

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.

MAY, 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 15th April, 1915, at 11.40 a.m. Present: His Excellency Sir Wm. H. Manning, K.C.M.G., C.B., (presiding), Sir Jno. Pringle, K.C.M.G., Hons. L. J. Bertram, C.M.G., P. C. Cork, C. M. G., D. Campbell, Geo. McGrath, R. P. Simmonds, S. S. Stedman and J. R. Williams; Rev. W. T. Graham; Messrs. R. Craig, A. W. Douet, A. C. L. Martin, Archd. Spooner, Conrad Watson and the Secretary, Jno. Barclay.

Apology for absence was read from Mr. E. W. Muirhead.

The Minutes of the previous Meeting were read. Mr. Craig made an objection to the Report of the Meeting of the Special Committee on the Banana Tax in Canada. He said that the cablegram drafted at the Meeting read as if it was from the Board of Management of the Agricultural Society, whereas it was only certain of the members who had met: all the members had not been notified of the Meeting.

Mr. Stedman and Mr. Williams who were present at that Meeting, said that the wording of the cablegram had been carefully considered and signed "Members of the Board of Management," not "*The Members.*"

Mr. Craig also said that the Minutes were not quite in order and asked that the words "he (Mr. Craig) had not got notice on page 122" might be altered to "all the members had not got notice." This was agreed to.

The Secretary read the following letter from Mr. Muirhead dated 10th April:—

"As I won't be able to get up to our usual monthly Meeting on Thursday next, I am returning the railway pass, and kindly mention that I am unable to be present.

Can you find out for me and let me know at the next Meeting, what the value of the importations into Canada is, for Bananas, Citrus Fruits and any other articles upon which increased taxes for War purposes have been placed or are proposed to be placed, and enquire as to whether any effort was made to reduce some, or was suggested by the Government or its representatives of the Deputation; or was it only considered that Bananas were the only article that should be exempt. If this is not so, does not this Society think that representation should be made to the Government (!) at the expenses attached to the despatch of a deputation to Canada so hurriedly should be borne by the Banana growers, and also ask the cost of the deputation."

It was agreed that Mr. Muirhead would require to send in any motion he would like to make on the subject for the next Board Meeting.

Mr. Muirhead also wrote in connection with the number of packages of Orange Oil exported in 1913 and 1914, and the value of these, as published in the Minutes, asking how the values were arrived at, as there was such a great disparity in the value of the packages exported in 1913 compared with the number of packages exported in 1914.

The Secretary was instructed to get this information from the Collector General.

Matters arising out of the Minutes:—

(a) *Loan Banks.*—The Secretary submitted Minute from the Governor in reply to Mr. Roxburgh's question *re* Loan Banks asked at the previous Meeting, as follows:—

"In reply to a question addressed to me by Mr. Roxburgh as to whether the Government intended to consider the applications of Loan Banks for an extension of time to repay these loans, I find that extensions have been approved in all cases where it has been deemed necessary on certain conditions which have been laid down and which I consider are equitable."

(b) *C. S. O. letter—Conditions on Free Railway Passes.*—

No. 4295-4815.

3rd April, 1915

"With reference to correspondence ending with the letter from this office, No. 2343-2367, dated the 23rd February last on the subject of the grant of free monthly railway passes to the members of the Board of Management of the Jamaica Agricultural Society, I am directed by the Governor to inform you that at His Excellency's request, the Director of the Railway has removed from the certificate to be furnished by you, the special condition with regard to the personal liability."

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

(c) *C.S.O. letter—Certificates for Field Inspector of Plant Diseases.*—

No. 4653-4817.

125th April, 1915

"With reference to your letter, No. 8268, dated the 26th ult., I am directed by the Governor to acquaint you for the information of the Board of Management of the Jamaica Agricultural Society, that His Excellency has approved of certificates of appointment being issued to each Inspector of Plant Diseases, and that the necessary steps are being taken to have this done."

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

(d) *C. S. O. letter—Cotton.*—

No. 4591-4390.

10th April, 1915.

"I am directed by the Governor to acknowledge the receipt of your letter, No. 8082, dated the 20th ult., and, in reply, to say that it is not deemed advisable to publish the correspondence relative to "Cauto" and "Marie Galante" cotton, in accordance with the advice of the Board of Management of the Jamaica Agricultural Society."

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

(e) *Authorizes Persons—Secretary's Pamphlet.*—

The Secretary submitted explanatory pamphlet *re* "Authorized Persons" which he had been directed to prepare for issue to each "Authorized Person." He said that as directed at the previous Meeting of the Board, he had circulated a copy of this to each member of the Board and some revisions had been made by the members.

After discussion it was agreed to strike out paragraphs 3 and 4 and to attach copies of the Law and the Schedule, and the Secretary was directed to circulate the revised copy of the pamphlet as it was to be issued.

Mr. McGrath said that he had asked for some information regarding the number of "Authorized Persons" who had been struck off the roll, and the causes therefor, and from the Minutes of the last Meeting he had seen that the Secretary had written the Inspector General who had only sent a note of the total number, stating that as his Office staff was limited, it would take him some time to look up the record and prepare the return asked for. He observed also that the Secretary had only kept full records for the last two years, and in that time 18 men had been struck off the roll for which no reason was given. He thought that full information should be provided by the Inspector General, and if this was provided by the month of July, when the Half-Yearly General Meeting would be held, it would be sufficient.

The Secretary was instructed to write the Inspector General for the full list.

Infectious Diseases of Plants Law.—The Secretary said that he had received the following letter from the C.S.O. on the 31st of March, and had as requested sent a copy to each member of the Board of Management for his views.

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 excision and tarring of canker in affected trees.

"I am to ask that a 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

He now also read their replies:—

Mr. Craig called attention to the wording of several sections and said he hoped that the Board would not recommend the Law in the form proposed, as the provisions of it should be considered very carefully first.

He asked the Secretary to read the letter from the Director of Agriculture on the subject which had come before the Instructors' Committee that morning.

The letter was read as follows:—

No. Y. 795.

31st March, 1915.

"I have the honour to acknowledge your letter dated the 25th inst., and to state for the information of the Instructors' Committee that I have duly considered the points emphasized in your letter under reply.

(2) "In the new law there are two classes of plant diseases provided for, viz., 'notifiable' and 'infectious.'

"Under the former it is proposed to declare Panama Disease of Bananas, which will then become, under drastic penalties, a direct responsibility between the owner of the diseased plants and the Director of Agriculture and his special officers.

"For the purpose of this disease, therefore, as dealt with by law, the Instructors of the Agricultural Society will have no responsibility whatsoever and the assistance of these officers will be most usefully apparent in advising any owners in doubt as to the presence or absence of the disease in any case in which they are consulted previous to its notification. As soon as the new rules are issued, I ask you to be so good as to circulate them to the Agricultural Instructors so that they may proceed in a correct manner with regard to any cases of this serious disease that came under their notice.

