

The Journal

OF THE

Jamaica Agricultural Society.

The more people do the more they can do; he who does nothing renders himself incapable of doing anything; while we are executing one work we are preparing ourselves for undertaking another.

VOL. XIX.

JUNE, 1915.

No. 5.

BOARD OF MANAGEMENT.

The usual monthly Meeting of the Board of Management of the Jamaica Agricultural Society was held at the Office of the Society, 11 North Parade, Kingston, on Thursday, the 20th May, 1915, at 11.40 a.m. Present: The Hons. P. C. Cork, C.M.G., Vice-President (presiding), L. J. Bertram, C.M.G., D. Campbell, R. P. Simmonds and S. S. Stedman; Messrs. Robt. Craig, A. W. Douet, H. Q. Levy, A. C. L. Martin, Adam Roxburgh, Conrad Watson, and the Secretary, Jno. Barclay. Sir John Pringle came in during the meeting.

Apologies for Absence.—Apologies for absence were submitted from the Hons. Geo. McGrath, J. R. Williams and Mr. E. W. Muirhead, who asked that the motion in his name *re* Banana Commission be postponed until the next Meeting, and Mr. Archd. Spooner.

Minutes of previous Meeting.—The Minutes of the previous Meeting which had been printed and circulated, were submitted. The following revisions were made *re* Infectious Diseases of Plants Law on pages 161 and 162:—

(1) On page 161 *re* Mr. Craig's remarks, which should read—"he hoped that the Board would not recommend the Law in the form proposed, as its provisions were extremely drastic and would require to be very carefully administered," and

(2) On page 162, to read as follows:—"Mr. McGrath and Mr. Graham supported Mr. Craig in his view, that it was inadvisable to declare Pod Rot and Canker of Cocoa to be Infectious Diseases under the Law"; and instead of "the proposed Law," the word "proposal."

The Minutes were then confirmed.

Minutes of Special Meeting.—

The Minutes of the Special Meeting held on the 28th April, were read as follows, and confirmed:—

A Special Meeting of the Board of Management of the Jamaica Agricultural Society was held on Wednesday, the 28th April, 1915, at 11.40 a.m., at the Office of the Society, 11 North Parade, Kingston. Present:—His Excellency Sir Wm. H. Manning, K.C.M.G., C.B., (presiding), Hons. P. C. Cork, C.M.G., D. Campbell, H. H. Cousins, Director of Agriculture, R. P. Simmonds, S. S. Stedman and J. R. Williams; Messrs. Robert Craig, A. W. Douet, H. Q. Levy, Rev. W. T. Graham; the Hon. St. John Branch, Attorney General, K.C., by invitation and Secretary, Jno. Barclay.

The Secretary read the paragraph in the Minutes of the previous Meeting of the Board, calling a Special Meeting to deal especially with the matter contained in the following letter from the C.S.O., and also with the proposed Order to be made by His Excellency under Law 3 of 1915, "A Law to Prevent the Introduction and Spread of Plant Disease," and dealing with Panama Disease of Bananas:—

No. 4146-4915.

31st March, 1915.

"I am directed by the Governor to state for the information of the Agricultural Society, that the Director of Agriculture has recommended, for the consideration of His Excellency, that "Pod Rot" and "Canker" of Cacao shall be added to the list of Infectious Plant Diseases under Law 3 of 1915, and that rules should be made for the sanitary treatment of all Cacao pods after the beans have been shelled and of all diseased pods, as also for the excision and tarring of canker in affected trees.

2. I am to ask that the Committee of Management of the Society will be so good as to give the proposal of the Director of Agriculture their early consideration and favour His Excellency with their advice on the matter."

(Sgd.) F. L. PEARCE,

Actg. Asst. Colonial Secretary.

After discussion and on the suggestion of the Governor, it was agreed to deal only with the Order *re* Panama Disease of Bananas and leave over the matter of adding "Pod Rot" and "Canker" of Cacao to the list of Infectious Diseases of Plants until the next ordinary Board Meeting.

After consideration of each clause and the adoption of revisions, the Secretary was instructed to send a clean copy of the revisions suggested, to the Governor, the Director of Agriculture, and the Attorney General.

20th May, 1915.

(Sgd.) P. C. CORK,
Chairman.

Matters arising out of the Minutes.—

(a) *Banana Commission.*—The motion standing in Mr. Muirhead's name was postponed as requested by him.

(b) *Value Orange Oil.*—The Secretary said that Mr. Muirhead had asked at the previous Meeting how the values for the exports of Orange Oil for 1913 and 1914, as stated by the Collector General, were arrived at, and he (the Secretary) was instructed to write the Collector General on the subject. He now submitted reply as follows

No. 326-1830.

19th April, 1915.

"In reply to your letter, No. 238, dated the 16th instant, I have the honour to state that the endorsements made on their Bills of Lading in terms of the requirements of section 118 of Law 18 of 1877, by Shippers, constitute the source of information as to the quantities and values of Orange Oil exported."

(Sgd.) A. H. MILES,

Collector General.

(c) *Pod Rot and Canker.*—Letter from the C.S.O. asking for the opinion of the Board as to whether Pod Rot and Canker of Cacao should be added to the list of Infectious Plant Diseases under Law 3 of 1915, as published in the previous minutes, was at the request of His Excellency, who could not be present at the Meeting, held over for consideration at the next meeting. His Excellency wrote in a note to Mr. Craig that he thought the meeting was fixed for the previous week and he had made an engagement for the present day which could not be postponed; he suggested that as the matter of Pod Rot and Canker was not pressing, the subject might be discussed at the next Meeting.

Analysis of Banana Meal.—The Secretary said that a few months back he had been directed by the Board to send a sample of Banana Meal through the Government here to the Imperial Institute, London, for analysis and report. He now submitted the analysis and report as follows:—

(Copy.)

IMPERIAL INSTITUTE.

RESULTS OF THE EXAMINATION OF BANANA MEAL FROM JAMAICA.

No. 55937. Date 16 March, 1915.
 Letter No. 4714 dated 6th November, 1914, from the Secretary of the Jamaica Agricultural Society, Kingston.
Imperial Institute Reference. Banana Meal, Weight 2 lbs.
Number of mark, and weight of sample.
Description. The sample consisted of a finely ground meal of light sandy colour and possessing a rather pronounced aroma.

	Present sample.	Banana (1) orange.	Flour (2) grey.	Wheat Flour.	Maize meal.
<i>Results of examination expressed on material as received.</i>					
Moisture per cent.	12.0	9.8	11.1	11.9	11.1
Crude proteins per cent.	4.6	3.4	4.8	13.6	9.5
Consisting of:—					
True proteins, per cent.	2.3	2.4	3.5	—	—
Other nitrogenous substances per cent.	2.3	1.0	1.3	—	—
Fat, per cent.	0.6	0.3	0.4	1.3	6.2
Starch, &c., (by difference)	79.6	84.2	80.8	72.6	70.6
Fibre, per cent.	0.7	0.5	0.5	0.1	1.4
Ash per cent.	2.5	1.8	2.4	0.5	1.3

Nutritive value. Nutrient ratio 1.17 6 1 25 1.17 1.5 6 1 9

The ratio between the percentages of crude proteins and the sum of the percentage of starch and fat, the latter being first converted into its starch equivalent.

Food units 93 93 94 117 110

(The total obtained by adding the percentage of starch to 2.5 times the sum of the percentage of fats and crude proteins.)

Commercial valuation and remarks.

This sample of banana meal from Jamaica is generally similar in composition to specimens of banana flour which have been received at the Imperial Institute from other sources. The only noteworthy difference between the figures obtained for the present sample and those for the specimens of banana flour quoted in the above table is that the "crude proteins" in the Jamaica meal include an unusually large amount of "other nitrogenous substances" (probably amides) which are very much inferior to the "true proteins" in food value. The large percentage of amides present may be due to the degree of maturity of the fruits from which the meal was prepared.

Compared with wheat flour or maize meal this banana meal contains a much smaller percentage of proteins, and its nutritive value is consequently much lower. Maize meal also contains much more fat than the banana meal. The percentage of mineral matter is however higher in the banana meal than in either wheat flour or maize meal.

It will be evident from these results that the banana meal will not compare in nutritive value with either wheat flour or maize meal, but nevertheless it should prove useful locally as a partial substitute for these products.

This was referred to the Special Banana Committee which had been dealing with the matter of the encouragement of the use of Banana Meal as a local food.

Law Relating to Praedial Larceny.—The Secretary submitted copy of the Law in Aid of the Laws Relating to Praedial Larceny passed by the Legislature which on the recommendation of the Society abolished the distinction between Praedial Larceny and Common Larceny as regards Agricultural Products.

Appointment of Two Field Inspectors.—The following letter from the C.S.O. was submitted :—

No. 5545-5853.

29th April, 1915.

"With reference to the letter from this Office, Nos. 4653/4817, dated the 12th instant, and previous relative correspondence, I am directed to inform you that, under the powers conferred by section 7 of Law 3 of 1915, "The Protection from Disease (Plants) Law, 1915," the Governor has issued certificates of appointment to Mr. Stanley Scudamore and Mr. John Bancroft Sutherland to carry out the provisions of that Law and any Orders issued thereunder, and has issued the instruction that these officers should always carry their Certificates about with them."

(Sgd.) ROBT. JOHNSTONE,
Acting Colonial Secretary.

Fustic.—The Secretary said he had observed a paragraph in the W. I. Committee Circular and in "Tropical Life," which had been quoted in the Newspapers here, which stated that the Imperial Authorities had asked the Government of Jamaica to make purchases of fustic and that the Government here had offered to purchase from growers large supplies of fustic and carry these at Government cost to Kingston for shipment; he had received letters from members of the Society asking if this was so. He had no official information to this effect, so he had written the Colonial Secretary, and the following was the reply:—

No. 5921-6537.

6th May, 1915.

"I am directed by the Governor to acknowledge the receipt of your letter of the 29th ultimo, and, in reply, to inform you that enquiries were being made by this Government on behalf of the Imperial Government as to what quantity of fustic was available for purchase and the price at which it was obtainable, but that the Government has not received instructions to purchase.

2. I am to add that the particulars were required for the information of prospective purchasers in England."

(Sgd.) ROBT. JOHNSTONE,
Acting Colonial Secretary.

The Chairman said that all that had been asked of the Government was whether supplies of fustic could be had here and to what extent, and particulars had been sent to the Home Government; supplies had been bought as usual through the merchants, and as large shipments were being made as could be carried.

Sugar.—The following letter from the C.S.O. was submitted:—

No. 6529-7143.

19th May, 1915.

"With reference to the correspondence ending with the letter from this office, Nos. 1220/1131.15, dated the 29th January last, I am directed by the Governor to transmit to you herewith, the accompanying copy of a letter from the Secretary of the West India Committee, with a copy of a resolution passed by the Executive of the Committee in February last, in connection with the possible expansion of the sugar industry of this colony, in which the Committee advocate the grant of a preference to British produced sugar for a definite period of ten years."

(Sgd.) ROBT. JOHNSTONE,
Acting Colonial Secretary.

(Copy)

From the Secretary of the
West India Committee, London,
To the Governor, Jamaica.

No. 370.

22nd April, 1915.

"Referring to our previous correspondence on the subject of the possibility of the expansion of the sugar industry in your colony, I have the honour to transmit herewith, for Your Excellency's information, a copy of a resolution adopted by the Executive of the West India Committee on February 11th.

"In this resolution, the Committee advocate the grant of a preference to British produced sugar for a definite period of ten years. They are of opinion that such a preference would not only be a material benefit to our sugar producing colonies, but would also render the consumers in this country ultimately independent of Germany and Austria, for their sugar supplies. In this connection, I may point out that of the total imports of sugar with the United Kingdom during 1913, amounting to 1,960,000 tons, 1,200,000 tons came from Germany and Austria."

(Sgd.) ALGERNON E. ASPINALL,
Secretary.

RESOLUTION ADOPTED BY THE EXECUTIVE OF THE WEST INDIA COMMITTEE ON
FEBRUARY 11TH, 1915.

"Whereas in the year prior to the outbreak of the present war, the United Kingdom was dependent on foreign countries for no less than 95 per cent. of the sugar supply, and whereas in the opinion of this Committee an adequate supply of sugar could be produced within the British Empire to meet the requirements of the Mother Country, be it resolved: "That it is desirable that British produced sugar should, for a period of not less than ten years, be accorded such preferential treatment as would suffice to encourage the development of both existing and potential sources of sugar supply within the Empire; and that His Majesty's Government be urged to take the necessary steps to bring this about."

The Chairman said that a letter from the West India Committee had been submitted to the Board asking their support to a resolution to be sent to the Imperial Government requesting the exemption of West India sugar from previous duty similar to the preference allowed in respect to sugar made from home grown beet; and after consideration, it was decided at the January meeting to reply that the time was inopportune to put forward any question that would hamper or incommode the Imperial Government at that time, but the matter would be considered again in six months' time.

It was resolved that as the six months would be up in June to consider both letters together at the next Meeting.

Diseases (Plants) Law, 1915.—Letter from the C.S.O. was submitted as follows:—

No. 6362-6279.

May 15th, 1915.

"I am directed by the Governor to inform you that His Excellency has made two Orders under section 4 of Law 3 of 1915, "The Protection from Disease (Plants) Law, 1915," with regard to the Bonnygate Disease of Bananas and the Bud Rot Disease of Coconuts, which together with a notice containing an explanatory description of what constitutes "infectious" and what "notifiable" diseases, have been published in a *Gazette Extraordinary*."

(Sgd.) ROBT. JOHNSTONE,
Actg. Colonial Secretary.

The Secretary submitted copies of the Orders *re* Diseases of Bananas and Bud Rot Disease of Coconuts, which had been sent by the Government, and which had been published in the *Gazette*, and said he would publish these in the JOURNAL for the information of members as it was important that this knowledge should be well known.

War Gifts.—The Secretary submitted the following letter from the C.S.O.:—

No. 5020-5547.

20th April, 1915.

"With reference to the letter from this office, Nos. 1781/2227, dated the 11th February last, I am directed by the Governor to inform you that a letter has been received from the Crown Agents for the Colonies reporting the arrival of the consignment of fruit, etc., given by the members of the Jamaica Agricultural Society for the use of wounded soldiers, which was shipped to England by the s.s. "Chagres," and stating that the West India Committee have informed them that the fruit was in excellent condition on arrival."

(Sgd.) G. M. WORTLEY,
Ag. Asst. Colonial Secretary.

The Secretary said he did not expect very good results from his last shipment of Oranges and Lemons per the S.S. "Chagres", as they had been sent in for shipment on the "Erymanthos" which had been delayed in arriving; and after seeing that ship and learning that she would be 3 weeks on the way back, he had shipped by the Elders & Fyfes steamer "Chagres." Meantime the fruit was rather mature. He would publish a list of the donors of the Fruit, Preserves, Cigarettes, etc., as usual in the JOURNAL.

The following letter from Hon. H. Cork was read:—

30th April, 1915.

"I am enclosing you a letter written to the President and members of your Board of Management, and ask your hearty co-operation in aid of a much needed want, that the poorest man in Jamaica can contribute towards."

(Sgd.) HENRY CORK.

Park Mount,
Port Antonio,
30th April, 1915.

To the President and Members of the
Board of Management of the
Jamaica Agricultural Society,
Kingston.

Gentlemen,

Will you be good enough to endeavour to collect through the members of your Society and Branch Societies, rough walking sticks?

There will be hundreds of convalescent soldiers in England who will thoroughly appreciate a sound substantial walking stick, and although we may send them home in the 'rough', I am satisfied from my knowledge of the class of men that the sticks will be given to, that they will : amongst themselves, find the men to carve and dress up good substantial sticks.

Will you be good enough to use your influence with the shipping companies and the Government to endeavour to get whatever facilities we can?

In the meantime I am holding myself responsible for the shipment of 1,000 sticks per month for a period of 12 months.

I am starting out with a contribution of 100 sticks myself, which I propose to keep up monthly.

If we cannot send men and cannot find rifles for the firing line, we can do our little bit in helping those who unfortunately have been wounded and require assistance during the convalescent period.

(Sgd.) HENRY CORK.

The Secretary said that he had informed Mr. Cork that if permitted by the Board, he would be glad to receive all the walking sticks that were sent in.

The Board considered that it ought to be made sure whether the War Office would appreciate such a gift as walking sticks, as these could be had in the United Kingdom at a very cheap price, and they would be very bulky to transport by sea and rail. The Board also considered that only finished walking sticks should be sent, not necessarily polished, but with proper heads and of proper lengths.

The Secretary was instructed to write Mr. Cork and ask him if he had communicated, or if not, would he communicate with the

Colonial Secretary's Office to find out whether a gift of walking sticks would be considered useful.

Banana Figs.—The following letter was submitted:—

Gayle,

April 22nd, 1915.

"As you know since August our German Market has been shut down. This has placed us in the very difficult position of finding other markets for Banana Figs and Banana Flour at a time when shipping facilities are so uncertain that one can not do business where delivery must be specified for definite dates.

I hear from our London House that they have endeavoured to interest the Admiralty and War Office with the idea of utilizing the Products in the field and on board ship. So far they have been unable to get in touch with the proper department and write me to see if it would be possible to get His Excellency to use his influence with the Departments at Whitehall.