(3) "Under the heading 'infectious' diseases it is proposed to schedule certain less serious diseases to be dealt with by owners themselves and with regard to these it is believed that the Instructors may do good work by encouraging owners to deal with these according to the requirements of the Law and in reporting to me any serious cases of neglect that require the attention of the Department for the enforcement of compulsory treatment.

(4) "It is obvious that in the case of a 'notifiable Plant Disease' our Inspectors will be liable to be called at a moment's notice whenever a case is reported and that it is neither reasonable nor necessary for the local Instructor to be troubled with the case, or to be informed in advance of the visit.

(5) "Where a systematic field campaign is being initiated, with regard to the 'infectious diseases,' I agree with the Committee that the Instructor should be notified of our operations in advance as soon as these have been arranged for and that the co-operation of your officers in such work is desirable if their other duties and engagements permit, and I will issue instructions accordingly to the two Inspectors of this Department."

(Sgd.) H. H. COUSINS,
Director of Agriculture.

Mr. McGrath and Mr. Graham supported Mr. Craig in his views. Mr. Cork, Mr. Campbell and Mr. Bertram expressed themselves in favour of the proposed Law.

Mr. Stedman said that most of the members of the Board had not seen copies of the Law and knew nothing about the Rules intended to be framed, and it was therefore not fair to ask them to decide until they had read the Law and the proposed rules; he suggested that the matter should be deferred until the next meeting of the Board.

His Excellency said that the matter was urgent and important enough to be considered by a Special Meeting of the Board. Meanwhile he would see that copies of the Law were sent to the Secretary together with the proposed Rules.

It was resolved that a Special Meeting of the Board should be held to consider this matter on Wednesday, the 28th April, at 11. 40 a.m., and that the Director of Agriculture should be asked to attend.

War Gifts.—The Secretary reported progress. He said he was arranging to ship by the special steamer coming out, the S.S. "Erymanthos," a consignment of mid-year Oranges from St. Ann and probably about 50 cases of Lemons from Manchester, also a considerable quantity of preserves, principally Guava Jelly. The Guava season, however was just coming in and he hoped more preserves would be sent in.

He had remitted the total of the contributions from the Branch Societies to the War Fund, which amounted to £154 18s. 11d., to the Bank of Nova Scotia, and he had advised His Excellency, who had sent the following acknowledgment:—

6th April, 1915.

"I have received your letter dated the 31st inst., enclosing a list of contributions made by the branches of the Jamaica Agricultural Society to the War Fund.

"I should like to place on record my thanks to the contributors for their very generous donations towards the fund, as I know that times are somewhat hard, and the list of donations therefore is evidence of the patriotism of the people throughout the island, which is so admirable."

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

The Secretary submitted letters from Mr. Aspinall, the Secretary of the West India Committee, and Mr. Dyer, the Secretary of the Vegetable Products Committee, London, as follows:—

19th March, 1915.

"I last wrote you on March 1st., (953) acknowledging your letters of January 28th, February 5th, and 9th. I should also have thanked you for your letter 6865 of February 8th. The Oranges, Grapefruit, Preserves and Ginger Sugar all arrived in first rate condition and have been despatched among the various hospitals whose letter of thanks we shall hope to forward to you in due course.

I am sending to you under separate cover a further batch of letters, some dealing with this consignment and others with earlier shipments. The 400 cases of fruit ear-marked for the Grand Fleet were handed to the Vegetable Products Committee and have been despatched to their destination. The attention of the Vegetable Products Committee was specially called to Captain Bonitto's fruit. In accordance with your special request several cases of fruit were sent to the hospital at Elgin whose acknowledgment we have since received. I note with regret that owing to the lack of shipping facilities you may not be able to send any more fruit. I think that you and your friends have done splendidly in sending over as much as they have done. The recipients have been, and are, most grateful. But for the kindness of your good selves and our friends in Trinidad and Dominica, the sick and wounded in the hospitals in France and Flanders would have been entirely without citrus fruits, for they are almost unobtainable out there at the present time. We shall be shortly rendering to the Army Council a full report of our stewardship in this matter of the fruit, and I shall hope to send you a copy. Meanwhile I need only refer you to the letters of acknowledgments to assure you how much the gift has been valued."

(Sgd.) ALGERNON E. ASPINALL,
Secretary.

Vegetable Products Committee,
London.

22nd March, 1915.

"I beg to acknowledge receipt of your letter of February 26th, respecting the supplies of fruit, etc., which you kindly authorized the West India Committee to hand over to us for the use of the Fleet in the North Sea.

I have now very great pleasure in conveying to you the grateful thanks of my Committee for your very welcome gift of 400 cases of Grapefruit and Oranges and 5 cases of Preserves, which we received at Avonmouth, ex S.S. "Chagres," which were immediately despatched to the Fleet, each case bearing the enclosed label.

In advising the Naval Store Officers at the Bases, I requested them to send an acknowledgment to the West India Committee, who, I understood would forward such acknowledgments to you. I believe that in each case, such an acknowledgment was received by the West India Committee.

Through indirect correspondence, I have learnt that the fruit was most warmly appreciated by the ships' companies, and there is no question as regards the benefit citrus fruits are to the health of the men. The Fleet has now been at sea for nearly eight months, during which time the Admiralty has not included any fresh fruit and vegetables in the regular rations served out to the men. During this time, the Vegetable Products Committee and its various branches have supplied the Fleet with about 700 tons of fresh fruit and vegetables, and the effect of these upon the men's health is testified, not only by a multitude of letters from the men themselves, but more strikingly in the letter received from the Medical Director General of the Royal Navy, which you will see quoted at the end of the enclosed copy of our printed leaflet.

I regretfully observe that you can send us no further citrus fruits this season, owing to the scarcity of direct freight ships. It is more than good of your Society to say that they would have supplied a much larger quantity had steamers been available, and my Committee are, therefore, correspondingly grateful to you for your kind intentions.

Unfortunately, we are now on the verge of spring when the men of the Fleet will want fresh fruit and vegetables more than ever. The immediate future promises a very hard and anxious time, when they should be kept in the best of health and good spirits. There is nothing more helpful in producing this result than a

good supply of fresh vegetables and fruit and it is greatly to be regretted that the absence of steamers prevents you from helping to ensure such a condition to the men of the Fleet. Cordially renewing our warmest thanks.

(Sgd.) E. JEROME DYER,
Hon. Secretary.

P.S.—I enclose a few of our leaflets which you might kindly distribute amongst the members of your Committee.

(Intd.) E. J. D.

The Secretary said there were 120 other letters of acknowledgment. He was instructed to publish some of these as before.

Authorized Persons.—The Secretary submitted the following letter from the Inspector General of Police:—

No. 272-1355.

9th April, 1915.

"I have to bring to your notice that although it has been customary to appoint illiterate persons as "Authorized Persons," it is considered that no good will result by appointing such persons in future, as they are probably ignorant of the directions and procedure to adopt.

2. "If you concur in this opinion, it would be advisable for you to circularize all the branch Agricultural Societies, only to submit, in future, names of persons who can read and write."

(Sgd.) A. E. KERSHAW, Lt.-Colonel,
Inspector General of Police.

After discussion in which it was stated that some of the old type of men who could neither read nor write made some of the best "Authorized Persons," the Secretary was instructed to write the Inspector General and say that the Board could not agree to his suggestion, pointing out that the men received their instructions orally, and that men who were otherwise up to a good standard should not be rejected as "Authorized Persons" because they could not read nor write.

Application for Affiliation.—An application for affiliation from a new local Agricultural Society, which had been formed at Lethe in Hanover, was submitted. The Secretary said that the Instructors' Committee had made enquiry about this Society, and had approved of it. It was really taking the place of another Branch close by, as Lethe was better situated for cultivators.

Affiliation was granted.

Instructors.—The Instructors' Reports for March and their Itineraries were submitted, and directed to be circulated to the Instructors Committee as usual.

Statement of Accounts.—Statement of Accounts up to the end of the financial year (31st March) was submitted.

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

Rev. C. A. Wilson, 181 Princess Street, Kingston; F. A. Foster, Hope-Waddell Training Institution, Calabar, Nigeria, West Africa; W. P. Smith, care of United Fruit Co., Port Antonio; E. B. Clarke, Dove Cot, Half-way Tree; Chas. H. Picot, Coolshade, St. Ann's Bay; Mrs. L. R. Hiam, 29 Smith Lane, Kingston.

The Meeting adjourned until the day of the Special Meeting, Wednesday, 28th April, 1915, at 11.40 a.m.

COCONUT DISEASES IN JAMAICA.

By S. F. ASHBY, B.Sc., Microbiologist.

The following is being issued by the Department of Agriculture as a leaflet, and brings our knowledge of diseases affecting Coconuts here up-to-date:—

They can be divided according to the part directly attacked into diseases of bud, leaf, stem and roots.

BUD DISEASES.

The most serious of these is BUDROT. The striking feature of this disease in the last stage is a soft stinking rot of the youngest leafstalks and growing point of the stem. Progress and symptoms vary somewhat depending on the point first attacked. Two cases can be clearly distinguished:—

1. Disease starts at the bases of limbs and swords in the outer or middle part of the top, eating upwards and inwards to the heart of the bud.

2. Attack begins in the bud which is killed before the outer leaves fail.

Case 1. Symptoms.—Dropping of young nuts and blackening of the stalks of one or more bunches are early signs of infection. Leaves at the middle of the top turn yellow, wither at the tips, and often break across; most expanded leaves become yellow successively, open out finally, give way at the base and hang down the stem: some leaves, however, may hang while still green. In the last stage of disease a few wilted leaves of the central column stand up alone, enclosing the withered bud, until the rot brings it all over, leaving a bare pole.

The Rot.—If the bases of limbs and swords or the surface of the adjoining stem is examined when young nuts are falling and the leaves yellowing, dark soaked patches or spots may be seen frequently by tearing away the strainer. On opening out the bud in advanced disease yellow spots with brown margins will be found on the leaf bases and young swords in the outer part while at the centre the stalks will be sodden, quite soft, and stinking (like ripe jackfruit) and the top of the stem soft and creamy. The progress of disease at first slow in the hard outer tissues later becomes rapid in the tender bud, but several months may elapse between the first visible signs of disease and a bare pole.

Case 2. Symptoms.—The rot starts in the bud and the first sign of attack is the withering and falling over of the heart; the outer leaves are often green and healthy and a heavy crop of nuts may be present. Following the death of the heart the leaves yellow and wither successively outwards for weeks or months, depending on weather. Inspection shows similar spots on the leaf-bases in the bud and a stinking soft rot at the heart.

Cause of Budrot.—In Jamaica and other West Indian Islands the greatest destruction has been due to a bacterial disease. The evidence points to infection, as due not always to one variety of bacterium but to several kinds of one group, abundant and widely distributed in soil, surface waters and air. Infection starts as minute spots which enlarge and unite the bacteria attacking all elements of the tissue and not being confined to certain parts such as the vascular fibres (gum disease of

can and wilts due to bacteria). Budrot is infectious but the usual mode of spread is not definitely known; diseased buds attract many kinds of flying insects, especially flies and beetles, and these carry away infection on their legs and bodies. A rotting bud becomes a centre of infection for all coconuts in the neighbourhood.

Treatment.—Under the diseases of Plants Law, 1911, Budrot was declared infectious and rules made for its treatment. If disease has reached the bud the tree must be cut down, the bud leaves pulled apart, chopped up, and burnt promptly, using the older leaves and trash as a basis for the fire; attempts to burn the bud as a whole fail because the heat does not kill the bacteria in the centre. In most cases the top of the stem is also soft and stinking; this should be chopped across below the lowest reach of the rot and the severed piece cut up and thoroughly burnt. If the bud is not visibly affected the disease being in the early stage of case 1 (young nuts dropping, yellowed and withering leaves, blackened spikes) the tree may be fired at the hanging trash so as to burn away the expanded foliage and strainer and so scorch the surfaces of limbs and adjacent stem as to kill the agent of the rot and give the tree a chance to form a new and sound top. If there is no healthy growth four months after firing, the tree must be cut down and the whole top burnt piecemeal. Spraying with bordeaux mixture a few days after firing is advised to prevent fungi attacking the scorched surface (a combined spray of bordeaux and paris green or arsenate of lead is still better as it protects against fungi and beetles.) In Case 2 the bud is the first part attacked and disease is too advanced, before showing up, for hope to save the tree by firing. Before cutting down a man should be sent up to pull out what he can of the withered heart; if the stalks show brown and mouldered, and not soft and stinking, the disease is not bacterial budrot and the growing tip of the stem may be sound and capable of throwing out new leaves. If the stalk show evidence of boring it is due to the grub of the ladybird borer (*Sphenophorus sericeus*) and a few pints of 1 to 15 Jeyes fluid (or similar liquor) should be poured into the heart. If there is no insect attack, but the youngest white overlapping leaflets from the heart show withered tips and yellow spots with brown margins and a fruity smell, disease is due to the pine-apple fungus (*Thielaviopsis*); a powdered mixture of 1 part bluestone and two slaked lime should be thrown into the heart, or better still, a bordeaux mixture of twice usual strength (1 pound bluestone in 2½ gallons of water mixed with ¾ pound quicklime in 2½ gallons) sprayed or poured in.

LEAF DISEASES.

Leaf-dieback.—The signs of this disease are brown patches usually starting from the tips of the leaflets and reaching finally to the midrib. The whole limb dries up later and falls. The brown zone is often separated quite sharply from the green of the leaf which may not be spotted. As the long brown patch dries minute black pustules are found, scattered behind its margin. If one of these is scraped off and torn up with a pair of needles in a drop of water and put under a microscope, it will be seen as a torn hollow sack which has set free a large number of colourless eggshaped spores which turn later into dark brown spores of the same shape but divided across the middle by a dark line. These are the spores which spread the fungus causing the disease. The oldest leaves are first attacked and disease is usually

first seen on trees of more than ten years; if younger trees are attacked the epidemic must be severe. The outer leaves fall prematurely and the top diminishes until, in a severe case, a few small leaves are alone left. As the nuts depend on food prepared in the leaves they are unable to grow on and fill, and often fall prematurely ripe. The disease has become very noticeable during the last two or three years round the east-end from Spanish Town to Port Maria. It is worse where the drought has been most severe and is found on every type of soil.