A very large quantity of dried apples, pears, apricots, figs and dates are being used at present. The bulk of these come from the U.S.A. The Banana Fig can largely take the place of all these goods of foreign origin, and from the point of view of food values is infinitely superior, not only when cooked, but when uncooked (or as taken from the cases or packets) it is ready for eating and is particularly palatable besides being a specific against scurvy and other similar affections. I feel sure that if His Excellency uses his influence in the right quarters a large business could be done, whereas an ordinary business man cannot get in touch with the heads of departments. The banana business (for fresh fruit) is very bad now-a-days, and if this outlet could be taken advantage of, it would go a long way towards easing the position in districts like Cave Valley which has a large quantity of excellent fruit, but being so far from a shipping point the cost of cartage to sell at present prices makes fruit growing unprofitable. Apart from this it would put more money in circulation and employment for people who at present have no work to do. Both our plants are shut down as the orders we had for England and for the French Hospitals are filled. Will you advise me in this?"

(Sgd.) J. W. PATTINSON.

P.S.—I enclose letter from the Under Secretary of State *re* freights, about which my firm in London wrote him.—J. W. P.

(Copy.)

Downing Street,

6th April, 1915.

"I am directed by Mr. Secretary Harcourt to acknowledge the receipt of your letter of the 25th March, relative to the lack of freight for produce from Jamaica.

2. You are no doubt aware that the efforts made to secure a direct subsidized service between this country and Jamaica at the time the Imperial Direct West India Mail Service came to an end were not successful; and, in present conditions, it is unlikely that the project could be revived with any better prospect of success."

(Sgd.) H. J. READ,

For the Under Secretary of State.

The Secretary said he had sent a copy of this letter to the Governor as President of the Society in case he might require to make some enquiry before the Meeting, and His Excellency had written him to the following effect:—

"In September of last year a hundred weight of Banana Figs was sent home to Great Britain, and a despatch was written to the Secretary of States asking whether the War Office would be able to utilise these figs for the food of the troops. A reply was received in October from the Secretary of States for the Colonies who wrote that my despatch had been referred to the Army Council, and that Banana Figs were not required for supply to the troops.

"Still, since you have managed to get a ton for shipment as a War Gift, this had better be carried out, and a letter should be sent both to the War Office and to the Admiralty, saying that a ton of Banana Figs is being shipped to England and that it is hoped that it may be found suitable for use in the Naval and Military Hospitals. I could forward this letter to the Secretary of State and ask that it might be sent to the Secretary of State for War and the Secretary of State for the Admiralty.

I can quite see the importance, if possible, of creating a market, and I would do anything that I could to push the matter forward.

These letters were referred to the Special Banana Committee for any further attention required.

Authorized Persons.—The Quarterly Return of Arrests sent in by the Inspector General for quarter ending 31st March, 1915, was submitted. This showed no arrests in Kingston, St. Andrew and St. Thomas 6 in Portland, 17 in St. Mary, 1 in St. Ann, 3 in Trelawny, none in St. James, 1 in Hanover, 2 in Westmoreland, 1 in St. Elizabeth, 1 in Manchester, none in Clarendon, and 3 in St. Catherine.

Corn.—The Secretary said he had received resolutions on the corn question from Branches in Clarendon. They were all pretty much the same. He would read the one from the May Pen Branch, which had taken a practical interest in furthering the growing of corn in that parish:—

“Whereas the May Pen Branch of the Jamaica Agricultural Society is fully convinced that were suitable encouragement given by way of a more table market this Island is capable of producing all the corn required for its own use and with few exceptions the large consumers would take supplies of native corn in preference to any other were such supplies obtainable at convenience, and that the people naturally expect the Government to give preference to supplies of native grown produce. Be it resolved that the Jamaica Agricultural Society be asked:—

(1) To establish a depot for native corn somewhat on the lines as Arrowroot is now treated, where regular supplies could be obtained by private individuals as well as by the Government Institutions.

(2) To urge upon the Government that native grown corn be used in preference to any other by all Government Institutions.

(Sgd.) C. L. A. RENNALLS,
Secretary.

The Secretary said he might mention that the Agricultural Instructors had held a Conference when they were in Kingston attending the Instructors Course at Hope, and the corn question was discussed then. The Instructors in the largest corn growing parishes present, said there was no trouble in marketing more corn than was being produced; the Instructors for the parishes that had been taking up corn-growing more widely recently, were those who asked about markets. At the present time, two months after the corn was taken in it was difficult to get any quantity of native corn at from 4/- to 4/6 per bushel. He had pointed out that as Jamaica imported £50,000 worth of corn, it was clear there was a big market here, but the first essential was to produce a marketable corn, thoroughly matured in the field, and well dried to be sold at not more than 60 lbs. weight to the bushel, if meant to be stored, otherwise, neither the Government, nor the Society, nor kiln drying, nor any sort of cooperative project for marketing would be of any use. Corn weighing say 64 to 66 lbs. to the bushel, which was often supplied, would not keep, would heat in the bags, would get mouldy, and practically was not a marketable product. He had communicated with the Director of Public Works again, as he had done before with previous Directors, with pretty much the same result, and he had received the following letter:—

No. 806-2662.

15th May, 1915.

“In reply to your letter No. 622 of the 10th instant on the subject of the use of native corn by this Department, I beg to say I find that records in this office show that the use of this corn has been repeatedly tried during the last seventeen years and that on several occasions contracts have been entered into for its supply but the results have been invariably unsatisfactory, endless trouble being experienced in maintaining a regular supply of good quality, which usually resulted in the contractors asking to be relieved of their contracts after a few months.

2. As a food for stock, it appears (when ripe and properly cured) to have given quite as good results as the imported article.

3. At present practically all the corn used is American, the bulk of it being imported through the Government Agents and the remainder being supplied by local Merchants at the same price as that imported direct.

4. The arrangements for all supplies to the Outstations are made in this Office, but Superintendents are allowed to supplement by the purchase of local corn when obtainable.

5. The present requirements of the Department are approximately 850 bags or 1,670 bushels per month.

6. I shall be pleased to co-operate in the endeavour to substitute native corn for the imported, but past experience is not encouraging.

7. In my opinion, the only system likely to prove successful is for corn to be purchased at fixed prices by some central organization such as your Society which could undertake the selection, proper curing, or kiln drying if necessary, and storage.

8. If such arrangements could be made that a regular supply of properly cured corn could be relied upon, I should be glad to enter into an agreement to take a fixed quantity per month."

(Sgd.) J. H. W. PARK,
Director of Public Works.

The Secretary said he had communicated with merchants in town, as he had often done before, and they were all willing to take supplies of country corn, but they would require to know ahead what they could get and that it would be well cured.

Mr. Levy said that the great drawback to thoroughly drying corn in the field, was that large quantities were stolen.

Mr. Bertram drew attention to the benefits of growing Guinea Corn which was not subject to stealing and which was harder than country corn and was quite as good a food.

The Chairman said the Society should do its utmost to encourage the growing of Guinea Corn in suitable districts. The co-operative marketing of corn was a project the Society could take up, and as had been pointed out, the first thing to secure was mature corn. He agreed that Guinea Corn was a crop that could replace country corn in dry districts; from analysis of the grain, it was proved to be as nutritious as country corn, and was much easier to grow.

After further discussion the Board came to the conclusion that while organization and co-operation through this Society would be useful, nothing could be done in the way of marketing corn for corn growers unless well matured corn, thoroughly cured, could be secured, and the Secretary was directed to point this out to the Instructors and the Branch Societies in corn growing districts.

Crown Lands.—Mr. Craig asked the Chairman if he could refer to this subject. Permission was given.

He said he would like to draw the attention of the Board to the Rules regarding Crown Lands as published by the Government of St. Lucia which appeared to him to be better and more practicable than ours. They were printed in the West India Bulletin, Volume 14, No. 4, page 267, and he would ask the Board to direct the Secretary to send a copy of these to the President (the Governor) through the C.S.O. for his information, and for the use of the Committee of the Legislative Council, who had the revisions of the proposed Rules here under consideration.

Cotton.—The Secretary said he had received the final returns for the Cotton shipped from the Experimental Plots. The Sea Island Cotton had sold at 1/1 per lb., and the Egyptian at 8d. per lb. The total proceeds had been £34 17s., less a reduction of £4 3s. 11d. for freight, etc. He would call attention to the high rate of freight and the other marketing expenses—£2 8s. 3d.

Competitions.—The Secretary submitted Report on the Special Competitions held in Manchester, which should have been judged before the end of March, but had been carried over to this financial year. In S. Manchester, owing to drought, the Competition had not been successful; one competitor, however, Mr. Haffenden, had put forth great effort on his coffee, and the Instructor for the district recommended that he should be awarded the 1st Prize. This was agreed to. The following is the Report:—

"I enclose the results in the special competitions. The parish was divided into four districts for the coffee and orange competitions; this was done to get the same conditions as much as possible. I regret to say that a good many of those that entered did nothing at all to improve their cultivations—others have done good work.

"The competition was for the greatest improvement in a cultivation during the six months previous,

"For the purpose of assisting in the judging, I made a maximum of 25 points for each. You will note that under some heads good work has been done, and others, in some instances nothing, and you will note in two of the districts only one competitor remained in. In the case of William Powell in the No. 1 district, I do not consider that the work done warrants a first prize, I think a second would do. The competitions have taken up a considerable amount of time.

"I have to thank Mr. Lewisham, of Ebenezer, and Mr. A. S. Rose, of Porus, both of whom gave up several days to assist me. I have also to thank you for the assistance given in the banana competition. I doubt if the results obtained in these special competitions have warranted the expenditure of time, labour and money although they were worth trying as a test; and I would much prefer the ordinary Small Holdings Competition."

(Sgd.) THOMAS POWELL.

THE AWARDS.

BANANA COMPETITION.

	Totals.	
Rev. C. A. Lindsay, Porus	64	1st
J. W. Haynes, Chantilly, Williamsfield P.O.	53½	2nd
W. I. Williams, ,, Walderston P.O. ..	42	3rd
John Foster, Pike, Coleyville P.O. ..	41	4th

COFFEE COMPETITION.

(District No. 1.)

W. Holness, Shirehampton, Maidstone P.O.	28	1st
D. G. McPherson, Knockpatrick, Mandeville	27	2nd
John Morrison, Lincoln, Mandeville ..	21½	3rd

(District No. 2.)

John Foster, Pike, Coleyville	25	1st
Perceval McLeish, Comfort Hall	20	2nd
George Nash, Comfort Hall	19	3rd

(District No. 3.)

J. W. Haynes, Chantilly, Williamsfield ..	54	1st
U. K. Phillips, Blue Mountains, Williamsfield	38	2nd
S. Sinclair, Christiana	17	3rd

(District No. 4.)

W. Morgan, Mt. Pleasant, Porus	47	1st
C. Bailey, Harmons, Porus	40	2nd
John Pussey, St. Toolies, Porus	35	3rd

JAMAICA AGRICULTURAL SOCIETY.

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South Manchester,

C. Haffenden Cross Keys. 1st

ORANGE COMPETITION.

(District No. 1.)

No award. 1st
 W. Powell, Hasty Good, Mile Gully 15 2nd

(District No. 2.)

John Foster, Pike, Colayville 34 1/2 1st
 No second prize.

(District No. 3.)

J. W. Haynes, Chantilly, Williamsfield P.O. 58 1st
 U. K. Phillips, Williamsfield 47 2nd
 W. D. Allen, Williamsfield 33 3rd

(District No. 4.)

D. Kelsea, Porus 57 1st
 C. Bailey, Harmons, Porus 45 2nd
 Thos. Pitter, Patrick Town, Newport 25 3rd

The Secretary submitted the awards in the School Garden Competitions. He stated that these would be published in the JOURNAL and a copy sent to the Director of Education.

Statement of Accounts.—Statement of Accounts itemized was submitted showing full details of Profit and Loss on Deposits, etc., and referred to the Office Committee.

Instructors.—The Instructors Reports and Itineraries were submitted and directed to be circulated to the Instructors Committee as usual.

New Members.—The following new members were elected:—

E. J. Melville, Balbao, C.Z.

Rev. Wm. Graham, Caledonia Crescent, Cross Roads.

Hector Josephs, Barrister, Kingston.

The Meeting adjourned until Thursday, the 17th June, 1915, at 11.40 a.m.

**THE JOURNAL OF THE
THE COCONUT INDUSTRY.**

(Adapted from long article on "The industrial Position of Copra, Coconut Oil, and Coconut Cake," in the *Bulletin of the Imperial Institute, London.*)

Large quantities of coconut oil are produced in India, Ceylon, the Pacific Islands, the Philippine Islands and elsewhere, whilst the dried kernels of the coconut, known as copra, are largely exported to Europe, and the oil extracted by modern milling methods. Prior to the war the chief countries importing copra were Germany and France, but owing to the complete cessation of trade from British possessions to the former country, as well as to Austria-Hungary, large quantities of copra from Ceylon, India, the Federated Malay States, and other countries have become available for use elsewhere, and attention is being called to the magnitude of this trade and to the desirability of British merchants and manufacturers securing a larger proportion of copra for industrial purposes in the United Kingdom.

The quantities and values of the exports of copra from some of the more important producing countries are shown in the following table; the figures in each case are for the last year for which statistics are available:

	Year.	Quantity. <i>cwts.</i>	Value. £
<i>British Territories:</i>			
Ceylon	1913	1,117,292	1,397,284
India	1913-14	763,832	1,039,826
Federated Malay States	1913	185,753	211,043
Seychelles	1913	58,738	71,919
Tongan Islands Protectorate	1912	222,400	209,567
Fiji Islands	1913	158,585	176,741
Papua	1912-13	15,880	16,356
British Solomon Islands	1912-13	83,920	73,637
Gilbert and Ellice Islands Protectorate	1911	41,700	20,700
East Africa Protectorate	1912-13	31,283	31,956
Zanzibar	1913	—	216,342
Gold Coast	1913	12,589	14,291
Trinidad	1913	10,308	11,545
<i>Foreign Territories:</i>			
Philippine Islands (U.S.A.)	1913	1,618,080	1,988,692
Java (Dutch)	1913	1,556,000	—
Sumatra (East Coast) (do)	1912	80,860	—
Celebes (do)	1913	580,340	—
Indo-China (French)	1912	157,074	95,783
New Caledonia do	1912	53,173	64,850
French Oceania do	1912	117,662	112,569
Samoa	1912	220,423	203,496
* Bismarck Archipelago, German Solomon Islands, and German New Guinea	1912	223,814	202,603
* East Carolines, Marshall Islands, and Nauru (German)	1912	94,940	82,820
* West Carolines, Pelew and Mariana Islands (German)	1912	21,706	15,091
German East Africa	1912	83,468	78,152
Portuguese East Africa	1911	78,220	48,066

* Since the war broke out these German colonies have been occupied by troops from Australia and New Guinea.

Part of the Samoan group belongs to the United States and part belonged to Germany previous to the war, but was occupied by troops from New Zealand.

The statistics of the distribution of the exports of copra from British possessions, show that in many cases a very large proportion of the trade was with Germany; in the case of Ceylon no less than three-quarters of the exports went to Germany in 1913, and in the case of India in 1912-13 as much as four-fifths.

In the West Indies, very little copra has hitherto been made owing to proximity to central markets for the dry nuts. But a little trade has been done of recent years. We give the exports as follows:—

Trinidad.

		1913.	
		<i>cwts.</i>	£
United Kingdom	.. .. .	7,979	8,986
Germany	.. .. .	1,637	1,834
United States	.. .. .	692	775
Total	.. .. .	10,308	11,545

Jamaica.

		1910.		1911.		1912.	
		<i>cwts.</i>	£	<i>cwts.</i>	£	<i>cwts.</i>	£
United Kingdom	.. .. .	286	294	199	263	408	610
Germany	.. .. .	—	—	—	—	4	5
United States	.. .. .	—	—	—	—	10	10
Total	.. .. .	286	294	199	263	422	625

British Guiana.

		1912-13.	
		<i>cwts.</i>	£
United Kingdom	.. .. .	1,143	1,101
British West Indies	.. .. .	1½	1½
Denmark	.. .. .	—	—
Germany	.. .. .	—	—
United States	.. .. .	4½	5
Total	.. .. .	1,149	1,107½

Small quantities of copra are also exported from some other British Possessions, the total exports in each case in 1912 being as follows:

		<i>cwts.</i>	£
Mauritius	.. .. .	167	86
Grenada	.. .. .	252	182
St. Lucia	.. .. .	69	68
British Honduras	.. .. .	18	8½

Figures for the total imports of copra to Germany are not available, but as Harburg near Hamburg is the chief centre of the German oil-seed crushing industry it is probable that the figures for the latter port represent nearly the total German imports.

Imports of Copra in 1913 to Hamburg and Austria-Hungary.