Treatment.—It was declared an infectious disease under the Diseases of Plant Law in 1913, and owners were required to chop away and burn diseased limbs and spray the rest of the top with bordeaux. The trees would be much helped to rapid production of a full crown again by cleaning, forking and manuring. Grass with its roots should be pared away round the trees to a distance of at least 12 feet all round, the soil opened by a strong tined fork (4-8 inches deep) thrust into the earth vertically, loosened by moving back and forth, and withdrawn without any prizing action; 4-6 thrusts per square yard are sufficient and if properly done there is no need for any serious root injury. This method of opening up the soil was originally suggested by Mr. O. W. Barret. A dressing of bone meal (2 lbs.) and sulphate of ammonia (1 lb.) or dried blood (2 lbs.) should be given from 6-12 feet from the bole, for trees over 20 years old and nearer for young trees. The manure should be broadcasted, mixed with dry earth to secure even distribution. If well rotted pen manure is available a dressing at the rate of 1 cwt. per tree would be helpful. If most of the mature leaves are severely affected flaming may be preferred to chopping off the limbs. Where the top is much reduced, with the appearance of dwindling or pencil point, it may be considered better economy to fell the tree and replant.

Spot Diseases.—They are due to a number of fungi. First yellow and then grey dry spots running together and making the leaflets ragged are usually caused by *Pestalozzia*; the spots are dotted over by the black spore masses of the fungus. Another kind produces long narrow spots which dry and split causing the leaflets to shred. One species attacks the midrib of the leaflet forming small grey spots with brown edges; the leaflets break at these points, leaving lines of stumps along the limbs, as if sawed off or eaten away by an insect. In inland districts still another fungus develops brown spots showing concentric ribs and covered by the minute black fruits (*Spherella* spot). *Pestalozzia* and *Spherella* spots are common on the older leaves of young trees (from 1 to 10 years) in damp and neglected localities. In serious attacks the bad leaves should be chopped down and burnt and the remaining top sprayed with bordeaux mixture. The treatment is of little use unless weeds are kept down near the trees, the soil forked at intervals, and drains opened when needful. Spots usually attack trees rendered unhealthy by neglect of soil sanitation and by overcrowding. Limbs below bunches of half grown nuts should be chopped a foot within the foliage region and the ends tarred; the stump lives on and the nuts have less tendency to drop than above limbs chopped near the base.

ROOT DISEASE.

In the leaf and bud diseases described the trunk and roots are sound; in this disease they are discoloured. The symptoms can hardly be distinguished from those of budrot case 1 (yellowing leaves and

dropping nuts, finally withered bud). The heart when cut open is frequently found sound but lacking in sap, growth having stopped due to cutting off of water supply. In old cases the heart browns and moulders away; sometimes the starved bud is attacked by soft stinking budrot and then should be torn up and promptly burnt. Internal symptoms serve to distinguish root disease from budrot; reddish patches within the rind, a red ring, or a red patch at the centre of the stump, when the tree is cut down a foot above the base, proves root disease; cracks from which gum oozes are frequent near the base and the limbs both young and old show red or brown internal gummy patches which may reach the surface and exude gum. The disease does not seem due to a parasite but to chronic unfavourable soil conditions. The affection is confined to trees in stagnant swamps or stiff clay subsoils, and begins to show after bearing age, when the roots are pushing into the subsoil. Drainage may be profitable in wet spots, but no effective cure is known yet on stiff subsoils.

DWINDLING OR PENCIL-POINT.

The top becomes reduced to a few small leaves, and the end of the stem much and rather abruptly narrowed. This is either an advanced condition of Leaf Dieback or (where the latter disease is absent) due to a fungus rot of the roots. If due to dieback, and the top not too reduced, the latter should be fired just before the rains. Where occasional cases of dwindling are found, in a plantation otherwise healthy, the affected trees should be cut down and a trench 18 inches deep dug round the stump 12-15 feet from it, to prevent fungus reaching the roots of adjacent trees.

STEM DISEASE.

Cracks show on any part of the trunk, from which sap escapes and stains the bark black. The rind beneath is reddish brown and sodden, and in old cases, the trunk is hollowed out, leaving the fibres alone remaining, though brown and dry. The rot is due to the pineapple fungus or to another species. The attack starts at a wound often caused by cutlass or fire. In advanced decay the trunk snaps away in a strong breeze. If the patches are treated as soon as the cracks and black stain are seen, the decay can be stopped. The rind should be pared away over and round the patch until sound tissue is reached, the edge of the wound smoothed off, and covered with coal tar. This waterproofing should be renewed at intervals.

BARBECUE COMPETITION IN UPPER CLARENDON.

REPORT OF THE JUDGE.

I beg to submit my report on the Barbecue Competition in Upper Clarendon.

With a view to encourage the better curing of produce in Upper Clarendon, where in the majority of cases the coffee is still dried upon the bare earth, the Trustees of the Clarendon Show Fund decided to offer prizes of 10s. each for the best barbecues built between June 1st., 1914, and February 25th, 1915. Unfortunately just at the time when the people were busily making plans for constructing them

the price of coffee fell to a most discouraging degree and many of those who had entered for the Competition had to fall out.

Twenty-two barbecues have been awarded prizes. These have a surface area of 6,589 square feet and are nearly all very substantially built. They are well distributed over districts in many of which none existed before, and I have no doubt the good example set will have a reforming effect.

The following is a list of the Prize Winners:—

T. B. Wright, Mahoe Hill; Wm. Cross, Mahoe Hill; T. Turner, Mahoe Hill; J. Dyke, Frankfield; P. Dyke, Frankfield; Mrs. Melhado, Frankfield; J. Knight, Frankfield; Z. Knight, Frankfield; C. McLean, Far Enough; J. James, Far Enough; S. Brown, Kellits, Chapelton; E. Bartley, Kellits, Chapelton; J. Campbell, Kellits, Chapelton; Corpl. Russel, Kelits, Chapelton; J. Forster, Kellits, Chapelton; L. Pinto, Kellits, Chapelton; E. Radlin, Kellits, Chapelton; T. Davis, Smithville; B. Gayle, Smithville; Rev. W. Turner, Crofts Hill; W. Rainford, Spaldings; G. McNamee, Moravia.

(Sgd.) S. A. SCHLEIFER,
Agricultural Instructor.

Chapelton,
March 5th, 1915.

:o:
**CORN GROWING COMPETITION IN MIDDLE AND LOWER
CLARENDON.**

The May Pen Branch of this Society offered prizes for a Corn Growing Competition to be held in the districts of Middle and Lower Clarendon. The Parent Society backed this up with a grant of £3 to help with the prizes. Fortunately the seasons were good and the Competition was a success.