	Quantity, metric tons (2,204 lb.)
<i>Hamburg:</i>	
Imports from all sources	230,395
" " British Possessions	124,434
<i>Austria-Hungary:</i>	
Imports from all sources	33,604
" " British Possessions	29,177

The details of the imports from the British Empire are as follows:

Imports of Copra in 1913 to Hamburg and Austria-Hungary

	Hamburg metric tons (2,204 lb.)	Austria-Hungary. metric tons (2,204 lb.)
United Kingdom	225	—
British Central and South America	195	—
British Africa	not given	774
British East Indies	112,341	22,104
Australia	10,651	—
British South Sea Islands	1,020	6,299
	<hr/> 124,434	<hr/> 29,177

These figures are not quite complete. Some imports from British West Africa reach Hamburg, but are not separately shown in the returns for that port. The imports from Australia to Austria-Hungary include 608 metric tons from British Australia, and 5,691 metric tons described merely as from Australia, which probably includes some from foreign possessions in the Pacific Ocean.

The quantity of British copra for which a new market must be found may therefore be taken as about 153,611 metric tons.

It seems likely that a considerable proportion of this can be taken by the United Kingdom. The copra imported into Germany and Austria-Hungary is used for the production of oil (coconut oil) and feeding-cake (coconut cake). Of the coconut oil expressed from copra in or near Hamburg in 1913, the quantity exported as coconut oil amounted to 40,966 metric tons, of which 30,236 metric tons was sent to the United Kingdom and 5,261 metric tons to Norway and Sweden, the next largest purchasers. Copra is already expressed for oil in the United Kingdom and coconut oil is made both in Ceylon and India. The oil now produced in Hamburg for the United Kingdom might be expressed in Ceylon or India and shipped direct, or the copra might be exported to the United Kingdom and treated here instead of in Hamburg.

The exports of coconut oil from Germany to the United Kingdom before the war are stated to have been largely the produce of a British-owned factory in Germany.

The Trade Returns for the United Kingdom show that in 1913 this country also imported about 18,600 metric tons of coconut oil from foreign countries other than Germany. The total imports of foreign coconut oil to the United Kingdom in 1913 therefore amounted to about 49,000 metric tons, corresponding to about 82,000 tons of copra.

It is moreover certain that from all these foreign countries which export coconut oil to the United Kingdom, and especially from Germany considerable quantities of coconut oil also reach this country in the form of margarine, vegetable butter, and prepared fats and foods of various kinds. No definite figures can be suggested for the amount received in this way.

It is clear from the foregoing data that considerably more than half of the British copra hitherto exported to Germany and Austria-Hungary might be taken by the United Kingdom for home use, either in the form of copra or coconut oil. Ceylon and India produce both copra and coconut oil, so that these countries could probably divert their supplies in either form to the United Kingdom. It is understood moreover that firms crushing copra in the United Kingdom are now extending their plant so that there is a good prospect of the British Market for copra being greatly enlarged.

In addition to the possibility of finding a market in the United Kingdom, there appears to be a considerable chance of the British Colonies and India securing a share of the French import trade in copra. In 1912 the total imports of copra into France were 153,506 metric tons. Of this 19,691 metric tons came from British Possessions, and 10,321 metric tons from French Colonies. Of the remainder 43,422 metric tons came from the Netherland East Indies and 72,964 metric tons from the Philippines. It ought to be possible for Ceylon, India, and the Federated Malay States to compete on favourable terms with the Netherland East Indies and the Philippines for this trade.

Apart from the United Kingdom and France the new markets available for British copra are small. In the case of the United States the imports of copra in 1913 amounted to 15,548 metric tons, of which 10,674 metric tons came from the Philippines, and the rest mainly from French, British, and German Possessions in the Pacific. The imports of coconut oil to the United States amounted in 1913 to 22,915 metric tons, of which about 18,000 metric tons came from Ceylon, India, the United Kingdom, and Australia, and the rest chiefly from France, Germany, and the Philippines.

In Holland it may be difficult to replace the imports from the Netherland East Indies by British copra and coconut oil, but there seems to be some possibility for the development of export to Denmark, Scandinavia, and Russia.

USES AND VALUE OF COPRA.

The copra imported to Europe and elsewhere is used as a source of oil (coconut oil) and feeding-cake (copra or coconut cake). The methods of preparing copra have been dealt with already in this BULLETIN in an article on the coconut and its commercial uses (1912, 10. 274), and it is proposed to deal now merely with its utilisation and value. The copra exported from the different countries varies somewhat in quality; the values per ton of the more important grades in London, Marseilles, and Hamburg are shown below:

	£	s.	d.
Malabar	26	2	6
Ceylon	25	10	0
Malay Straits	24	10	0
Manilla	23	12	6
Samoa	23	17	6

Coconut Oil.

As already mentioned, large quantities of coconut oil are prepared from the fresh kernels in Ceylon and India, and exported as oil. The United States took £657,502 value, the United Kingdom £307,326, Germany £3,493.

Nearly all the Indian oil is prepared in Madras, and particularly on the Malabar coast. The Cochin Oil produced in the latter region is on the whole more carefully prepared than Ceylon Oil, and consequently realises higher prices. The values of Cochin and Ceylon oils in London at the present time are £55 and £48 10s. per ton, respectively (February, 1915).

The quality of the oil prepared by expression from copra in Europe, the United States, and elsewhere depends largely on the quality of the copra used. Sun-dried copra yields an oil of paler colour than kiln-dried copra, whilst that obtained from imperfectly dried copra is of higher acidity and inferior quality. The current value of London-expressed oil is £40 5s. per ton (February 1915). The oil content depends on the thoroughness with which the copra has been dried. Thus, sun-dried kernels contain about 50 per cent. of oil, kiln-dried kernels contain 63 to 65 per cent., and hot-air-dried copra up to as much as 74 per cent. The ground copra is expressed twice at a temperature of 55 to 60 C., the yield of oil from average copra being about 62 to 63 per cent.

At the average European temperature coconut oil is a solid fat, varying in colour from white to yellowish, according to the quality of the copra and the method of preparation. The unrefined oil prepared from the best quality copra possesses the characteristic smell and taste of the fresh coconut, but that obtained from the lower grades of copra is often rancid and disagreeable in smell and taste. By suitable refining methods, however, an odourless and tasteless oil may be produced, and the refining of coconut oil for the production of edible fats is now an important industry.

Refined coconut oil is used in the preparation of solid edible fats such as margarine, vegetable butters, cooking fats, and chocolate fats, as well as in the manufacture of cakes, biscuits, sweetmeats, etc. In order to obtain a fat of firmer consistence and higher melting point, a certain proportion of the liquid constituents of the oil ("coconut olein") is removed by expression. The "coconut stearin" which is left is used for the purposes indicated above, when obtained from high-grade oil, while that obtained from the lower grades is used for candle manufacture.

(To be Continued.)

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MANURING FRUIT TREES.—It is usual to apply manure underneath fruit trees as far as their branches extend overhead, but this is not a correct system, writes an authority on the Continent. At an experimental station on the Rhine a cherry tree twenty-five years old was dug up and the roots were found to extend more than eleven yards. The roots of a plum tree three years old were quite two yards long. How extensive, then, must the roots of fully-grown tree be!

From this fact it is clear that the proper plan is to spread the manure, whether farmyard manure or artificial, in a wider circle, and in orchards, where the trees are close together, to distribute it over the whole surface. Only in this way is it certain that all the trees will get the benefit of the nourishment supplied to them.

The Dean of an Agricultural College, U.S.A., is quoted as saying that it would take us twenty years to put into practice the agricultural science we now have, even if we should stop further investigation immediately.

AUTHORIZED PERSONS.**I.—THE LAW RELATING TO AUTHORIZED PERSONS.**

The stealing of agricultural products from the field has been and is a form of crime very common in Jamaica. It is most demoralising both for the thief, if he finds he can steal with impunity, and for the cultivator who time after time finds his crop stolen from his field so that he is inclined to say: "What is the use of cultivating? Thieves take so much of my crops that it can't pay me to cultivate."

The chief crops to suffer are food crops, especially yams and corn, but of late years since the growing of cocoa became general in some districts and buyers have started to buy in the pod, the stealing of cocoa pods has become very common. They are so easy to pick, so easy to steal, and so easy to sell as the law at present stands.

Praedial Larceny was so common, and theft was so often done with impunity, that the Government passed a Law in 1909 throwing the burden of proving his innocence on the person suspected of being in unlawful possession of the agricultural produce set out in the Law, and giving the privilege to Agricultural Societies of nominating men with special authority to arrest people so suspected of being in unlawful possession of agricultural produce. These men are called "Authorized Persons."

The procedure is this:—Any Agricultural Society (and there are now 146 in the Island constituting the Jamaica Agricultural Society and its Branches) can nominate men of good character, preferably healthy and of good physique, for each district covered by the operations of the local Agricultural Society for appointment as "Authorized Persons." Their names, written in full, together with their districts and postal addresses, are sent to the Secretary of the Jamaica Agricultural Society. The latter sends these to the Inspector General of Police with a letter stating that the local Agricultural Society is in good standing. The Inspector General sends these names to the local police of the district to make enquiry as to whether the men nominated are considered fit and proper persons to hold the power of "Authorized Persons." If they are found to be suitable men they are appointed. A badge of authority is handed to them through the local police, and also a pair of handcuffs, and the Sergeant or Corporal of the nearest police station should give them copies of the Law, and explain the nature of the duties expected of "Authorized Persons."

The persons nominated by Agricultural Societies for appointment as "Authorized Persons" should preferably be members of an Agricultural Society, but this is not required under the Law; it is, however, a recommendation.

It should be made a point by Branch Societies nominating the Authorized Persons for these men to be asked to attend a meeting of the Branch when their appointments are made and have their duties explained to them.

The Authorized Persons should also attend the regular meetings of the Branch Society and report any cases, and it will then be easy to get the form for payment of services rendered filled up and signed by the President and Secretary; there will generally be some person present at the meeting who can guarantee that the services claimed to have been done were really performed. Clerks of Courts must

have sufficient proof that the work claimed to be done has been done, and such a Certificate will save the Authorized Persons and the Clerk of Court much trouble and perhaps annoyance.

An Agricultural Society nominates men for appointment as Authorized Persons, and if these men do not act properly, do not do any work, or are not satisfactory in the performance of their duty, the same Agricultural Society can recommend the withdrawal of an appointment giving reasons in support.

This recommendation should be sent to the Secretary of the Jamaica Agricultural Society, Kingston.

Naturally in the working of a new Law, quite a departure from the old Law dealing with Praedial Larceny, a good many difficult questions may arise.

This Law came into operation in November 1909, but it was two years before the local Agricultural Societies began to act freely on it. Since then so many difficulties have arisen in "Authorized Persons" not understanding what they may or may not do under the Law, that the Agricultural Society directed its Secretary to write a simple treatise on the subject with a view of explaining some points of the Law. This has not been very easy to make brief, and yet fully explain all the problems in connection with the working of this Law that have arisen. All I have attempted to do is to write a simple explanation of the Law to be put into the hands of Authorized Persons. Whatever further difficulties may be found, seeing that the Law has been for some years in force, and Authorized Persons have been for some time at work, should be reported to me at once.

II.—THE POWERS AND DUTIES OF AUTHORIZED PERSONS.

The Law creating the office of Authorized Persons and setting out his powers and duties is Law 4 of 1909 as amended in Schedule A of the Amended Law of 1915.

Schedule A of Law 4 of 1909 contains a list of articles of agricultural produce, and the Governor in Privy Council may at any time remove or add any article to this list by an Order to be published in the *Jamaica Gazette*. Now, the duties of an Authorized Person are only in respect of these articles of agricultural produce while they continue on the list; he has nothing to do with any article not on the list.

The Law gives the Authorized Person the power to arrest without a warrant in the following cases.

(1) Where he finds that a person has been in possession of any of the articles of agricultural produce, or

(2) Where he discovers him in the actual possession of any of the articles.

But that is not all. The Law says that the Authorized Person before he can arrest, must have *reasonable grounds* to suspect that the person has either stolen the agricultural produce, or has received it from someone else knowing that it was come by dishonestly. Any Authorized Person must therefore act like a reasonable thinking man before he arrests. He must decide if the circumstances of the case are such that he really believes or strongly suspects that the person with the agricultural produce has stolen it himself, or knew that the person from whom he got it either stole it or came by it dishonestly. If he has good grounds for this belief or suspicion it is his duty to arrest the person.

When an Authorized Person has made an arrest he must forthwith, that is immediately, take the prisoner, along with the agricultural produce, if possible, before either a Justice of the Peace or the Clerk of the Courts who will then hold an enquiry into the matter and will decide what further is to be done.

The effect of the change in the Law by Law 10 of 1915, which abolished the distinction between common larceny and praedial larceny, as regards agricultural products, is that an Authorized Person, so long as reasonable suspicion exists, can arrest for the possession of any of the articles of agricultural produce on the list attached herewith. It does not matter whether the product is fresh from the tree or not, or whether the arrested person got it from the tree or picked it up from the ground or took it from a barbecue. So long as he has had, or does have, in his possession any agricultural produce, and there is reasonable cause of suspicion, the Authorized Person can arrest him.

III.—SOME INSTANCES OF REASONABLE CAUSE FOR SUSPICION.

1. An Authorized Person is appointed for a district. He is presumed to know most persons residing in that district. Stealing of crops, say, of yams or cocoa pods is reported as being general. The Authorized Person meets a man—whom he knows owns no cocoa, who is not usually and is most unlikely to have become a buyer—with a load of cocoa pods presumably going to sell same. He can stop that man, show his badge of office and question him. If he has reasonable cause to believe or suspect that the man cannot honestly account for the possession of the cocoa pods, he can arrest him.

2. A man who has no yams growing, who does not buy any, yet is able to sell yams, can be watched and the moment he is found in possession of those, and fails to explain satisfactorily how he got them, he may be arrested, although he may not actually have been seen stealing them or coming from a "ground" with them.

3. Children who habitually sell cocoa pods, yet whose parents do not grow any or who on enquiry do not give them any to sell, may be arrested. This form of Praedial Larceny—the stealing of cocoa pods—is so common among children that drastic measures are necessary, such as arrest on the spot.

4. If a person is seen picking coconuts or taking away coconuts which are lying on the ground, and the Authorized Person has reasonable cause to suspect that the person is not the owner or is not employed by the owner, he can question the person, and if the explanation is not satisfactory, the Authorized Person can show his badge and arrest the suspected person forthwith.

IV.—PAYMENT OF AUTHORIZED PERSONS.

The Law says the Authorized Person must be paid for:

(a) Each day on which he makes an arrest or actually attempts to effect an arrest.

(b) For each day he attends Court or before a Magistrate on duty in connection with a case under the said Law.

(c) Or does such other services in connection with his duties under the Law as has occupied him a day or part of a day.

The Authorized Person must fill up and present a Certificate to the Clerk of the Courts (a form for which can be got from the local Clerk of the Courts) stating what services he has done, and all payments should be made by the Clerk of the Courts at the Court House whenever the case is tried or at the Courts Office if the case does not come for trial.

V.—CAUTIONS.

An Authorized Person is appointed for a district and should act only within that district as a general rule. It is not expected that he will go outside of his district to watch for dishonest and suspected people. But if an Authorized Person, when he happens to be outside his district, comes across a glaring case, and has no opportunity to communicate with a constable, a district constable, or an Authorized Person for that district, then he may arrest.

An Authorized Person should always put on his badge of office when he is about to, and before, he makes an arrest.

The powers and duties of an Authorized Person are set out in this pamphlet. He must bear in mind that his appointment gives him no powers or duties in connection with anything except what is specified in this particular Law. Except under this Law he is just an ordinary citizen and no more. He cannot arrest for house-breaking, or assault, or anything outside of agricultural produce.

COPY OF LAW.

Dealing with the Appointment of "Authorized Persons."

JAMAICA—LAW 4 OF 1909.

A Law in aid of the Laws relating to Praedial Larceny, 1909.

[31st March, 1909.]

Be it enacted by the Governor and Legislative Council of Jamaica as follows:—

1—Whenever any person, hereinafter called a suspected person, has been or is in possession of any of the articles of agricultural produce mentioned in Schedule A or of any other articles of agricultural produce which the Governor in Privy Council by order published in the *Jamaica Gazette* may at any time hereafter add to the said Schedule, under such circumstances as shall reasonably cause any officer, or sub-officer of Constabulary, constable, district constable, or person authorized, as hereinafter provided, to suspect that such article has been stolen, or has been relieved knowing the same to have been stolen, or has been in any other way dishonestly come by, it shall be lawful for any such officer, sub-officer, constable, district constable, or person authorized as aforesaid, to arrest such suspected person without a Warrant, and take him with such article or articles of agricultural produce forthwith before a Justice of the Peace, or Clerk of the Courts; Provided, always, that the Governor in Privy Council may, by order published in the *Jamaica Gazette*, remove from Schedule A hereto, any article therein mentioned, or added thereto by the Governor in Privy Council, and this Law shall not apply to any articles so removed.

2—The Jamaica Agricultural Society, and any local Agricultural Society duly constituted and affiliated to the same under the constitution and rules thereof, may, and the Board or Committee of Management of such Jamaica or local Agricultural Society may, at any ordinary or general business meeting nominate any person or persons to the Inspector General of Police to be authorized persons under this Law having authority to arrest and deal with suspected persons as provided in the preceding section. It shall be lawful for the Inspector General of Police on the nomination aforesaid and with the sanction of the Governor, to appoint the person or persons so nominated to be persons authorized under this Law, having authority to arrest and deal with suspected persons as provided in the preceding section.

Provided that lists of all such authorized persons shall, before their authority shall commence, be published in the *Jamaica Gazette* and the production of a copy of the *Jamaica Gazette* containing the name of any authorized person shall be conclusive evidence that such person has been duly appointed. The Inspector General may at any time revoke the appointment of any person authorized as aforesaid.

Whenever any expense has been incurred by any authorized person in connection with the arrest or attempted arrest or prosecution of any suspected person under this Law, the Governor may, in his discretion grant compensation to such authorized person for such expense out of the General Revenue of the Colony, under the same conditions as those in which compensation may be made to a constable; Provided that such expense be recommended by the Agricultural Society by which such person was authorized.

3—If after enquiry into the circumstances of the arrest of such suspected person which shall be on oath except as to any evidence given by the suspected person, the Justice of the Peace or the Clerk of the Courts is of opinion that the arrested person was in possession of the article of agricultural produce under circumstances of reasonable suspicion and that such suspected person does not give a satisfactory account of the manner in which he became possessed of such article, he may in default of sufficient bail, order that such suspected person be detained in custody until the next convenient sitting of the Resident Magistrate for the parish; provided, that such detention shall not exceed seven days. Such Justice of the Peace or Clerk of the Court may, after holding such enquiry, commit such suspected person for trial before a Resident Magistrate, on a charge of being unlawfully in the possession of the articles of agricultural produce of which he was in possession, and such Justice of the Peace or Clerk of the Courts may order such articles of agricultural produce to be detained pending the trial of such suspected person. If the Justice of the Peace or Clerk of the Courts after enquiry is not satisfied that the arrested person was in possession of the article of agricultural produce under circumstances of reasonable suspicion or is satisfied with the account given by such suspected person he shall forthwith discharge the suspected person from custody.

4—On the trial before a Resident Magistrate of any such suspected person, on a charge under this Law, the burden of proving that he became honestly possessed of any article of which he was in possession as aforesaid, shall be upon such suspected person; and if he shall refuse or be unable to satisfy the Resident Magistrate before whom his trial takes place, that his possession of the said article was honest, it shall be deemed to be prima facie evidence of his guilt, and the Resident Magistrate may convict him of the offence with which he has been charged as aforesaid, and may make such order for the disposal of the article or articles of agricultural produce of which he was in possession, as may appear to meet the justice of the case.

5—Every person committed for trial under this Law shall be tried by the Resident Magistrate on indictment which may be in the form in Schedule B hereto.

6—Any person convicted before a Resident Magistrate of an offence under this Law, shall be liable to imprisonment, with or without hard labour, for a period not exceeding six months; and upon any subsequent conviction on a similar charge to imprisonment, with or without hard labour for a period not exceeding twelve months.

7—In all proceedings under this Law the suspected person, and the husband or wife of such suspected person shall be competent but not compellable witnesses.

8—All proceedings under this Law shall be free of fees and stamp duty.

SCHEDULE A.

Logwood	Oranges
Fustic	Grape Fruit
Cedar	Forbidden Fruit
Mahogany	Shaddocks
Satin Wood	Lemons
Mahoe	Limes
Lignumvitæ	Apples
Ehony	Grapes
Bitterwood Spars	Fine Apples
Lancewood	Bananas
Pimento Sticks	Plantains
Orange Sticks	Breadfruit
Broadleaf	Yams of any kind, and heads of yams
Canes	Cocoas, and heads of cocoas
Cocoa or Chocolate	Potatoes and sweet potatoes

Kola
Nutmegs
Ginger
Arrowroot
Pimento
Tobacco
Annatto
Coconuts

Cassava
Peas, Beans
Indian corn or maize
Guinea corn
Guinea Grass
Garden vegetables
Plants or suckers of any of the above
Sarsaparilla
Coffee

SCHEDULE B.

In the Resident Magistrate's Court for the Parish of
to wit the day of 19
It is hereby charged on behalf of our Sovereign Lord the King that A.D. was
on the day of in the
Parish of unlawfully in possession [here state the
quantity and nature of the agricultural produce] against the form of the Statute in
such case made and provided.

C. D.
Clerk of the Courts for the Parish of
AUTHORIZED PERSONS.

RULES FOR THE PAYMENT OF "AUTHORIZED PERSONS" FOR ATTENDING COURT AS
WITNESSES AND FOR PERFORMING ACTUAL DUTIES.

1. Every "Authorized Person," appointed under the Praedial Larceny Law,
Law 4 of 1909, shall be paid for attending Court, as a witness, according to the
Rule set out in Schedule A of Law 9 of 1899, as amended by Law 4 of 1902 ; but
in no case shall he be paid less than 2 - per diem, and mileage, at the rate of 3d.
per mile, one way only.

2. Every such person shall be paid, at the rate of 2 - per diem (and not more,
and without mileage) for each day on which :

- (a) he effects an arrest, or actually attempts to effect an arrest;
- (b) he attends at a Police Station, or before a Magistrate, on duty,
in connection with a case under the said Law;
- (c) does such other service, in connection with his duties under the
Law, as has occupied him a substantial part of a day, or other
wise entitles him to payment, in the opinion of the officer author-
ized to pay him.

3. All payments shall be made by the Clerk of the Courts at the Court House,
where the case is tried, or at the Courts' Office, if the case does not come to trial.

The above Rules were approved of by His Excellency the Governor on August
22nd, 1910, in C.S.O. letter No. 84^o -10103 of that date.

AUTHORITY SENT TO EACH AUTHORIZED PERSON ON HIS APPOINTMENT.

To.....
You are hereby authorized, under Section 2 of Law 4 of 1909, to arrest any
"Suspected" person or persons in possession of any articles of Agricultural Produce,
mentioned in Schedule A of the said Law, or any other articles of Agricultural Pro-
duce hereafter added to such Schedule by order of the Governor in Privy Council
published in the Jamaica Gazette, and deal with such person or persons as provided
for in Section 1, of the said Law.

Inspector-General of Police.

day of.....19.....

COPY OF MEMORANDUM BY THE ATTORNEY GENERAL, AS TO THE POWERS OF AUTHO-
RIZED PERSONS.

"Authorized Persons" under the Praedial Larceny Law 1909, (Law 4 of 1909)
may arrest, without a warrant, any person who has been, or is, in possession, of
any of the articles of agricultural produce mentioned in the Schedule to this Me-
morandum, if they have reasonable cause to suspect that such article has been
stolen, or has been received with the knowledge that it was stolen or dishonestly
come by. The Authorized Person making the arrest should forthwith take the
person arrested, with the article, or articles of agricultural produce, before a Justice
of the Peace or Clerk of the Courts and the Justice or Clerk will deal with the ar-
rested person.

THE PROTECTION FROM DISEASE PLANTS LAW

Colonial Secretary's Office,

14th May, 1915.

The Governor directs the publication, for general information, of the following notice with regard to the distinction between "notifiable plant diseases" and "Infectious Plant Diseases" as defined under the terms of Law 3 of 1915 "A Law to prevent the introduction and spread of Plant Disease."

1. The Governor in Privy Council has power to declare any disease of plants to be a 'notifiable plant disease' and the Governor to issue an order prescribing the treatment to be followed by the owner or occupier for the treatment of such notifiable plant disease.

In the case of a notifiable plant disease the owner or occupier and every person having the charge or management of land who knows or suspects the existence of a notifiable plant disease on the land of which he is the owner or occupier or has the charge or management shall with all practicable speed give notice in writing to the Director of Agriculture of the fact of the land or of any plant thereon being so infected or suspected, and should in such notice give all information in his power as to the extent and nature of the disease. The said notice shall be served personally on the Director of Agriculture or shall be addressed to him by registered post.

Where the occupier or the person having the charge or management of land is charged with an offence under the Law, he shall be presumed to have known of the existence of the disease, unless and until he shows to the satisfaction of the Court that he had not knowledge thereof and could not with reasonable diligence have obtained that knowledge.

A fine not exceeding £50 can be inflicted for a breach of an order made under the Law or for failure to notify a notifiable Plant Disease.

At present the Panama Disease of Bananas is the only plant disease declared to be a notifiable plant disease to which the above requirements apply.

2. An "Infectious Plant Disease" is a disease so declared by the Governor in Privy Council for which the Governor has power to make an order for treatment by the owner, occupier or manager concerned.

No notice of such a disease to the Director of Agriculture is required.

If the owner or occupier or the person having the charge or management of any land fails to carry out the measures prescribed in the order so issued, the Director of Agriculture or any person authorised by him in writing may enter on such land and may carry out the measures prescribed in the order and the cost of carrying out these measures is recoverable from such owner or occupier or person as the case may be at the suit of the Director of Agriculture or any person authorized by him in writing, as a Civil Debt before the Resident Magistrate for the parish in which the land in question is situated.

The *Bonnygate Disease of Bananas* and the *Bud-roi Disease of Coconuts* have been declared to be "Infectious Diseases" under this Law.

By command,

ROBT. JOHNSTONE,
Actg. Colonial Secretary.

The Governor directs the publication, for general information, of the following Order made by His Excellency under Section 4 of Law 3 of 1915. The Protection from Disease (Plants) Law, 1915, with regard to the Panama Disease of Bananas.

This Order will be published in pamphlet form with a preface containing an explanatory description of what constitutes "infectious" and what "notifiable"

ORDER.

Under Section 4 of the Protection from Disease (Plants) Law, 1915, (Law 3 of 1915):

Whereas it is provided by Section 4 of the Protection from Disease (Plants) Law, 1915, (Law 3 of 1915) that it shall be lawful for the Governor from time to time by Order to be published in the *Jamaica Gazette* to prescribe the measures to be taken for the treatment of any notifiable plant disease by the owner, occupier or person having the charge or management of any land, whether the land shall or shall not have been declared to be infected or suspected of being infected with plant disease and generally to make provision for the purpose of preventing the introduction and spread of plant disease or of any particular plant disease named in any such Order:

And whereas the Panama Disease of Bananas is and is hereby declared to be a notifiable plant disease, now therefore the Governor is pleased to prescribe the following measures to be taken for the treatment of the Panama Disease of Bananas:—

1. Every owner or occupier or persons having the charge or management of land (whether the land shall or shall not have been declared to be infected or suspected of being infected with plant disease) who knows or suspects the existence of the Panama Disease of Bananas on the land of which he is the owner or occupier or has the charge or management shall, on giving notice to the Director of Agriculture as required by Section 9 of the Protection from Disease (Plants) Law 1915, and pending the arrival of the Director of Agriculture or a person appointed to carry out the provisions of the said Law, prevent as far as possible all persons and animals passing over the land infected or suspected of being infected and shall disinfect with a solution of one half pint of Jeyes' Fluid, or similar disinfectant, per gallon of water, the boots or naked feet of all persons and the feet of any animals entering or walking on the land infected or suspected of being infected and shall disinfect by the heat of fire, or thoroughly cleanse with the disinfectant above described, all cutlasses and tools used in the examination or treatment of any suspected plants, and shall examine the clothing of any person leaving the infected area and shall carefully remove any mud or soil found on such clothing, and shall wash any clothing so soiled with the disinfectant above described.

2. The occupier or other person having the charge or management of land which in the opinion of the Director of Agriculture is infected with the Panama Disease of Bananas (whether the said land shall or shall not have been declared by Order published in the *Jamaica Gazette* to be infected or suspected of being infected with Plant Disease) shall make a systematic examination of every stool of bananas within a distance of one chain from the diseased plant by cutting down and observing the appearances of the stem and base of each plant. If one or more diseased plants are thereby disclosed a further area of one chain in distance from any such diseased plant shall be further examined in the manner above prescribed, and this procedure shall continue until an area has been attained in which no diseased plant is found within one chain of the boundaries of the said area. The whole area thus included shall be an infected area (hereinafter referred to as "the infected area") for the purpose of these regulations and shall be treated by the said occupier or other person as follows:—

- (1) Every banana plant within the infected area whether diseased or not, shall be dug up with its roots and cut up into small slices not exceeding three inches in thickness. The pieces of plants which are not diseased shall be piled into heaps and treated with fresh-slaked lime. The pieces of the diseased plants shall not be mixed up with those not diseased, and if practicable, shall be thoroughly burnt so that the fragments are charred to the centre. Where it is not practicable to use fire the diseased pieces shall be treated with from 4 to 20 gallons of lime per plant according to the size thereof. Lime shall be applied to all the holes from which plants have been dug and these holes left open and exposed to the sun. The plants found to be diseased shall be cut up and treated last. The pieces of diseased plants shall after treatment be kept in some place from which they are not likely to be carried away by flood rains.
- (2) All root food-crops including yams, taniens, groundnuts, sweet potatoes, cassava, Irish potatoes, onion, scallions, turnips, growing on the infected area shall be dug up and destroyed or thoroughly disinfected at the time of treatment of the diseased area with the disinfectant above described.
- (3) No person except those acting under Section 8 of the Protection of Disease (Plants) Law, 1915, shall without the permission in writing of the Director of Agriculture first had and obtained enter on the infected area and no poultry or domestic animal shall be allowed on the said land.
- (4) No Plants or crops of any description shall be planted on the infected area, nor shall any implements of tillage be used thereon for a period of at least one year from the last treatment of such area nor until the written permission of the Director of Agriculture has been obtained by the said occupier or other person.
- (5) No person shall remove from the infected area any cutlass or implement of tillage used thereon unless and until such cutlass or implement has been disinfected by the heat of fire (or thoroughly cleansed with the disinfectant above described.)
- (6) All persons who enter the infected area to carry out the treatment prescribed in this Order shall, before proceeding from the infected area to a place not infected, wash their boots or naked feet in a solution of one half pint of Jeyes' Fluid or similar disinfectant per gallon of water.
- (7) Should adventitious Banana Suckers appear upon any land after treatment thereof as an infected area under this paragraph, such land shall be treated in the manner prescribed in (1) of this paragraph and the provisions of (5) and (6) of this paragraph shall apply to such land.

3. The occupier or other person having the charge or management of any land adjacent to land which in the opinion of the Director of Agriculture is infected with the Panama Disease of Bananas shall treat as an infected area within the meaning of the next preceding paragraph all land within a chain from the nearest diseased plant on the adjacent land.

In this paragraph "Diseased Plant" means a plant which in the opinion of the Director of Agriculture or of a person appointed under Section seven of the Protection from Disease (Plants) Law, 1915, is infected with the Panama Disease of Bananas.

4. This Order may be cited as The Panama Disease of Bananas Order, 1915.

5. The Interpretation Law, 1900, (Law 9 of 1900) applies for the purpose of the interpretation of this Order in like manner as it applies for the purpose of the interpretation of a Law.

(Sgd.) W. H. MANNING,
Governor.

King's House, Jamaica,
10th May, 1915.

ORDER.

Under Section 4 of the Protection from Disease (Plants) Law, 1915, (Law 3 of 1915).

Whereas it is provided by Section 4 of the Protection from Disease (Plants) Law, 1915, (Law 3 of 1915) that it shall be lawful for the Governor from time to time by Order to be published in the *Jamaica Gazette* to prescribe the measures to be taken for the treatment of any infectious plant disease by the owner, occupier or person having the charge or management of any land whether the land shall or shall not have been declared to be infected or suspected of being infected with plant disease and generally to make provision for the purpose of preventing the introduction and spread of plant disease or of any particular plant disease named in any such Order.

And Whereas the Bonnygate Disease of Bananas is a plant disease which the Governor in Privy Council by notice published in the *Jamaica Gazette* has declared to be an infectious plant disease;

Now therefore the Governor is pleased to order and prescribe as follows:—

1. The occupier or other person having the charge or management of any land on which there are banana plants infected with the Bonnygate Disease of Bananas, whether the land shall or shall not have been declared by order published in the *Jamaica Gazette* to be infected or suspected of being infected with plant disease, shall take the following measures for the treatment of the said Bonnygate Disease of Bananas.

- (a) the diseased plants shall be dug up completely, chopped into pieces not exceeding three inches in thickness and the pieces covered with dry powdered lime, and all holes from which the diseased plants are removed shall be treated with lime and left exposed to the sun.
- (b) All adventitious banana suckers appearing at any time within three months at or near any place from which banana plants have been dug up and treated under paragraph (a) above, shall be dug up and treated in the manner prescribed in the said paragraph (a).
- (c) No banana plants shall be grown or allowed to grow on or near any place from which banana plants have been dug up and treated under paragraph (a) above for a period of three months after such digging up and treatment.

2. This Order may be cited as "The Bonnygate Disease of Bananas Order, 1915."

3. The Interpretation Law 1900 (Law 9 of 1900) applies for the purpose of the interpretation of this Order in like manner as it applies for the purpose of the interpretation of a Law.

W. H. MANNING,
Governor.

Kings House, Jamaica,
14th May, 1915.

ORDER.

Under Section 4 of the Protection from Disease (Plants) Law 1915, (Law 3 of 1915).