The following is the report of the judge, Mr. Schleifer, the Agricultural Instructor.

To the May Pen Branch
Agricultural Society.

Gentlemen,

I beg to submit my Report on the result of the Corn Growing Competition in Middle and Lower Clarendon.

This Competition has been very interesting and instructive, and should have a far reaching influence on the production of corn in the future especially if a market can be found for the product. Should continued encouragement be given to corn growing I have not the slightest doubt that the importation of this article would be a rapidly diminishing quantity. The Competition under review has demonstrated the possibility of producing thousands of bushels in Clarendon during the months of January, February and March, while the Competition in the Lamb's River district of Westmoreland some time ago demonstrated the possibility of producing large quantities in that parish in the months of June, July and August. With careful manipulation it seems quite possible for a continuous supply to be kept up throughout the year and in no case would the amount in store be more than three months old. Corn well dried can be easily kept free of weevils for this period. In days prior to the organization of Agricultural Branch Societies throughout the Island and possibly before the days of Agricultural Instructors, I understand an experiment to supply the Government mules with home grown

corn was tried and resulted in failure. I certainly think that with the agencies at present at work such an experiment if repeated could not end in failure and would result in the building up of a lucrative industry in districts where the problem of even being able to exist is a difficult one.

I suggest an alteration in the Competition as at first planned the conditions in the Mocho Hill being so different to those in the Plains, it is difficult to judge them together, I therefore recommend that they be classed separately and that the prizes be re-arranged by your Committee accordingly.

Eight fields were judged in the Mocho division distributed between the Kencoe Backwoods, Richmond Park, Stewarton and Brixton Hill, and six in the Plains distributed over the widely divided districts of May Pen, Palmetto Pen, Portland, Gravel Hill, Tweedside and Osborne Store. Several who had at first entered the Competition withdrew from the unfavourable weather condition and a few fell out chiefly because animals entered and damaged the fields, driving home, I hope, the lesson of first securing the premises by a good fence before beginning to cultivate, especially when we grow such tempting crops as corn.

The havoc wrought by thieves was also apparent in many fields.

The following method of judging was adopted:—

The owner of the field was made to choose one-sixteenth of a square chain from the part of the field he considered best and I did the same from the part of the field I considered poorest; these portions were then reaped, shelled and measured in my presence and with my assistance. From these the yield per acre was estimated.

The results of the Competition are:—

I.—MOCHO.

- | | |
|-------------------|--|
| 1. Robert Adams | Land forked and planted 5 x 4 feet, 4 to 6 grains each, 99½ bushels per acre. |
| 2. Ivan Francis | Land forked and planted 5 x 4, 3 to 4 grains each, 70 bushels per acre. |
| 3. Philip Lennan | Land not forked but well stirred by hoe, 4 x 4 feet, 5 to 6 grains each, 67½ bushels per acre. |
| 4. Samuel Francis | Land not forked, planted 5 x 4 feet, 3 to 4 grains, 55 bushels per acre. |
| 5. David Alison | Land not forked, planted 5 x 4 feet, 3 to 4 grains each, 55 bushels per acre. |
| 6. R. Alison | Land not forked, planted 5 x 5 feet, 5 to 6 grains each, 53¾ bushels per acre. |
| 7. J. Alison | Land not forked, planted 4 x 4 feet, 3 to 5 grains each, 52½ bushels per acre. |
| 8. R. Gibson | Land not forked, planted 6 x 6 feet, 4 grains each, 33¼ bushels per acre. |

The fields of Samuel Francis and David Alison adjoin each other. Samuel Francis kept a faithful record as to time of planting, rainfall, etc. Alison kept none.

II.—LOWER CLARENDON.

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|---------------------|---|
| 1. C. L. A. Rennals | Land forked, planted 5 x 3 feet, 3 to 4 grains each, 88 $\frac{3}{4}$ bushels per acre. |
| 2. Thos. Green | Land not forked, planted 4 x 4 feet, 4 grains each, 60 bushels per acre. |
| 3. Peter McGill | Land not forked, planted 5 x 4 feet, 4 grains each, 55 bushels per acre. |
| 4. C. F. Dennis | Land not forked, planted 5 x 4 feet, 3 to 4 grains each, 50 bushels per acre. |
| 5. A. B. Francis | Land not forked, planted 5 x 3 feet, 4 grains each, 46 $\frac{1}{4}$ bushels per acre. |
| 6. William White | Planted 4 x 2 feet, 4 grains each, 25 bushels per acre. |

Ten per cent. should be struck off each for shrinkage in additional drying.

Taking soil conditions into account Dennis and Francis may be regarded as a tie and in case of a prize the same should be divided.

From the lack of symmetry in yield in certain fields it was evident that careful selection of seeds for planting was neglected. This opinion was borne out by admissions made. The wonderful powers of careful seed selection and of the use of the fork have been fully illustrated once more.

The latter is especially serviceable in the Mocho district where there is a common fallacy that forking would cause the drying out of soil.

The Mocho Branch Society is to be congratulated upon the fine display made by its two members who are wise enough to make use of the forks recently provided by that Branch for the use of its members.

Samples of corn are sent from each field which should be forwarded to the Secretary of the Parent Society after members have seen them.

(Sgd.) S. A. SCHLEIFER.

:o:
RICE CULTIVATION.

It is probably an unknown thing in many of the parishes, that a considerable amount of rice of excellent quality is grown in the Western parishes of this Island, and that it may be had in the local markets at prices below some brands of inferior imported rice.

Up to recently rice growing was confined to the coolies on the sugar estates.

Their principal food is rice and they found it a great saving to utilize the swamp lands considered worthless by the proprietors for growing their own food.

When they grew more than they required for their own consumption, they sold the surplus grain in the local markets, thus creating an appetite and a demand for the article.

Latterly many creoles have learnt to grow rice and have found it a paying industry, and now rice growing is an ever increasing branch of agriculture in these parts. The acreage under cultivation however, is very small in comparison with the large expanse of swamp lands and also with the population of coolies and creoles interested in its growth. The reasons are not far to seek. Swamp lands are generally parts of large properties, as small settlers when purchasing lands generally avoid them.

They occur in large pastures and cattle runs, and this makes expensive fencing a necessity. Birds devour a large amount of rice. Flocks of doves and wild ducks, chiefly "Whistlers," feed in the rice fields and many men are afraid of planting fields far from their houses as the birds cannot then be kept away.

This last difficulty can be overcome by extensive planting, so that when the birds have fed, the crop will not be appreciably diminished.

There are great possibilities for the development of the rice industry. There is that large expanse of swamp lands, ten to fifteen thousand acres in area, known as the "Great Morass," two thousand acres of which belong to the Government. If these lands were opened up and coolies who had served their indenture were encouraged to go there a large addition would be made to the profitable productions of these parishes. One asks why is it not done?

R. C. SOMERVILLE.

Bethel Town P.O.

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RICE GROWING.—NO. II.

In continuation of my article on rice growing in Westmoreland, I now add a few facts that might be of interest on this promising industry.