Whereas it is provided by section 4 of the Protection from Disease (Plants) Law 1915 (Law 3 of 1915) that it shall be lawful for the Governor from time to time by Order to be published in the *Jamaica Gazette* to prescribe the measures to be taken for the treatment of any infectious plant disease by the owner, occupier or person

having the charge or management of any land whether the land shall or shall not have been declared to be infected or suspected of being infected with plant disease and generally to make provision for the purpose of preventing the introduction and spread of plant disease or of any particular plant disease named in any such Order;

And whereas the Bud Rot Disease of Coconuts is a plant disease which the Governor in Privy Council by notice published in the Jamaica Gazette has declared to be an infectious plant disease;

Now therefore the Governor is pleased to order and prescribe as follows:

1. The occupier or other person having the charge or management of land on which there shall be any coconut trees infected with the Bud Rot Disease of Coconuts whether the land shall or shall not have been declared by order published in the Jamaica Gazette to be infected or suspected of being infected with plant disease, shall take the following measures for the treatment of the said Bud-Rot Disease:

- (a) If one or more leaves in or near the bud of a coconut tree turn yellow and break near the end and on cutting down to the base of the affected limbs yellow or dark spots are found to be present, the hanging dead leaves shall be fired so as to burn away all expanded foliage. If the tree does not recover so as to produce healthy growth at the heart within 4 months after this treatment the diseased tree shall be cut down and the bud destroyed with fire.
- (b) If the heart of the tree, though green, bends over and looks wilted and on examination yellow or dark spots are found to be present on the affected parts, the tree shall be cut down and the top thereof treated with fire so as to char it to the centre.
- (c) If the heart leaves of the tree dry up entirely and a soft, sticking rot is present in the stalks, the tree shall be cut down and the top thereof treated with fire so as to char it to the centre.
- (d) If the heart of the tree has fallen away completely the tree shall be cut down and the upper portion thereof treated with fire so as to char it to the centre.
- (e) In cases where it is dangerous or impracticable to use fire on the spot, the diseased material shall be carefully removed and treated with fire in a safe place.

2. This Order may be cited as "The Bud Rot Disease of Coconuts Order, 1915."

3. The Interpretation Law 1900 (Law 9 of 1900), applies for the purpose of the interpretation of this Order in like manner as it applies for the purpose of the interpretation of a Law.

W. H. MANNING,
Governor.

King's House, Jamaica,
14th May, 1915.

BOOTS.

People coming back from Central America must now have their boots disinfected. The reason is that the germs of Panama Disease of Bananas are carried in soil, and there is usually some dirt contained between the soles and uppers of boots. The following order by the Governor has been made:—

The Governor directs the publication, for general information, of the following order made by His Excellency under the powers vested in him by Section 4 of "The Protection from Disease (Plants) Law, 1915," Law No. 3 of 1915, prescribing the conditions under which alone the importation of boots from certain countries will be permitted.

It is also notified that the means of disinfection will be provided by the Customs Officer.

ORDER.

In exercise of the powers in me vested by Section 4 of the Protection from Disease (Plants) Law, 1915, I Brigadier-General Sir William Henry Manning, K.C.M.G., C.B., Governor of Jamaica, do hereby prescribe the following conditions under which alone the importation of boots from Dutch Guiana, Colombia, Panama, the Canal Zone, Costa Rica, Nicaragua, Guatemala, and Honduras, shall be permitted, namely:—

That such boots shall prior to admission to the island be soaked for not less than ten minutes in a solution composed of either:—

- (a) 1 lb. Jeyes' Fluid diluted in not more than one gallon of water, or
 - (b) $\frac{1}{2}$ lb. Sulphate of Copper diluted in not more than one gallon of water,
- provided that any Custom Officer may waive the foregoing condition in regard to any boots which he may be satisfied neither belong to nor have been used by labourers who have worked on banana farms in any of the above mentioned countries.

W. H. MANNING,
Governor.

PINEAPPLES.

It is strange that Cuba should be able to grow and ship to northern markets large quantities of pineapples and from Jamaica practically none are shipped. In 1912 only 311 packages of a value of £58 6s. 3d. were exported representing mostly a few boxes from private parties, probably presents to friends. Formerly pineapples were common in the local markets from April to September, and after that time some could always be got at an increased price. And always the favourite pine locally, and the most expensive, was the "Ripley." Now the Ripley appears to have gone out of cultivation; the Liguanea Plains was its special home and every other person with some land had a patch; some had small fields. Now hardly anybody has any there at all. The markets from June to September have usually now, only the hardy Bullhead or Red Spanish; the well known Sugar Loaf and a variety sometimes called "Sugar" or "Chinese" pine, the two latter being very soft and juicy, but not of such distinct flavour as the Ripley. They grow half wild in small settlers cultivations without much attention. The Black Pine has a better flavour, and is a strong grower withstanding drought, but it is not a prepossessing pine in appearance, as it never makes a bright colour, and so is not a favourite local buyers, for use on board steamers or for export.

The cultivation of pineapples for shipping has generally been a failure here when tried on a large scale. Yet during the period the Direct Line was running, we had suitable shipping facilities. It is not that pines will not grow well; they do and with no great difficulty, yet they have not paid on a large scale. It seems a puzzle why the growing of a good shipping variety like the Bullhead or Red Spanish for shipping to the United Kingdom should not pay. On paper it should pay, in practice it has not.

(This is in answer to several correspondents who are late arrivals here and who have been asking why pineapple cultivation should not be embarked upon; they have given the prices they have had to pay for pines in London; they have estimated the cost of shipping they have figured out so many plants to the acre here, and so many fruits therefrom and the result has been £100 per acre gross!—Ed.

At the same time pineapples for the table should be available all the year through, especially at the time we expect tourists to be here, for they always ask for pines. Yet for some years back between Christmas and April a good pineapple has been the scarcest fruit to get, and hotel keepers often could not get them at any price, except a few Bullheads. It was the continued droughts since 1907 that knocked the Ripley pineapples almost out of existence in the Liguanea Plains of St. Andrew, and plants are now very scarce.

It would be the greatest pity if this, the best flavoured pineapple of all pines, should remain so scarce that they cannot be had in any numbers even in their season.

—:—

Most of the men who in recent years have lived far beyond the ordinary term of human life have been noted for hobbies; that is, besides their ordinary occupation, whatever it may be, they have had one or more interests to which they have turned for refreshment, and which have evidently proved not an expenditure of energy but a recreation in the etymological sense of that word, as providing an opportunity for other portions of their brain to relax themselves thoroughly.

THE JOURNAL OF THE
MANURING OF COCOA.

There have been carried on in Dominica and Trinidad some systematic experiments in the manuring of cocoa over a period of years. The results of one year against any other year would not be of much value as there might be better seasons in one year than the other, but the average results over a period of five years are likely to give results from which definite experience can be gained and acted upon. In Dominica such experiments have been carried on for thirteen years now. We have referred to these before, and given some of the results. In all the experiments in both Islands certain plots are left that are given no manure and no treatment; these are called check or control plots. In Dominica the invariable result has been that mulching with grass and leaves has given the best results by far, the nett returns given being more than double over some of the combinations of fertilizers used; but these experiments were only carried on at the Botanical Station, and the same results might not apply on different types of soil or with a different rainfall. In Trinidad, however, the experiments have been carried on, on various estates having different soils and different rainfalls, some on level ground, some on hillsides, some on open ground, and some in deep valleys, and the results have been so very varied that one is forced to the conclusion that experimenting must be done for one's self on one's own estate.

On some of the estates, the control or check plots with no manure have given better nett results than where expenditure has been incurred on various combinations of fertilizers and for lime and for pen manure. This does not mean that these fertilizers or chemical manures have not increased the yields, but that they have not increased the yield enough to pay for what was expended over the results from the control plot where nothing was expended in manuring. Therefore the control or unmanured plots have given better nett results; this, however, does not apply to all the estates.

We will take one estate, for instance, which had 89.32 inches of rain in the year, and it is stated that with the exception of plot 3 (on which 2 lbs. of Basic Slag and 1 lb. of Nitrate of Soda were applied per tree, and which gave only a yield of \$39.21) the increase obtained from the manured plots was greater than from the control plots, and in the case of 6 of the plots out of 13, the increase was quite appreciable. The best result was obtained from 2 lbs. of Basic Slag and $\frac{1}{2}$ lb. of Sulphate of Potash, which gave a nett return of \$78.41, while the best control plot gave \$41.44. The return from the control plots on the average was 3,087 pods against 4,543 pods per acre from the average of the manured plots. The field under experiment was the worst on the estate and was specially selected on that account. As there was practically no improvement in the yield of the trees during the first two years, it was thought advisable to try the effect of dynamite on the soil which was a stiff, heavy clay. Accordingly, during the first week of June, 1914, half cartridges (1lb. each) of Dupont's Red Cross Dynamite, were exploded at a depth of about 3 ft. between every two cocoa trees in each plot, except No. 4, so that the charges were about 12ft. apart. The effect on the soil was very good, very few "blow outs" having been experienced especially after the first day when the labourers had got into the correct way of tamping. It was observed that holes drilled a couple of days in advance collected

water, and so gave reason to believe that in the rainy season water stagnates 2 to 3 ft. below the surface of the soil and cannot be removed by ordinary drainage. The additional cost of this dynamiting experiment was £7 16s. 8d. per acre. The results of the dynamiting over the check or control plots remain to be proved.

We take another estate with a much lower rainfall—47.68 inches. On this estate one control plot which received no manure gave the best nett results, and the other 2 control plots gave larger nett profits than some of the manured plots, although the manured plots gave larger increases; these increases, however, were not enough to pay for the cost of the fertilizers and the labour in applying them. The largest number of pods picked per tree was 21.79 where the following combination of fertilizers had been applied:—2 lbs. Bone Meal, $\frac{1}{2}$ lb. Sulphate of Potash, $\frac{1}{4}$ lb. Sulphate of Ammonia. And this acre gave the best nett results of all the manured plots, the total nett profit after deducting the cost of the manures being \$36.83 per acre of 253 trees. The control plot, No. 4, however, with no manure, gave \$37.40. The lowest yield of any of the acre plots was \$16.70, and the combination of manures applied was— $\frac{1}{4}$ lb. Sulphate of Potash, $\frac{1}{4}$ lb. Sulphate of Ammonia, 75 lbs. Pen Manure.

It will thus be seen that very different results can be got on different estates from the same combination of Fertilizers. On one estate the very best results were got from one combination, on the next estate the same combination gave less than the plot receiving no manure at all. Some of the estates had trees, 35, 40, and even 50 years old, but as we have no estates here with such old trees—i.e. acres of them—we are taking one estate with trees varying from 11 to 14 years old which is the age of a very large number of trees on estates here: the rainfall also is very much like what prevails over a good many cocoa estates in Jamaica—61.5 The best nett results on this estate were obtained from an application of 3 lbs. of Lime and 1 lb. of Superphosphate of Lime, per tree, a combination which gave almost the poorest results on the two previous estates mentioned; the nett yield from this combination was \$32. The next two best results were got from the two control plots with no manure—\$74.69 and \$72.82 respectively.

In the Trinidad experiments very useful information has been obtained on the natural yield of plots, the records from each tree having been kept. The average number of pods picked from trees 20 years old varied in 1913-14 from 23 to 44.65 pods on an estate with a large rainfall, and this has been an increase over 1912-13 when the average number of pods was 14 to 30.65.

In Tobago the returns given in wet cocoa from trees 10 years old with a rainfall of 76.69, was 1,074 lbs. to 1,989 lbs. each plot being an acre. The number of pods per lb. of dry cocoa varies very much on different estates and in different years on the same estates, from 10.96 to 18.84.

The natural yield of trees varies so very much, that one is led to consider what has caused this. We have written on the subject of the selection of seed very often, and we are convinced that all the operations in planting have to be conducted with the greatest care and watchfulness to see that from the very beginning the best seed is planted—that likely to be most productive—from a vigorous tree. The first need is the vitality in the seed itself. Every weakly plant that has started in a nursery should be eliminated at once. It is a

common habit to save expense by coaxing such weakly plants along. No young cocoa plant grown in a bamboo pot that is root-bound, should be planted, but ruthlessly rejected as it is unlikely that it would ever make a vigorous tree. It is better to reject hundreds of young plants than have trees cumbering the ground in after years, occupying space and costing money to keep up, with unprofitable results. The crops from trees vary so very much that this matter has to be studied. There are matured cocoa trees not giving more than 1 lb. of dry cocoa per tree, on the same land, and under the same conditions, and of the same age, there are trees yielding 14 lbs. on an average per annum.

In the Trinidad experiments it is also stated that the limed plots show that lime alone is of no value as manure for their kind of soils, yet their soils are stated to be deficient in lime. The addition of lime, however, is stated to be of great benefit if given with other plant food, in fertilizers or manures. It is also stated that trees yielding not more than 2 lbs. of dry cocoa are not profitable enough to justify much expenditure in cultivation.

SCHOOL GARDENS.

The competition in School Gardens will be continued this year. The Board of Management offer prizes to Teachers having School Gardens in the following districts:—

1. Prizes for the best plot of Sea Island Cotton confined to the following districts:—

Southern St. Elizabeth—			
3 prizes of 20s., 15s., 10s.	..	£2	5 0
Southern Manchester—			
2 prizes of 20s., 10s.	..	1	10 0
Southern Clarendon—			
3 prizes of 20s., 15s., 10s.	..	2	5 0

£6 0 0

2. Prizes of 20s. and 10s. for the best plot of two varieties of Guinea Corn, red and white, confined to the following districts:—

(a) Southern Manchester	..	£1	10 0
(b) Southern St. Elizabeth	..	1	10 0
(c) Southern Clarendon	..	1	10 0

£4 10 0

3. Prizes of 10s. each for the best plot of corn (Maize) suitable for seed corn. The districts and prizes for this competition will be distributed as follows:—(1) Kingston, Port Royal, St. Andrew and Eastern St. Thomas; (2) Western St. Thomas and Eastern Portland; (3) Western Portland and St. Mary; (4) St. Ann; (5) Trelawny; (6) St. James; (7) Westmoreland and Hanover (Mr. Briscoe's district); (8) Westmoreland and Hanover (Mr. Somerville's district); (9) St. Elizabeth, Northern (Mr. Powell's district); (10) St. Elizabeth, Southern (Mr. Smith's district); (11) Manchester, Northern (Mr. Powell's district); (12) Manchester, Southern (Mr. Smith's district); (13) Clarendon; (14) St. Catherine

14 prizes of 10s. each, in all	£7 0 0
Total	£17 10 0

RULES.

1. The above crops should be planted during the months of August and September, (preferably between the 15th of August and the 15th of September) if the seasons permit; if too dry in these months, then not later than the 15th of October, the earlier the better.

2. The plots should be one-fourth of a square chain in extent.

3. Entries should be made by the 31st of August to the Secretary, Jamaica Agricultural Society, who will furnish seeds free.

4. Judging will take place in January or February, or as soon after as is possible, according to the seasons that may occur.

5. The Agricultural Instructor for the district will be the judge. He may pay visits as he has opportunities during the period of growth, and will form his judgment from the general conditions under which the crop is grown, and not entirely by the total crop.

NOTE. The kind of seed used, the exact measurement of the plot, the date of the planting, the distance between the plants, the rainfall during the period of growth of the crop, and the crop finally reaped should be carefully recorded in the School Garden record.

APPROVED— J. R. WILLIAMS, JNO. BARCLAY,
Director of Education. Secretary.

SCHOOL GARDENS.

The following are the awards made in the School Gardens Competitions for the year 1914-15:—

CORN.

Mr. Hanson's District—1st, H. T. Crooks, Mt. Fletcher, 10/-.

Mr. Cradwick's District—1st, W. T. Edwards, Brainerd, 5/-; R. A. Sutherland, Buff Bay, 5/-, equal.

Mr. Arnett's District—1st, L. M. Welsh, Duan Vale, 5/-; J. E. Hall, Jackson Town, 5/-, equal.

Mr. Briscoe's District—1st, T. A. Malcolm, Seaford Town, 10/-.

Mr. Powell's District—1st, R. A. Munroe, Comfort Hall, 10/-.

Mr. Smith's District—1st, J. H. Petrie, Barbary Hall, 5/-; A. N. Finlayson, Epping Forest, 5/-, equal.

Mr. Schleifer's District—1st, W. F. Clarke, Frankfield, 10/-.

Mr. Mossman's District—1st, R. M. Dillon, Linstead, 10/-.

Mr. Wates' District—No award.

Mr. Somerville's District—No award.

GUINEA CORN.

Mr. Schleifer's District (Southern Clarendon)—1st, A. L. Neita, Alley, £1; 2nd, P. L. Clarke, Watsonson, 10/-.

Mr. Smith's District (Southern St. Elizabeth).—1st, Miss I. C. Black, Top Hill, £1; 2nd, J. H. Petrie, Mountainside, 10/-.

COTTON.

Mr. Schleifer's District (Southern Clarendon).—N. S. McDonald, Race Course, 15/-; A. L. Neita, Alley, 15/-; P. L. Clarke, Watsonson, 15/-, equal.

Mr. Smith's District (Southern St. Elizabeth).—1st, Miss I. C. Black, Top Hill, £1; 2nd, A. N. Finlayson, Epping Forest, 15/-; 3rd, J. T. Meek, Ballard's Valley, 10/-.

COTTAGE HOLDING COMPETITION.

PRIZES OFFERED FOR BEST KEPT SMALL HOLDINGS IN THE PARISH OF
PORTLAND. ONE ACRE OR UNDER. 1915-16.

RULES.

1. Prizes will be awarded for holdings of not more than one acre or less than quarter acre which are in the opinion of the judges best established as a home with suitable crops and surroundings.

2. The residence of the Competitor must be on the holding entered for competition, and the holding must be situated near (within a reasonable distance of) a Main or Parochial Road.