The proprietors of George's Plain Estate have for some time been engaged in hulling rice and own a splendid plant, the machinery of which is worked by steam and water power combined.

The rice is bought from the coolies who are tenants on the neighbouring plantations and on George's Plain itself. The price this year has been 10s. per 100 quarts of dahn. The dry dahn is treated with steam which causes the husk to smell and burst and when this is again dried and passed through the mill it comes off very easily.

The machinery not only thrashes the rice, but separates it from the trash and finely broken grains. There is no waste whatever as these are ground into a fine meal and the product is known as rice bran; this is a splendid stock feed, about the cheapest I know. The average is about two bags of dahn to one bag of clean rice.

The rice is of the very best quality "white" and any one who has not eaten it has a surprise in the excellence of Jamaica foods awaiting him.

The machinery at George's Plain is capable of hulling 40 bags a day and usually mills between one and three thousand bags annually.

I know that if proper machinery were erected at Negril and the Great Morass planted out in rice, we could supply all the rice that Jamaica consumes and would have an export trade of considerable importance.

There is this great undeveloped resource of our Island waiting for some enterprising capitalist to turn into a golden harvest. Ten thousand acres of land in one huge expanse of useless morass and thousands of time expired coolies who would find themselves in congenial and lucrative employment, and all the money that goes out of the country for imported rice stopping right here, are the subjects I commend to our legislators.

The opinion is current that the banana has seen its best days, that sugar has had a hard fight,—shall we not look in some new direction for a paying industry?

And is there any other with such an established permanent demand as is rice which forms so large a part of the diet of all classes of the community?

All I ask is that enquiry be made into the possibilities of the industry, and I am confident that there can be only one result, and that is, a knowledge that we have still one undeveloped resource which has great possibilities behind it.

R. C. SOMERVILLE.

:o:
THINGS TO BE OBSERVED.

A. ABOUT BANANAS.

1. Bananas planted at the same time, on the same property, and under identically the same conditions, will often mature at intervals of from one to five months.

Conclusion.—The disparity lies in the plants. Not only should the utmost care be exercised in the selection of “suckers,” but there should be an assortment before planting. Have large and medium suckers planted in different sections.

2. The healthiest “eye” on a sucker is almost invariably found on the side remote from the point of contact with the mother plants, and located between the stem and the bulb.

Conclusion.—This eye should be saved and set well under in the hole, so as to establish a good footing for the future plant. Be on the look out for another plant which may grow from that part of the bulb nearest the surface. This usurper may take the lead, but if allowed by mistake to grow will produce an inferior bunch of fruit, and will get uprooted very easily.

3. Forking during the fall of the year does not insure a spring crop of bananas, and often proves a set back.

Conclusion.—The matured roots are badly broken, and are quickly overtaken by winter. If forking be attempted for any exceptional reason during early Autumn, this should not approach within four feet of a well advanced plant. The roots torn up should be cut regularly off with a sharp spade.

4. A neglected sucker very often has the effect of causing a “false” hand on the bunch of a mother plant, reducing, for example, a straight to an eight hand.

Conclusion.—Suckers are rapid gormandisers, and exist at the expense of the crop. The earlier they are removed the better.

B. ABOUT COCONUTS.

1. Oval nuts of fair size and weight very often fail to attain the standard. They are wanting in circumference.

Conclusion.—Not only should care be exercised in the selection of healthy seedlings, but the sound variety should be sought.

2. Plants deposited in holes about three feet deep very often die back in dry weather.

Conclusion.—The subsoil is lacking in vegetable mould. Fill in surface soil to about twelve inches from the surface before planting. Fork up the soil in a circle from three to nine feet around the young plant, and mulch as a provision against dry weather.

3. Three trees planted but a few feet apart, and in triangular form will bear only on the sides remote from one another.

Conclusion.—Plant in straight rows; and bear in mind that in loose or sandy soil coconuts have been found to extend their roots as far as sixty feet.

4. Lightning can only strike a coconut tree during a thunderstorm, and this seldom happens. Even then the wilting of the leaves, and the dropping of the fruits is the process of a couple of days.

Conclusion.—Signs of decline are in the great majority of cases symptoms of disease. Consult, if needs be through the Secretary of your Branch Society, those who are able to save your diseased trees, which if left alone will die, and cause others to die.

(To be Continued.)

A. P. HANSON.

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MULCHING.

BY A. NORMAN PALMER.

(Read at the Meeting of the Troja Branch on Thursday, 25th March, 1915.)

1.—What is mulching? Spreading a layer of grass or trash on soil.

The subject of mulching is one which is worthy of much more attention than is generally given to it.

Of late, the weather conditions in Jamaica have been very uncertain, and periodic droughts of sometimes long duration occur frequently.

It is at such times that planters who have no facilities for irrigating their properties, feel the need of some means of conserving the supply of moisture that is in the soil.

It is a well-established fact that in an acre of ground we sometimes find as many as four different kinds of soil, *e.g.*, heavy clay, light sand, loam, and sandy loam. Such soils all have different retentive powers. The heavy clay, being more able to retain moisture, in greater quantity and for a longer period than the light sandy soil, is less liable to suffer quickly from the effects of drought than any other kind of soil except perhaps one well filled with humus.

Some of us have the misfortune, no doubt, to cultivate on light sandy soils with low retentive power, on account of the porous nature, which not only allows the water to drain away rapidly but to evaporate from the surface more rapidly. Cultivators on such soils are never certain of their returns unless they have constant and abundant rainfall.

Now such persons need not worry if they will only apply the panacea "mulch."

The advantages of mulching are numerous:—

1st.—It prevents the rapid evaporation of water from the surface of the soil, and by thus conserving the moisture, it promotes the rapid growth of plants (upward movement of water in times of drought.)

2nd.—It prevents the surface of the soil from getting hard and baked by the hot sun. This is of course, a very undesirable condition, for the moment surface soil bakes, the air cannot enter the soil, and if no air enters the soil, nitrification cannot take place, and without nitrification in the soil, we might as well plant in the sea.

3rd.—Mulching keeps down the growth of weeds. This is a very important point. If a man who plants a field of one acre, mulches half an acre thoroughly and does not mulch the other half, he will find that, when the half not mulched requires three or four weedings for the year, the part that has been heavily mulched will only require one weeding.

The practical agriculturist can see the great advantage in that, especially to the man who has acres of cultivation. The comparatively small expense which will be incurred in having mulch spread on, will be far exceeded by the savings on the item of grass weeding, which as you know is a big factor in cultivating.

4th.—Besides the first three named advantages of mulching, there is a fourth, namely: It prevents the washing away of the fine rich surface soil. On hilly lands you know there is always the tendency for the fine soil to be washed down by the torrential rains. This collects as a mud in the hollows at the foot of the hills and thus you find that while these glades are very fertile, the exposed hillsides are comparatively sterile. The judicious use of mulch on these hillsides, however, would serve to obviate such a condition of things.

5th.—Besides all the above, mulching eventually increases the fertility of any and all soils on which it may be used; for, after a time the mulch rots and forms manure, which may be incorporated into the soil, adding rich and much needed plant food.

6th.—Mulching prevents the rapid exhaustion of soils. All cultivators with any experience, know that if the same crop be planted, year by year on a soil, without manure, that soil gradually becomes poorer and eventually ceases to give an appreciable yield of that particular crop. Since, however, mulching helps the soil in the five different ways named above, it follows that a soil which is constantly mulched will last longer than one which has had no help in this direction.

7th.—Kinds of mulch:—(a) Earth mulch; (b) Vegetable mulch, *e.g.*, Guinea Grass, Coconut boughs, banana trash, leaves and branches of trees, etc.

8th.—Examples of benefits that have been derived from mulching, *e.g.*, Rio Magno.

G. P. Campbell of Williamsfield.

My own experiments in school gardens during the last six years have led me to appreciate fully the value of mulching, and I hope the day is not far distant, when not only every member of this Society, but every cultivator in Jamaica, will realise and experience all the benefits to be derived from a scientific and intelligent application of the mulch.

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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.

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 Agric. News, 30.1.16.

YAMS.—A The Harvest Festival at Refuge Church at Stewarton (Clarendon) Mr. W. O. Parchment of Stewarton presented a Mozella yam weighing exactly 100 lbs. This yam was sold at 4/-.

INDUSTRY

(Being paper read at meeting of the *Maidstone Branch.*)

Industry, as defined by our ordinary dictionaries is habitual diligence in any employment; steady application to labour. Both these definitions lend themselves readily to our fancy. Taking a further step we see that industry is the habit of doing one's work, whatever the work may be, faithfully, during the working hours. "Habit is second nature" and we would be glad indeed, could we see our people acquire it. It is not an impossibility for the majority of the peoples of all progressive countries acquire it. To assist in the acquirement of this habit the subject may be viewed thus: (1) Industry in its true form (2) Industry in its mistaken form (3) The good results of Industry.

1. Industry in its true form. Longfellow's "Village Blacksmith" depicts accurately, Industry in its true form. There we find, "week in week out, from morn till night, you can hear his bellows blow" and "His brow is wet with honest sweat, he earns whate'er he can," for "Each morning sees some task begun, each evening sees its close."

We are not many gathered here, yet there is a diversity of occupations. We see the Clergyman, the Instructor, the Day School Teacher, the Farmer. There is nothing to prevent each in his sphere from being assiduously engaged at his calling. It must not be construed, however, that to be industrious, one must be a slave to the work and not share in wholesome recreation. "All work and no play" the saying goes, "makes Jack a dull boy." What is meant is, do not waste or trifle time, but, "work while you work and play while you play."

Let us look awhile at the farmer. Before he starts for the field he should see that all the tools required for the day are in proper order. He should sharpen all those require sharpening the evening before. Failing this, it should be done very early the morning, then like the Father of the faithful, start early. Do not abuse time in formal salutations on the way. Remember an hour in the morning, etc. Do not overwork nor underwork. Be conscientious even when the work is your own, and you can do no less when engaged by another. This will prevent the unpleasantness so often witnessed between employer and employee, besides, the work will be done without the employee feeling the stress.

2. Closely allied to this way of working is the false or wrong form of Industry. It carries in its train: hurry, confusion, loss of temper, overwork, "short-hand" work, sometimes loss of occupation, to say nothing of the loss of health and character. Of these, the last named should ever be carefully watched and protected, for—

When wealth is lost, nothing is lost,
When health is lost, something is lost,
When character is lost, all is lost.

You all know the tale of the Hare and the Tortoise. The hare, on rousing from sleep and wishing to carry off the prize, began real work *too late*, and had to endeavour to perform an impossibility, while the tortoise, without any show or fuss, carried off the goal. It is not wisdom to start on any work and court defeat, for, "Whatever

is worth doing, is worth doing well." Let this be another motto of yours.

3. Here are some of the good results of Industry: Perseverance, Independence, Honesty, Honour, Patience, Accuracy, Self Respect, Courage, Justice, Success. These noble virtues will be secured. These will follow also, promotion, constancy of employment, old age provided for, because Dame Fortune's door would have been opened by this key—Industry. Ever keep in mind the adage—

"The heights by great men reached and kept.

Were not attained by flight,

But they, while their companions slept,

Were upward toiling in the night.

"Let us, then, be up and doing,

With a heart for any fate;

Still achieving, still pursuing,

Learn to labour and to wait."

OR

SEASONABLE HINTS.

We have been asked again why we do not write these Seasonable Hints regularly. Simply because in the issuing of this JOURNAL there is nothing more difficult than to write notes ahead, giving hints about the planting and reaping of crops when local conditions are so different from east to west, from north to south, from lowland to upland, and our readers will not realize—although we have so often stated it—that such notes must be read with discretion and judgment. Hints cannot be made applicable to every little district.

MANURING.—In one of the Agricultural Instructors' reports the following paragraph appears:—

"On this holding all around a cane mill and sugar-boiler, heaps of ashes and cane refuse, the accumulations of years, rose high, while a couple of chains away the plants—Bananas, Coffee and Cocoa—were perishing from want of some fertilizer."

It often happens that men complain of their land giving out, that they do not get much good crops as formerly and they never seem to think that a large part of the wood ashes and all the cane trash that has come from their field could be used for manure. Both cane trash and wood ashes make excellent manure and no particle of these should be wasted.

PREPARATION OF LAND.—The early preparation of land for planting is worth a great deal to the planter, and yet so many simply wait until the week of planting, turn over the soil hastily and plant. In the first place the weather, especially on clayey soils, can do much for him: When the land is cloddy, it takes a tremendous amount of labour to get it crumbled down, whereas if left to the sun, breeze, and the heavy showers that fall, it crumbles down without much labour. Then again, land turned up early and receiving showers, will absorb a good deal of moisture, and most of all, especially in clayey soils, exposure to the air liberates plant food, especially nitrates.

Cultivators should keep this in mind and not have the land intended for a crop lying untouched until planting time comes. Even for bananas we should leave the holes lying open for a month. For corn, too, hasty preparation and planting is a mistake.

COFFEE.—Some erroneous ideas are current about coffee growing. Most of the written information on the subject has been got from Blue Mountain experience where the circumstances are generally a great deal different in some ways from other parts of the Island. Short top coffee has been advocated as *the* system under all circumstances and conditions, and any comparison of results made has been made between well cultivated short top against switchy trees generally called long top but which in reality are simply neglected short top trees run half wild; trees planted close together and branches interlocked like a jungle.