3. No Prizes will be awarded unless there are at least three times as many Competitors as there are prizes offered.

4. Prizes will be given as follows:—

1st Prize .. ..	..	..	£1 10 0
2nd Prize .. ..	..	..	1 5 0
3rd Prize .. ..	..	..	1 0 0
4th Prize .. ..	..	..	15 0
5th Prize .. ..	..	..	10 0
			£5 0 0

5. The judging will be conducted on a system of points as follows:

Houses and Outbuildings ..	..	20
Gates and Fences ..	..	15
Sanitation .. ..	..	15
Vegetable Garden .. ..	..	15
Flower Garden .. ..	..	10
Permanent Crops .. ..	..	10
Live Stock .. ..	..	10
Permanent Improvements ..	..	5
		100

6. It shall be competent for the judges to withhold any or all of the prizes if the Holdings entered for competition are not considered of sufficient merit.

7. Due notice to be given before judging commences (which will take place before the 31st March, 1916), and the decision of the Judges in all cases will be final.

8. Application for entries to be made as follows:—

To the local Agricultural Instructor, the Secretary of the Branch Society in your parish, or to

JNO. BARCLAY, SECRETARY,
Jamaica Agricultural Society,
11 North Paade, Kingston.

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A man must have either great men or great objects before him, otherwise his powers degenerate, as the magnet's do when it has lain for a long time without being turned towards the right corners of the world.

HOUSEHOLD HINTS.

ORANGE MARMALADE.—This is an easy method. Take equal weights of oranges and fine white sugar. Put the oranges whole into a preserving pan, cover them with cold water, and bring to the point of boiling. Pour off the liquid, put fresh water with the fruit, and boil gently until the rinds of the oranges can be easily pierced with the head of a pin. Take out and drain the oranges, and cut them—skin, pulp and everything—into very thin slices; remove the pips, and throw the fruit into a preserving pan, with half a pint of the water in which the oranges were last boiled, to every pound of fruit, and half the sugar which is to be used. Simmer gently for 30 minutes, then add the remainder of the sugar, and boil 20 minutes longer, or until the marmalade jellies. Pour it into jars and when cold, cover and store for use.

:o:

LEMON JELLY MARMALADE.—Take 3 lbs. lemons, 4 pints cold water, preserving sugar. Choose good fresh lemons with thin skins. Wash them carefully, and peel off the rind as thinly as possible. Now cut the yellow rinds across in thin strips or shreds, put these into a small saucepan with a pint of the water, and let them simmer until tender, about half an hour. Meanwhile remove the white skin from the lemons (this is not used in the marmalade) and cut the juicy inside part in small pieces. Put this into the preserving pan with the remainder of the water, bring to the boil, and boil steadily about one hour, stirring frequently. Then strain through a fine hair sieve or jelly bag without pressing the fruit. When all the liquid has run through, add it to the lemon shreds and their liquid. Measure this, and return it to a clean preserving pan, allowing $\frac{3}{4}$ lb. sugar to each pint of liquid. Bring to the boil, and boil until the marmalade will set readily. Pour into jars and cover.

:o:

ORANGE JELLY.—Take 4 lbs. marmalade oranges, 2 lemons, $4\frac{1}{2}$ pints water, preserving sugar. Wipe the oranges and lemons with a damp cloth, and grate off the yellow rinds only. Then remove all the white skin, which is not used in the making of the jelly. Cut the inner part of the oranges and lemons into small pieces, and put it into a preserving pan with the water. Boil for half an hour, stirring frequently, then strain through a hair sieve or jelly bag, and allow the juice to drop without pressure. Measure this liquid and put it into a clean preserving pan, with the grated rinds, and 1 lb. preserving sugar to each pint of juice. Bring to the boil, and boil from 10 to 15 minutes, or until it will jelly. Skim well, pour into jars, and cover while hot.

:o:

GRAPEFRUIT MARMALADE, I.—Choose fruit not quite ripe, clean well with a cloth or brush, and soak in water—to 6 of the fruit one gallon water. Next day quarter them taking out cores and pips, then put on to boil in the water in which they were soaked and boil till skins are tender, then take them out and pass through a mincing machine, return all to the water, then weigh and use weight for weight of sugar and boil till syrup jellies.—C. T. W.

GRAPEFRUIT MARMALADE, II.—3 Grape Fruit, $2\frac{1}{2}$ lbs. sugar, 1 quart and 1 pint water. Slice the Grape Fruit thinly and soak for 24 hours; then turn into a preserving pan, bring to the boil and then throw the juice off. Add the same quantity of water and allow to boil again, add sugar gradually and boil until of the right consistency. W. H.

(Some Guava Recipes next month.)

PREPARATION OF COCOA.—To prepare the Cocoa seeds for drinking purposes after they are cured, they should be placed in an iron pot over a fire and well parched so as to facilitate the removal of the outer skin or shell. This done and the seeds separated from the trash, they are next placed in a mortar and thoroughly pounded; cinnamon or nutmeg can be added and well mixed in, if flavouring is desired; it is then in a condition to be rolled into sticks, which being soft and moist should be set aside to cool and harden for a couple of days.

To prepare the drink, these sticks should be grated to a fine powder, add the required amount of water and boil for about ten to fifteen minutes, when milk can be added to suit the taste and the chocolate is ready to serve.

NOTE.—Chocolate for Exhibition purposes must be unflavoured and without artificial colouring.

STOCK NOTES.

BLACK LEG.—Black Leg is a disease that very much resembles Anthrax. The symptoms are very much the same in both cases, excepting that the animal may live a few days longer with Anthrax than with Black Leg.

The most important characteristic of this disease is the appearance of a tumor or swelling under the skin of the affected animal a few hours after the setting in of the disease.

The tumor may be located on the thighs, neck, shoulder, breast, hock joints, flanks or rump. By examining or feeling the joints, a peculiar crackling sound is heard under the skin. This is due to a collection of gas formed by the germs as they multiply. At this stage the skin becomes dry and cool to the touch in the centre of the tumor. If the swelling is lanced, a frothy, dark red, rather disagreeable smelling fluid is discharged. The animal manifests little or no pain during the operation. The treatment of this disease is very unsatisfactory. In fact it is useless to undertake it. A prevention of the disease is the only wise thing to undertake. This is to render the balance of the herd immune by vaccination with Black Leg Vaccine.

* * * * *

With fresh lush grass in plenty after the genial rains we have had, in most districts young stock may soon get into prime condition, and rapid improvement from poor condition to putting on flesh, favours the outbreak of Black Leg. There is no cure once an animal is attacked, but inoculation with "Blacklegoids" advertised in this JOURNAL is a safeguard. All carcasses of animals that have died of this disease should be burned at once.

:O:

PIGS AND MUD.—Just as a hen takes a dust bath and a man takes a water bath, a pig likes a mud bath. Even if the pig has a nice pool of water available, he will surely turn up the mud on the edge and get plastered over. It is natural for the hog to do this—the mud keeps flies and other pests off and clears off scurf from his skin. *But*—and mark this *but*—there is such a thing as clean mud and dirty mud, and a filthy pool is not clean mud. Because the hog likes a wallow that does not mean that he likes to wallow in filth. Clean water and a clean wallow are necessary things for a pig.

:O:

CALF MILK.—The question was asked us the other day as to when the milk from a cow was good for human food after the cow had a calf. The calf milk or colostrum is a special milk provided by nature when the calf is born and is very laxative in effect. It is not good for human food. It usually lasts 3 days, but traces of it may last up to the 5th day. Generally speaking, however, the milk is quite good for human use on the 4th day.

:O:

PIGS AND WORMS.—It is not realized how much pigs are infested with internal parasites, generally slumped under the term "worms." To clear these out sometimes takes drastic treatment, but, unless in bad cases, the following simple powder used regularly for a period say one week in every month, would keep worms from getting a hold in the pigs and help to clear any out where the pigs are not too badly infested.

In the latter case a regular and careful medicinal treatment would be required, the exact nature of which would depend on the symptoms of the pigs.

Take 12 lbs. of charcoal, 5 lbs. woodashes, 5 lbs. of coarse salt and 1 lb. of Sulphate of Iron or Copperas, grind fine and feed one tablespoonful per 100 lbs. weight of pig, in every feed given to the pigs.

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OVERRUN IN BUTTER MAKING.—The overrun in butter making is often confusing to those not familiar with the composition of butter nor with the process of making it. Overrun means merely that a pound of butter-fat when churned into butter will produce more than a pound of butter, just the same as a pound of flour when mixed with yeast, milk, salt and water will make more than a pound of bread. When the cream tests 25 per cent. it requires 4 pounds of such cream to contain 1 pound of butter-fat. After the removal of the butter-fat by churning it is washed to remove the butter-milk, then salted to suit the market. The composition of average butter is as follows: Butter-fat 82.5 per cent, water 14 per cent, casein 1 per cent and mineral matter 2.5 per cent.

In the process of making butter, the constituents naturally would vary the same as in bread, depending upon the skill of the maker. In both cases, the water would vary the most.

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There is in operation in Victoria, Australia, a Law which compels the annual dipping of all sheep and lambs, except where the owner can obtain a certificate from a stock inspector to the effect that his stock is free from ticks and lice. What would be said in this country if a similar regulation were in force? And yet no regulation could be of more benefit to the stock owner generally than one of this description. Few realise the immense amount of damage done by ticks, because it is not damage than can be plainly seen. Perhaps the word "damage" is not quite a correct definition of the harm done; it would probably be better to use the words "loss occasioned by those animalculae," for they, like all other live animals, have to be kept, and the food they consume is of the most costly description, viz., the blood of the animal. During the time they are occupants of the cow it is impossible that the animal host they inhabit can either develop and attain or produce milk at the same rate as it would if they were absent.—From the JOURNAL for November, 1912.

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DRAYS AND BRAKES.—Every dray should be fitted with a brake. It saves the mules, especially the shaft mule, a tremendous amount of strain, and pays the owner.

In most districts carts and drays have no brakes at all, or only log of wood against the wheel.

We would go so far as to make the use of brakes compulsory.

We see nice carts now in North Manchester fitted with effective brakes worked with a lever at the right hand.

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There are about 180,000 acres planted in citrus fruits in California. There are about 8,000 citrus growers, the average holding being about 20 acres. The annual shipment is now about 14,500,000 boxes, approximately one-sixth of the world's supply. (From Circular No. 121 of the University of California, College of Agriculture.)—*The Agricultural News*, 30, 1, 1915.

POULTRY NOTES.

PRESERVING EGGS.—Eggs are still plentiful and will be until August. We remind readers who never like to be without eggs of their own and who use a large number around Christmas, that June and July is the period when eggs should be preserved and kept until fresh eggs are scarce and dear.

We do not repeat the recipes for using Silicate of Soda (Water Glass) as a preservative, nor the lime method. Turn up the JOURNAL for June, 1913.

* * * * *

We can assure those who may doubt that eggs can be kept in a tropical climate that these methods are not new even here. They have been tested long ago. Eggs put down in Water Glass solution in June kept in a fairly cool place will be quite good in December. Infertile eggs are, however, always better for this purpose than fertile eggs and as the hatching season is over, the cocks might be put up away from the hens.

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Every year we repeat methods of treating the various troubles that affect fowls, and still letters come in; if not every day, at least never a week passes without someone asking for advice on the treatment of the most common troubles.

The little booklet "Poultry in Jamaica," price 2d. from this Office, should be in the hands of everyone interested in rearing even a few hens.

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FEEDING YOUNG DUCKS.—One of the greatest causes of deaths among young ducks is feeding sour food. An enquirer asked us the other day why so many of his young ducks should die. They were fed 3 times a day on raw cornmeal merely mixed with water, and any left remained in the pans from one meal to another. This is altogether wrong. The cornmeal should be cooked into a gruel and fed to the young ducks, just enough that they will finish and look for more. The dish should then be lifted away and not left to sour in the sun. A ration of cornmeal 3 times a day is too monotonous and some other ration, in the way of scraps from the table should be fed.

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CAUSES OF INFERTILITY OR THE EMBRYO NOT DEVELOPING IN THE EGGS.—Enquiries about this are so numerous that it is difficult to answer them all fully. One of the chief is the cock being off colour, which he may be for a day or several days, and then recover without any indisposition being noticed, or a hen may be off colour and still lay; or the eggs may have been kept too long and although kept in a cool place have been exposed to the breeze, and this dries the moisture out, so that although the embryo starts to develop it dies in the shell at an early stage. Then there is another cause,—weakly parents, or the cock having too many hens—a common cause of infertility and weak embryos. Then the setting hen may have more eggs than she can cover and some get chilled, or she may stay off the eggs too long, or not long enough, for it is a mistake in this hot climate for a hen to sit too close; the hen should come off for twenty minutes to half an hour every day. If she was off for longer on an occasion it would not harm the eggs unless they were exposed to breeze.

PRESERVING EGGS.

VARNISHING EGGS WITH WATER GLASS.—Relative to the preserving of eggs we give the following new idea:— “Last Spring I began experimenting with water glass as an egg preservative in a way that I never have seen referred to, but which has thus far led to results so satisfactory and promising that they seem worth making known before the season of low-priced eggs again passes. The method, in a word is varnishing, instead of immersion. After trying various degrees of dilution of the water glass I came to use for my later lots of eggs, *four parts of water to one part of water glass*. Using less than an ounce of the diluted material glass at a time I found a tapering measuring glass and a small, flat brush to be convenient. A sheet of newspaper was spread on the table, and the eggs set on it as varnished. They dry quickly, and when convenient thereafter I gave them a second coat, afterward packing them in sawdust to prevent breakage, and keeping them in a fairly cool place. Up to date the eggs used have been fully as good as those immersed, and I am inclined to think better. They were not produced on my own place, and those that showed signs of “going some time” may easily have been two or three days laid when varnished. They were all or nearly all fertile, probably also. The greatest advantage over the immersion method is economy. Just how great I have not calculated, but to state it very roughly I should think the cost of immersion might be a thousand times the cost of varnishing.

A second important gain (which, because of the breadth of its application and possibilities, should perhaps stand far ahead of the first point) comes from the increased strength of the shell. A varnished egg is relatively hard to break, and would stand shipping hardships fatal to a *plain* one. If less dilute material were used, or more than two coats applied, eggs could be shipped as securely as nuts, and would keep good perhaps as long. To the housewife varnished eggs are far easier and more agreeable to handle than those immersed. They don't have to be fished out of a crock with a wooden spoon, and are dry when you get them. Of course, if a large number were to be done at a time dipping could be substituted for brushing.

There are some features of the process still to be improved. The paper adheres to the egg and nothing I have tried takes its place to advantage. Also a little dust on the brush or the fingers makes the egg look smeary. Again, we have hesitated to settle our coffee with eggshells that have been varnished, thinking the hot coffee might dissolve the varnish and charge our systems with an unwholesome quantity of sodium silicate. Perhaps you can allay this feat. I expect to go further with the matter myself, and shall be glad to learn anything others may know or discover concerning it.—*Rura New Yorker*.

(We have Silcate of Soda in rough crystals in stock.—Ed.)

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No one can lay down rules or systems for farming. Each man must work that out for himself, using all the information and experience available and as the farmer's knowledge and ability to think grows so will his management grow and change.

COMMENTS.

HALF-YEARLY GENERAL MEETING.—Members of the Society and Secretaries of Branch Societies should keep in mind that the Half-Yearly General Meeting will be held on the 15th July at this Office at 11.40 a.m., when the Governor, as President of the Society, will preside.

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FINANCIAL YEAR.—We have reminded all Branch Societies that all Financial Years should be arranged to commence on the 1st of April; most Branch Societies have so arranged. Affiliations are due in that month but they are payable up to June 30th. New lists of members should also be sent in before June 30th.

A copy of the Statement of Accounts of each Society should be handed to the Instructor for his perusal and he should forward it to the Secretary of the Parent Society. It is desirable that the Instructors should be as closely acquainted with the business and finances of the different Societies as possible. All Branches should have their Treasurers' Accounts audited—in fact, all their financial matters should be carried through in a strict business manner.

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WAR GIFTS.—Do not let us rest on our oars and be too self-satisfied with what we have done.

We were of the opinion that Jamaica had done pretty well as regards War Gifts, but Trinidad has done better. We could have and would have sent more had we had shipping space available on the steamers; however, we trust that the members of this Society will continue sending fruit and preserves whenever they are available. We shall be glad to know whenever and wherever there are early oranges available.

By the end of December we had only shipped 1,814 packages of Oranges and Grape Fruit and 13 cases of Preserves, while Trinidad had shipped 2,187 packages of Citrus Fruit and 53 cases of Preserves. Of course, Jamaica also sent a large number of other useful gifts—for instance, 16,750 Cigars, 53,000 Cheroots, and many thousands of Cigarettes.

Up to date we have shipped 1,960 boxes of Citrus Fruit and 30 packages of Preserves, etc.

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WAR GIFTS—WALKING STICKS.—The Hon. H. Cork has taken up the project of sending Walking Sticks from Jamaica to be distributed to the wounded soldiers in the Military Hospitals, many of whom are crippled in the lower limbs. We have, in Jamaica, an abundance of wood suitable for making nice Walking Sticks—Pimento Sticks are well known as we export them for making umbrella handles. However, it is of no use sending sticks in too rough a state. they should be cut down to about the right length which is 3ft. long, not shorter, an inch longer will not matter; they need not be polished or made very fine.

It is a very difficult matter to get a small quantity of Walking Sticks to Kingston from some country places as there is a great deal of expense in getting them to the railway. We have promised Mr. Cork and have the permission of the Board of Management of this Society to receive Walking Sticks to be forwarded when a large enough number have been collected. If any one who can contribute

some will write to us, we will arrange about this and send them a label to get them into Kingston free by rail. The various Agricultural Instructors have been asked to interest themselves and gifts of Walking Sticks may be handed to them as they go around by those who can only supply a small quantity but would like to help.

WAR GIFTS—FRUIT & PRESERVES.—We should like to make another shipment of Fruit and Preserves between the end of June according as a steamer is available. We are rather disappointed at the small quantity of Guava Jelly—comparatively speaking—that has been sent in. We should like to ship about 1 ton in 10lb. tins, that is, 224 tins. We again repeat that we can supply these to anybody who will make Guava Jelly, to be shipped for the use of (1) the soldiers at the front, (2) the wounded in the Military Hospitals, (3) the sailors in the North Sea Fleet. Anyone sending a gift here can state their preference. A gift can be sent right to a soldier in the trenches, so long as we know his name, rank and regiment.

THERMOMETERS.—Every one who keeps stock should have a Veterinary Thermometer. We have some in stock which we could send out, price 5/. Whenever a cow or hog gets off its feed a thermometer should be used.

FIGS AND DATES—The large trade in Smyrna figs should be stopped meanwhile the War is on and that port is blockaded. Figs are also largely grown in California and growers there will benefit. We cannot help thinking that the Banana Fig is a better form of dried fruit than the Smyrna fig—for which we ourselves do not care a fig. These figs are full of small seeds that are very annoying to the teeth.

Then again dates are mostly grown by Arabs—picked and packed under what conditions? where water is scarce and the washing of hands and the person is not even a daily institution. Dates contain stones to break the teeth if the eater is not watchful. The Banana Fig is free of seeds and stones, and all the operations of peeling the skins, placing the fruit on the trays to go in the drier, and then packing in boxes, are simple operations easily supervised, and all being done in a shed, surrounded with close mesh wire if necessary to keep out flies, and with plenty of spraying of a disinfectant around, this fruit can be depended upon to be also a hygienic food.

SPANISH ORANGE TRADE.—It is stated that this trade is in a critical condition. In the full year prior to the war, Germany, Austria and Holland took between them about 155,000 tons of this fruit, the greater portion going to Germany. The chief consumers of Spanish oranges are England and France, who last year took altogether 510,000 tons. The rise in freight rates has affected the trade materially, and whereas early in 1914 the prices of oranges at the orchards was about 10s. per 1,000, it is stated to have since fallen to less than 5s. per 1,000.—*Fruit Grower*, London.

SPRAYING MACHINES.—We have in stock some of the 4 gallon size of the Holder Pneumatic Spray Pumps. The demand was for a larger size when we had not got it but had the 2 gallon size; now we have none of the latter and consignments are difficult to get out

from London, all enquirers appear to want the small size. For spraying coconuts and cocoa however on a large scale, the large size serves best. These are all in brass alloy, which will stand the action of lime and sulphur wash, which the copper does not do.

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AUTHORIZED PERSONS.—Authorized Persons may be appointed on the nomination of Agricultural Societies by the Inspector General with the approval of the Governor; and the Agricultural Societies are responsible for seeing that their Authorized Persons act. It is not in the Law, but it was a recommendation from the Parent Society, that all Authorized Persons should be members of an Agricultural Society and report to the local Society or the Parent Society periodically as to the work done by them and on the state of Praedial Larceny in their districts.

Just as an Agricultural Society can nominate a man for appointment, it can also, on reasonable grounds, recommend that the appointment be cancelled.

* * * * *

It is further recommended that each Authorized Person should report on his work to his local Agricultural Society and get a Certificate for the work done signed by the presiding officer and Secretary whenever possible. Clerks of the Court must have some proof that the work claimed to be done, has been done, and such a certificate would save the Authorized Persons and the Clerks of the Courts much trouble and, perhaps, annoyance.

Where an Authorized Person lives at too great a distance to attend Meetings of a Branch Society regularly and report on the work he has done, he should send in a quarterly report stating whether he has made any arrests and report on the condition of his district as regards praedial larceny, and as to whether he has had any difficulty in getting due fees for work done.

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COCOA SHELLS.—The common practice by small settlers as well as many large estates is to fling down the empty cocoa pods in a heap or heaps just where the beans have been taken out, which is sometimes in the field among the cocoa trees or sometimes in the yard; often festering heaps of empty cocoa shells may be seen. Such heaps are more than waste: if only the waste of good manurial substance had to be considered it would be bad enough, but the disease engendering danger of such heaps of fermenting, festering, rotting pods, is very serious to growers.

All cocoa pods should be carried to the yard or some central place and all empty shells should be made up into a heap, covered with earth and a sprinkling of lime and also some trash so as to make, by and by, a good compost or manure heap, which can be used safely as a manure for any crop.

Where trees are very liable to disease, it pays to cart away the refuse (or excreta as it were) of the particular tree and use it on another crop. This is not always practicable, but it is not usually expensive or difficult to do on a cocoa plantation, large or small. It is not practicable with bananas and therefore all the more reason that liming should be a regular operation in banana walks where so much "trash" or vegetation is always lying on the soil or being ploughed or forked into the soil.

TREATING CORN BEFORE PLANTING.—A planter took us to task the other day and said that he had lost £20 through following our recommendation to pass all seeds before planting, especially country Corn and Guinea Corn, through a thick paste made of Kerosene and Wood Ashes. We replied that it was impossible that this could affect the seed prejudicially as it had been proved for many years and it prevents pests, such as ants and mice, from eating the germinating grains.

But not only that, we guaranteed that Corn can be steeped in Kerosene 5 to 10 hours and it will germinate all right. As a matter of fact we did this, as we have done it before, that is, steeped Corn in pure Kerosene for 5, 10 and 18 hours. All the grains germinated, although the 18 hours lot did not grow strongly.

We now notice the following in the Journal of the Board of Agriculture (England):—

“EFFECT OF TURPENTINE AND PARAFFIN ON THE GERMINATION OF TURNIP SEED.—It having been suggested that treatment of turnip seeds by soaking in turpentine or paraffin prevents, to some extent, the attack of turnip beetle when the turnip plant reaches the seed-leaf stage, this experiment sought to discover whether the germinating power of the seeds was hindered by such treatment.

Seeds were soaked for from one to twenty days in water or paraffin or turpentine and each sample afterwards germinated. Both paraffin and turpentine retarded germination as compared with water, but increased it as compared with germination of seeds not soaked at all.

The length of time the seeds were soaked did not appear to affect germination, although apparently a soaking of five or six days in turpentine and two days in paraffin gave the best results as regards rapidity and evenness of germination of the seeds treated.”

Note the *days*: we only say *hours*. But simply passing the seed through the Kerosene and wood ash mixture is entirely harmless yet effective in keeping off pests.

WEEVILS.—These pests do not appear to attack Arrowroot stored in barrels, but they do attack Banana Meal. We find that Banana Meal keeps well enough in a dry climate, the only trouble being attacks of weevils—our experiments have not yet extended to a wet climate. Corn, we find, is more readily attacked by weevils than beans or peas generally, but Red Kidney Beans are more liable to attack than anything else, far more than cowpeas.

While corn, beans and peas can be treated with Naphthalene or Bisulphide of Carbon, Banana Meal cannot be so treated, unless it is well sunned and aired after treatment. But sunning and airing involve a considerable amount of work (which means expense) when it comes to a ton of meal.

We have in store here (where unfortunately weevils come in with different supplies of seeds and have to be killed out) large stocks of arrowroot amounting to, at least, 59 barrels. We have never found any of these, though stored for 9 months, to be attacked by weevils.

When grain that has been treated either with Bi-sulphide of Carbon or Naphthalene, is well aired, no smell or flavour is perceptible.

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RATS.—A correspondent writes:—“The E.X.O. has arrived safely, and I think the result is satisfactory as I have not seen any rats run-

ning about since I have been using it, nor have I lost any more chickens."

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RATS.—Those interested in getting rid of rats by the aid of a Virus (and some had great success in this way) will read the following from the Ratin Laboratory with interest:—

"We also desire to draw your attention to the fact that we have now placed on the market a liquid form of the Ratin No. 1. (bacterial culture) and Ratin No. 2 (a non-bacterial preparation) which have hitherto been in solid form, as it has been demonstrated in a series of official experiments that not only do the rodents more readily partake of the liquid form, but the percentage of mortality is appreciably higher. In addition, the liquid is very simple to prepare as it has only to be poured over the bread baits, and they are ready for immediate application. We have accordingly abandoned the solid form of Ratin in view of these facts, and we thought you would like to be acquainted with those developments. No change has been made in the liquid form for dealing with mice, and this remains as before. There is also no difference in the prices charged.

We take this opportunity of sending you herewith a copy of each of our newest pamphlets for your information and perusal together with Order Card, and shall appreciate a communication from you.

The Ratin Bacteriological Laboratory,
Windsor House, Kingsway,
London, W.C.

—:o:—

ONIONS.—A correspondent writes us as follows:—"Bermuda Onion Seeds I got from you turned out splendidly, some weighed 17 ozs. and a very superior quality onion."

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MARKET REPORTS.—Some of our readers ask why we do not publish Market Reports, that is, giving the prices of products in the large markets of the world—London and New York. This used to be done when the JOURNAL was published first and found to do more harm than good, as by the time the JOURNAL was in the hands of the readers the printed prices were out of date.

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CASSAREEP.—How many of our readers know what Cassareep is? From correspondence we have received, we are afraid a good many do not know and yet it has often been written about in past JOURNALS. It is a typical Jamaica product, and we shall say no more about it now until we gain a general idea from further correspondence how many do not know what it is and have never even heard of it. We ask the Secretaries of Branch Societies to enquire at their Meetings who knows about Cassareep and whoever knows about it should explain what it is. It is something that should be in use in almost every household.

WAR GIFTS.

SHIPMENT PER S.S. "CHAGRES", MAY 10TH, 1915.

PRESERVES.

Names.	Addresses.	Kind.	Quantity.	
Miss Sant	St. Andrew's School Half-way Tree	Guava Jelly	12 jars	18 lbs.
Miss K. Fisher	Mandeville	Grape Fruit Marmalade	4 "	8 "
Mrs. C. R. Isaacs	Shooters Hill	Grape Fruit Marmalade Orange Marmalade	5 "	13 "
W. V. Heron	Christiana	Grape Fruit Marmalade	1 "	2 "
Miss Small	Hone Bay	Guava Dolce	9 "	22 "
Mrs. M. Miller	Dalacava	Guava Jelly	6 "	9 "
Mrs. Sanftleben	Luca	Grape Fruit Marmalade Orange Marmalade	3 "	18 "
Mrs. Bridge	Clovelly Rd. Kgn.	Guava Jelly	10 tins	7 "
Richmond Guild of	Ladies, per Sister Beatrice, Richmond.			
Mrs. C. Goffe	Highgate	Guava Jelly	11 jars	110 lbs.
Mrs. Foster	Richmond	Ground Coffee	1 "	5 "
Mr. Goodison	Richmond	Sugar	—	50 "
Mrs. A. A. Lewis	Alley	Guava Jelly	3 "	30 "
Mrs. Deerr	Half-way Tree	do	1 "	10 "
Mrs. F. Barnet Brown	Fairy Hill	do	2 "	20 "
Miss Olive Street	Fair Prospect	do	2 "	20 "
Mrs. R. F. Perkins	Claremont	do	2 "	20 "
Miss C. C. Davies	Montego Bay	do	1 "	7 "
Mrs. A. Roxburgh	Walkerswood	do	3 "	30 "
Mrs. L. Roper	Walkerswood	do	1 "	10 "
Mrs. A. E. Parke	Port Antonio	do	1 "	10 "
Mrs. C. R. Isaacs	Shooters Hill	do	2 "	20 "
G. Soltau	Kingston	do	4 "	40 "
A. S. McNeil	Windward Road, Kingston	do	1 "	12 "
Alf. Chinnon	Port Antonio	do	1 "	12 "
Mrs. H. C. McGilchrist	South Camp Road, Kingston	do	1 "	12 "
G. Soltau	Kingston	Grape Fruit Marmalade	8 "	96 "
Mrs. F. Leahong	Hanover St., Kingston	Grap- Fruit Marmalade	5 "	60 "
Mrs. Stephenson	1 Portland Road, to be sent to D. P. Stephenson, 2nd Lieut. 1st Cheshire Regiment	Grape Fruit Marmalade Tamarinds	1 "	10 "

(CASES OF PRESERVES, CIGARETTES, ETC., SENT READY PACKED BY THE DONORS.)

Names.	Addresses.	Kind.	Quantity.	
Commander Hall,	Hector's River	Guava Jelly	1 case	24 jars
(To be sent to "Our Soldiers' Hospital.)				
Mrs. Wilson	Brown's Town	Cigarettes	1 case	13½ bxs (of 50 packs ea)
(To be sent to Miss M. Jeffrey-Smith, London, for distribution by her.)				
Messrs Tapley and	C/o Nathan & Co.,	Cigarettes		90/0
Hendry	Kingston			
to be sent to Miss H. Scott Walker		Sweets		1 tin
Lady Supt. V.A.D. Hospital,		Preserves		60 jars
Withyham, Sussex		Coffee	2 cases	2 tins
		Cigars		20)
		Sundry articles of clothing		
Per Mrs. Arch. Spooner	Half-way Tree, Ja.	The women of Antigua for the Belgian women. Sundry articles of clothing (be sent to Miss Simpson, Wortning Station, Sussex.		

CITRUS FRUIT.

Names.	Addresses.	Kind.	Quantity.
Adam Roxburgh	Walkerswood	Oranges	40 boxes
W. H. Coke	Mandeville	Grape Fruit	15 "
		Lemons	15 "
J. H. McPhail	Bog Walk	Lemons	30 "
Thos. Powell	Mile Gully	Lemons	2 "
Miss E. E. Pratt	Old Calabar, East	Banana Figs	30 boxes, 30 lbs.
	Queen St., Kingston		
J. D. Forbes	Albany	Honey	1 cask, 25 gals.
R. H. Forbes	Pratville	Honey	1 cask, 25 gals.

N.B.—The above list of Preserves is what was actually shipped. Several tins and jars which were sent to us at this office, had to be rejected as the preserves began to ferment and were unfit for shipment.

Also 5 boxes of Citrus Fruit out of the above list were too ripe for shipment, and had to be rejected. These were given to the Volunteers who sailed on the S.S. "Erymanthos."

BRANCH NOTES.

UPPER ST. JOHN'S (St. Catherine).—The usual monthly meeting was held on Tuesday evening, 11th April. Mr. J. Horatio Nelson presided. There were present, The Agricultural Instructor and Secretary, fourteen members, and two visitors: who afterwards were elected members. The Secretary gave his report for the year ended 31st March. It was gratifying to know that the Branch has in hand £1 6s. 1½d to the credit of the Society. The Instructor moved: "That a list of the Authorized Persons of the Branch with the dates of their appointments, and number of occasions at which larceny was detected and by whom should be prepared for next meeting." This was agreed to. The following resolution was agreed to: That in future the Secretary prepare a written report of the year's work. The Instructor spoke to the members about their bringing some matter to the meetings to make them interesting. The election of officers to serve for the year then followed. Rev. L. M. Beverley was re-elected President. Mr. E. Thos. Hamilton was re-elected Secretary, and the office of Treasurer was also given him. The Secretary's letter re Produce Protection Law came up for discussion. It was unanimously agreed on that there is no necessity to raise the License so long as proper precaution is taken as contained in No. 2, and in addition that extra care be taken by the Police in the inspection of the Produce Buyers' books. The Instructor spoke briefly about the recent lectures given at Hope, and mentioned that the Department of Agriculture is making arrangements to have two courses, one at each time of the Half-Yearly Meeting, so that Delegates attending the meeting may have the benefit. He also spoke in high terms of the President who was absent, thanking him for the valuable services he rendered to the Branch, and for giving free use of the building, etc., for the holding of the meetings. Twelve members paid in their subscriptions for the year. The roll was called.

E. THOS. HAMILTON, Secretary.

GUY'S HILL (St. Anns).—The annual meeting was held at St. George's on Thursday, the 15th April. There were present: The Secretary, eight members, and Mr. Robt. Edwards (visitor) who was afterwards made a member. Mr. Chas. Irvine was moved to the chair. The election of officers resulted as follows: Mr. C. A. Hay, President; Messrs. P. C. Bell and S. A. Martin vice-Presidents; Mr. H. S. Allen, Treasurer; Mr. W. E. Watson, Secretary. It was moved and carried that the meeting closed and the unfinished business be dealt with on Friday, 23rd inst., at 6 p.m. The Society met on Friday, 23rd April to complete the business of the previous week. There were present eight members and the Secretary. Circulars from the Secretary of the Parent Society dealing with "Authorized Persons" new list of members, etc., were read, and there was much discussion on the first of these. It was generally felt that if more "Authorized Persons" were appointed there would be less praedial larceny and it was decided to nominate at least one person at the next meeting. The rules setting out the duty of "authorized persons" were read and some slips containing rules for payment were distributed. Mr. J. T. Lawrence, an "authorized person," reported that he had made no arrest recently, but he was sure that the fact of his being known to be an "authorized person" serves to prevent more frequent offences in his district. The Secretary was instructed to find out from the Secretary of the Parent Society whether there is the possibility of

securing a foreign market for pine apples, and also to know from the Instructor of the District whether it is possible to get some quick yielding cassava sticks. The President gave notice to move at the next meeting: That the hour for commencing be 6 p.m. The Secretary gave a report of the year's work, but the Treasurer being absent his report had to lie over.

W. E. WATSON, Secretary.

BUNKER'S HILL (Trelawny).—The annual and monthly meeting was held on the 27th April. There were present: The President, Mr. C. G. F. Robertson, the two vice-Presidents, the Secretary, 6 members, a number of visitors, and E. Arnett, Esq., Instructor, Mr. Rennie, the newly appointed Assistant Instructor for Lower Trelawny, and Mr. J. F. Thompson of Good Hope, who also became a member. Election of officers for new year took place. Mr. Arnett presided during election. On his suggestion all the old officers were re-elected. The President asked Mr. Arnett to address the audience. He encouraged the members to take more interest in the meetings and to attend more regularly. He also formally introduced Mr. Rennie as the Instructor, and mentioned specially Mr. Thompson of Goodhope, who is greatly interested in the branch, and had offered to give something for the best improvements to the holdings of the members. Mr. Arnett was then asked to work out a scheme for this prize holding competition. Mr. Rennie expressed the pleasure it gave him to be present, and promised to do his best for the members. He encouraged them to cooperate with him as much as possible. Mr. Thompson spoke encouraging words to the members, and nominated his two sons, Messrs. J. S. Thompson and H. Thompson, who were both unanimously elected members. The President thanked Mr. Arnett for coming over to introduce Mr. Rennie, and welcomed the new members. He said that with our new Instructor at work, and with the "American push" of the Messrs. Thompsons, the Society should be more prosperous in the future than it has been in the past.

W. A. WRIGHT, Secretary.

MAY PEN (Clarendon)—The monthly meeting was held on Wednesday, April 28th. There were present Messrs. S. M. DeRoux, President; T. B. Thompson, ten members, Mr. S. A. Schliefer, Instructor, and Mrs. Schliefer. The torrential down-pour an hour before the time for meeting was accountable for the small attendance. A vote of welcome was given to Mr. Schliefer after his illness. Mr. DeLeon explained that the sub-officers' Guide was not the book really required by Authorized Persons, but a copy of the instructions to Authorized Persons. Mr. Schliefer intimated that he understands instructions to Authorized Persons was under review by the Parent Society. Letter from His Honour Mr. Robert E. Noble was read regretting his inability to attend this meeting, but hoping to attend subsequent meetings. Mr. Noble was duly elected to membership; Mr. R. G. Rodlein was also elected a member. The awarding of the prizes in the recent corn-growing competition was next proceeded with. The amount available, £10 10s., was divided among the two classes of competitors, those from the hills forming one class, and those from the savannahs another. Five prizes were awarded each class, ranging from £2 down. Mr. Schliefer then gave an interesting lecture on corn-growing, after which a general discussion took place on the subject which was summed up in the following resolution:—Whereas the May Pen Branch of the Jamaica Agricultural Society is fully convinced that were suitable encouragement given by way of a more stable market, this Island is capable of producing all the corn required for its own use and with few exceptions the large consumers would take supplies of native corn in preference to any other were such supplies obtainable at convenience, and that the people naturally expect the Government to give preference to supplies of native grown produce: Be it resolved that the Jamaica Agricultural Society be asked—(a) To establish a depot for native corn somewhat on the same lines as arrowroot is now treated where regular supplies could be obtained by private individuals as well as by the Government institutions; (b) To impress upon the Government that native grown corn can be used in preference to any other by all Government institutions. The Circular from the Parent Society relative to the Produce Protection Law was read and discussed and suggestion No. 2 was adopted. Letter from Mr. George May was read thanking the Chairman and other gentlemen for the interest they take in the Society. The President, in reply, stated that while they were not agriculturists, they were interested in agriculture, as the wealth of the Island came entirely from that source. Mr. Rennalls gave notice that at next meeting he would move for the holding of a Local Show early in the following year. Mr. Schliefer intimated that the Clarendon Show will be held early in January. Mr. Rennalls pointed out that it will be necessary in future to divide the Clarendon Show between Chapelton and May Pen.

C. L. A. RENNALLS, Secretary.

DEESIDE (Trelawny).—The annual meeting was held in the Hastings School-room on the evening of the 28th April. The following were present:—H. Ramsden, Esq., President; twenty other members, three ladies, the Secretary, Mr. E. Arnett (Instructor), Mr. J. Rennie (Assistant Instructor) and a large number of visitors from the Bunkers Hill Branch and Mr. E. Arnett, jr. Letters from the General Secretary were read dealing with the following: 1. Publication of Branch Notes; 2. The financial year of the Society; 3. The appointment of Mr. Rennie as Assistant Instructor for Lower Trelawny under the supervision of Mr. Arnett. The annual report of the work of the Branch was presented by the Secretary and adopted. The report shows that the Society has been steadily and efficiently carried on during the year. There has been a marked improvement in the attendance of members and visitors at the monthly meetings. Lectures, debates, and discussions on varied subjects of general and agricultural interest have helped considerably to enliven the meetings from time to time. Much is due to the strenuous efforts of the President in keeping the Branch together during the year. The Treasurer's report shows a balance of £7 - in hand. The election of officers for the ensuing year followed. The President, Secretary and Treasurer were re-elected. The Rev. T. B. Prentice was elected 1st Vice-President, and Mr. R. L. McKenzie second. Mr. M. Rennie, the newly appointed Instructor, was introduced to the meeting and received a hearty welcome. He addressed the meeting briefly. The next item on the agenda was an address by Mr. Arnett on "Co-operation" as he has seen it in Ireland. The speaker in his usual interesting manner introduced the subject, but as other business had taken up much of the time he was unable to go on at any length and promised to continue his address at the meeting in June. This concluded the business part of the meeting and a "social" was held consisting of songs and recitations, after which members and friends partook of the good things provided for the occasion.

R. R. McBAYNE, Secretary.

CENTRAL ST. MARY (St. Mary).—The regular monthly meeting was held at Clonmel on April 29th, instead of the annual. Mr. J. A. Banks, President, presiding. There were present eleven other members and two visitors. The President apologized for his absence. Read correspondence from the Parent Society re Branch Notes, new list of members and affiliation fee, and Produce Protection Law; a discussion at the last Half-Yearly Meeting on the sale of cocoa pods in country districts. Answers to questions: 1. No. Not advisable to continue the Produce Law as at present for buying cocoa pods. 2. Recommend central factories in district or agents. 3. The raising of the license to a substantial sum would not be sufficient. Recommend that the purchasing of cocoa pods be confined to Central Factories. The annual meeting will be held at the Eliot Schoolroom on Thursday evening, the 6th May, at 7 p.m.

The annual meeting came off at Eliot on Thursday evening, the 6th May. Present were: Mr. J. A. Banks, President Rev. H. W. Wolcott, the acting Secretary, eighteen other members and several visitors. The annual reports of Secretary and Treasurer were tabled, the latter showing a balance of £2 8s. 8½d. to the credit of the Branch. Both reports were adopted. The election of officers for 1915-16 resulted as follows: Mr. J. A. Banks, President; Messrs. C. G. Marzink, First Vice-President; F. A. Williams, Second Vice-President and assistant Secretary; M. L. McLean, Secretary; H. H. Taylor, Treasurer. Rev. H. W. Wolcott gave a lecture on agriculture, and dealt with the following: 1. Planting systematically and intelligently; 2. Reaping; 3. Co-operation in marketing good products, a principle which if not adhered to, will result in our own loss and ruin. A hearty vote of thanks was accorded Mr. Wolcott for his visit to the Branch and his instructive lecture. Mr. Thomas Barnett of Lewiston, Clonmel P.O., was recommended as authorized person for the Belfield district. The Secretary was instructed to send up the name of Mr. Barnett to the Secretary of the J.A.S. as recommended by the Branch. Nine members paid in their dues for the present year.

F. A. WILLIAMS, Actg. Secretary.

FRANKFIELD (Clarendon).—The annual meeting was held on April 30th. The meeting was a representative one. Besides the President, there were the two Vice Presidents, the Instructor, Secretary and fourteen other members. The Circular from the Parent Society respecting the Produce Protection Law came in for a very lengthy discussion. The meeting, after voting, thought that to prohibit entirely the buying of "Cocoa Pods" would put a hardship on the trade, and to interfere with the liberty of the buyers in such a drastic manner would serve no useful purpose as it would not prevent the stealing of cocoa. Question No. 2 was thought more desirable. The president in his opinion thought that the establishment of a local factory would facilitate the curing of cocoa, and save the risk incurred during the

rainy seasons, and thus serve a useful purpose not only in the curing, but also in the purchasing. Question No. 3: The meeting thought it was a difficult matter, as purchasers differ very much in their opinion in the mode of purchasing the article. At the same time it was deemed necessary that something ought to be done to safeguard the trade. The Instructor gave an interesting address pointing out the ways and methods of improving holdings, laying particular stress on the cultivation of corn and the result of the "Corn-growing Competition." He advocated some scheme for the encouragement of the industry, and gave as an instance the establishment of a depot where it could be stored. Great care should be taken in the selection of seeds for cultivation. The effect of this is very prominently shown on bad seeds during a drought. He would not restrict the selection solely to hybridized corn as he has from experience found that good native corn was just as productive if not more. We are too fond of belittling anything native instead of fostering it, and we should approach the Agricultural Society so as to have some organization established for the purchasing of corn at a remunerative price. Care should also be taken in the selection of animals. After this the President congratulated the Branch Society in coming successfully through another year, and after a short review of the work done, vacated the chair. The Rev. J. K. Phillips, one of the Vice-Presidents, was asked to occupy the chair during the election of a new President. Mr. McKay was unanimously re-elected President for the year, and the other officers *en bloc*. Subscriptions were received and after fixing the date for the next meeting (28th May) the meeting terminated.

W. H. CLARKE, Secretary.

AEOLUS VALLEY (St. Thomas).—The yearly meeting was held on Monday, May 3rd, 1915, in the Govt. Schoolroom. There were present 17 members and the 1st Vice-President. Secretary's report and the election of officers: Secretary's report reviewing the past, drought, war, hard times and the numberless difficulties which hamper the large and small man alike. He (the Secretary) was proud to say the instruction given by the Parent Society had not been in vain, for not less than 6 cane mills are in the district, and doing well. Planters are enlarging their fields, corn, potatoes, cassava and peas are also being grown. The officers were re-elected. Two members paid in their subscriptions in advance. The acting Chairman reported the results of his mission to the Lower St. David's Branch; he presented £1 12s. 8½d. as the share to this Branch. The Secretary asked Mr. Wm. Stewart to go with Mr. Barnett to Morant Bay and lodge this amount in the Govt. Savings Bank in the name of this Branch. Meeting closed by singing the National Anthem.

R. A. JONES, Secretary.

TROY (Trelawny).—The regular monthly meeting was held in the Troy Schoolroom on Tuesday, the 4th day of May, 1915. There were present: The President, Vice-President, Secretary, Assistant Secretary and 6 other members. Arising out of the minutes, Mr. Carter moved with regard to the suggestion that the rules be printed, that at next meeting the rules be gone through and such alterations as may be necessary to suit local needs be then made. The Secretary read article from March JOURNAL, page 91, respecting worms in vams. The Secretary informed the members that the affiliation fee is now due, and the Secretary was asked to send it up.

T. PINNOCK, Secretary.

SPANISH TOWN (St. Catherine).—A meeting was held here on Wednesday, the 5th May. Present: Messrs. William Gentle (Actg. President), D. A. Aldred (V.P.), the Treasurer, the Secretary, 4 others and a visitor. Secretary reported the work done by Mr. T. G. M. Stewart, an "Authorized Person" and tendered an excuse for his absence. The Secretary mentioned that he had received a few copies in booklet form of the last report of the Half-Yearly General Meeting of the Parent Society. Decided to circulate them. The following communications from the General Secretary were read: (1) Requesting that Branch Notes be written concisely for JOURNAL. Noted. (2) *re* (a) new list of members; (b) affiliation fee and (c) JOURNALS unclaimed from time to time. Noted. (3) *re* Produce Protection Law. With regard to (3) it was resolved: "That the Spanish Town Branch of the Jamaica Agricultural Society is of opinion, in view of the prevalence of larceny of cocoa pods and the sale of immature cocoa pods by children and others and for protecting the cocoa industry of this Island, that the Produce Protection Law should be amended in terms of the joint suggestions contained in questions (2) and (3) in paragraph 1 of the Circular letter of the Jamaica Agricultural Society dated 29th March, 1915, i.e., by making it possible for only such persons to get a license to buy cocoa in the pods as can show that they have proper equipment to cure cocoa themselves, or are qualified responsible agents for other people who have proper equip-

ment, and further by raising the license money to a substantial sum." A vote of thanks also was accorded Mr. Gentle for the use of the meeting rooms. The meeting then adjourned.

EVERARD LOPEZ, Secretary.

ALBION MOUNTAINS (St. Mary).—A meeting was held on Thursday, 6th inst. Sixteen members and four visitors were present. Mr. Hamilton, the 1st V.P., occupied the Chair. After informing the members that they had met that evening to appoint officers for the financial year, Mr. Hamilton vacated the Chair, and Mr. E. A. Thompson was voted to it. The following officers were elected: Mr. W. G. Hamilton (President), Messrs. E. A. Thompson and Ben. Ryfield (1st and 2nd V.P.'s respectively), Mr. Alex. Taylor (Treasurer), Mr. W. E. Morris (Secretary), Mr. G. A. Anderson (Asst. Secretary). Correspondence was read regarding circular from Parent Society which intimated that many members fail to call for the JOURNALS at the P.O., and thereby cause some inconvenience in that department; it was shown that the members of this Society are (with very few exceptions) always calling in due time for their JOURNALS. Mr. Hamilton said he took great exception to certain remarks that were made at a previous meeting during his absence regarding the prize money that was won by this Society at the Albany Show. "He had often called the men together, who had sent exhibits, that he may know their intention, whether they claim it (as it was theirs by right) or they would pass it over to the Society, but they had failed to meet." It must really be admitted that the remarks made of which Mr. Hamilton complained were altogether uncalled for and misleading. The President then urged the members to pay in their subscriptions early so that the minimum number may be reached at an early date.

W. E. MORRIS, Secretary.

CASTLETON (St. Mary).—The annual meeting came off here to-day in the Ugly River Schoolroom at 3 o'clock p.m. on the 10th May. S. C. Pickersgill presiding, several of the ordinary members and the Secretary. The Secretary read circular from the Secretary of the Parent Society re "Produce Protection Law," dated 29th March, 1915. The Society was of the following opinion: With regards paragraph I, the Produce Protection Law should be amended so that only responsible persons with proper curing equipments to be examined and passed by the Agricultural Instructor or some one else so appointed) should be granted a pod license. Paragraph II. The raising of the license would not have the desired effect as it may in many cases keep out the honest buyer and give preference to the unprincipled man. With regards the other suggestions embodied in the circular, the Society respectfully refers the Secretary of the Parent Society to their resolution sent up on the 16th February, 1915. After the transaction of some minor items of business, the meeting proceeded with the election of officers for the ensuing year, which resulted as follows: Rev. James Robertson, President; Messrs. Jas. Hardy and C. E. Graham, first and Second Vice-Presidents; Messrs. Alfred Pickersgill and D. F. Barrett, Secretary and Assistant Secretary respectively, and Mr. Cephas Tait, Treasurer. The new President took his seat and thanked the members for again electing him to the post. The meeting came to a close in the usual way, after which the members retired to Mr. Tait's place for the usual banquet. Mr. G. O. Hanson represented the Scotta Hall branch.

A. PICKERSGILL, Secretary.

RED HILLS (Clarendon).—A meeting was held on Thursday, May 13th, in the Schoolroom, at 5 o'clock. There were ten members present and Mr. S. A. Schliefer (Instructor). Correspondence from the Parent Society was read. A list of paid up members for April was presented, and those who have not paid are asked to come and pay in by May at the latest. It was suggested that some of the Society's money be spent in buying a breed of pigs for the improvement of our own in this district. Election of officers: Mr. Joseph Taylor was appointed President and Mr. John Lovelace and Mr. Henry Taylor, Vice-Presidents; other officers continue as there was no reason for exchanging. The Produce Protection Law was discussed and decisions arrived at were: Stealing of produce (cocoa) is raging in these districts. The Society begs that the public instead of police from a station that is far off, who does not know the people of that district, to overlook the produce buyers' books; it would be better to give the District Constables or the Authorized Person or any one whom the Inspector would think fit to overlook books, for they know people by name and seeing a name that they know who does not possess such produce, would be able to make enquiry how such person come by it, and if people know that such steps will be taken, we are of that opinion that cocoa stealing would be reduced to a minimum. The Instructor gave his address on plant disease and other things.

A. E. MILLS, Secretary.