Well cultivated long top coffee is a rarity. In the first place, trees meant to be grown as long top have to be planted not closer than 8ft. square and 10' x 10' is certainly preferable. Most of the neglected short top called long top was planted ½ or 4 ft. apart, seldom more than 6 ft. apart,

Even Mr. H. Q. Levy in his articles on Coffee in this JOURNAL, we think has made a mistake when he states, that above 2,000 ft. short top coffee should be adhered to while below that long top coffee should be grown. We do not think this applies generally outside the Blue Mountains. It depends on the soils and conditions generally. As a matter of fact, we know places at 3,000 ft. elevation on both red and black soils, where short top coffee has not, in practice, been so successful in results as long top has, all the time they have been growing; we know of other places at the same high elevation where "short top" does not succeed at all. The only objection to long top coffee that we know of, is the difficulty of picking the berries, where small boys and girls are so often employed to do the picking; branches often get broken.

In Costa Rica, where coffee is grown at a high elevation, there is no such thing as short top coffee grown. It is all long top, but the trees are planted wide to give them plenty of room to spread, and the average return in that country is more than we ever get here even on the best estates.

This is a subject we should be glad to hear about in correspondence, actual experiences preferred.

There will be a very large banana crop coming in between July and October, and probably there will be more bananas available than ever in the history of the Island, yet the demand owing to the war conditions is smaller and the price less. The question is naturally asked—what can be done with the surplus bananas? It certainly does not pay to feed stock with bananas where money has been spent on the cultivation, but this is certainly more economical than wasting any of this good fruit. We know of planters who feed their mules and horses on bananas, both green and ripe, and so save a large proportion of corn. We consider it waste to feed much in the way of green bananas to animals. If the fruit is allowed to ripen there is more food value in it. This applies to pigs especially, and saves trouble and expense of cooking the green bananas. Large use should be made of the bananas in the household. Stocks of dried bananas simply cut into chips should be laid by in barrels and tins and ground into meal as food for the house when required.

We are very much disappointed that a large trade has never been built up in Banana Figs: we know they are appreciated abroad; we know there has been a demand outside of Germany, which was the chief market before the War, and yet through different circumstances we have not been able to provide Banana Figs; yet there will probably be millions of fine bananas available. Soldiers at the front would appreciate packets of Banana Figs in their knapsacks. These banana figs are at once a fruit and a substantial, nutritious, palatable food, proved to be very sustaining, and not thirst provoking as so many other preserved foods are. A philanthropic planter here has given us a cheque in order to send a ton of banana figs right to the soldiers at the front, and we are arranging for this. We will make the most of this as an advertisement of Jamaica Banana Figs; but there is a great lack of organized effort to push trade abroad in many side products; only banana figs should not be a side or minor product, but should be a staple product, exported in thousands of tons.

STOCK NOTES.

WATERING.—This paragraph does not refer to watering gardens but to watering animals—draft stock. We saw the other day a drayman who fed his mules with 2 quarts of corn each and then immediately let them drink water. They had been very thirsty evidently and drank eagerly and long, and the result was that one had a bad attack of colic, while the other looked uncomfortable and no doubt had belly-ache. Every owner of mules and horses should take care himself, and warn his servants, that the animals must be watered before they are fed. If a beast eats heartily of corn and then drinks freely afterwards, some of the corn is washed out of the stomach entirely undigested, and if this does not cause an out and out colic, it certainly causes a good deal of disturbance and the corn passes out entirely undigested.

CALVES.—Many calves which people attempt to raise by hand die every year from scours, the direct cause of which is feeding from a filthy pail. After feeding, the milk pail must be cleaned out immediately, otherwise the milk coagulates in the seams, and in spite of the ordinary casual washing the pail becomes sour and rancid.

PIGS.—The Island is under-stocked with pigs at present. No shoat should be killed now but carefully kept. Feeding is plentiful now, and likely will be more so. See that the pigs have plenty of clean water to drink and that they are not kept in filth. Pigs that are tied out should be shifted every other day to a clean place, whereas they are commonly kept for weeks, even months, without being moved. Those pigs kept in pens should be well bedded with grass and trash.

DOGS.—Dogs are an important part of the household economy, first as watch dogs, and second, for hunting rats and mongoose. They are worth being decently fed and kept clean—they are often only fed on an odd scrap now and again and are not often washed to get rid of the fleas, which infest them. Fleas are dangerous pests. Whenever the cows are sprayed or washed for ticks, the dogs about the yard can be done also: the same wash will kill fleas. Cats are also subject to fleas and as they are better ratters than dogs in the house and yard, they are useful; they object to water but all the same catch them up and give them a wash like the dogs. After the wash they will disappear like a shot but will come back again all right. Instead of the wash they can be dusted with insect powder or sulphur.

GOATS.—With the hot weather lice will become rampant on goats, and these animals must be sprayed or washed. If a goat that is well fed, is seen not to thrive, the first thing to look for is lice which can be got rid of by washing or spraying, with a tick wash. If they do not thrive after the lice are got rid of, then suspect worms, and dose them with two tablespoonfuls of castor oil and one bare dessertspoonful of turpentine or jeyes; this for a full grown goat. The drenching of goats must be carefully done. We prefer to give goats medicine in powder form in a little cornmeal. Sulphate of Iron will get rid of internal parasites, but must not be given to the goats heavy in kid; so will powdered borax, although this is not generally known. A teaspoonful of powdered borax in food is the dose for a goat.

BUTTER.—When cream is hard to churn or turns like whipped cream in the churn, add cold water, about half as much as there is cream in the churn; this brings the butter out in a few minutes.

In making butter if it turns out streaky one cause is that after the butter has been salted and has stood for some hours the salt causes the streaks. It has been experienced that this has been overcome by leaving the butter longer—that is, churning at night, and working the butter in the morning. Correspondents might say what has been their experience. Butter-making here is becoming important. We ought to be able to replace all the imported butter by home made.

YELLOW BUTTER & MILK.—The rich yellow colour of some milk and some butter has usually been set down to the individuality of the cow, and generally the Guernsey breed have been credited with pro-

ducing milk of this desired tint, followed secondarily by the Jersey breed. Experiments have been carried out by the Missouri State Experiment Station, U.S.A., which go to show that while this is to some extent a breed characteristic, the intensity of this yellow colour in milk and butter may within certain limits be increased or diminished at will by changing the animals rations. Green grass is probably richer in pigment—that gives the milk and butter that golden colour called Carotin—than any other dairy feed. Green corn will also produce a highly coloured butter. Hay and yellow corn do not produce this colour.

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WORKING A STALLION.—I traded for a stallion that had failed in service. His colts died; his mares would not produce. So I put him to work when threshing began, hitching him to the water-wagon.

It took the surplus flesh off him, leaving him quite thin at the end of the season. In January I began to feed him and by April he was in good shape. In spite of his bad name, he settled 45 mares and the next spring 40 healthy colts were foaled. None of them died while I owned the horse. I advise all my friends in the stallion business to work their horses. The colts from such sires are more vigorous and seem more resistant to navel trouble. Also it gives better blood and stronger muscles to the stallion.—*Exchange*.

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The "*Breeder's Gazette*" of Chicago says:—

"Scottish horsemen fairly excelled themselves at the Annual Stallion Show at Glasgow. The attendance was in excess of any previous gathering of the kind. The exhibition from the stock-owner's point of view, was the best held for many years."

This Stallion Show refers to Clydesdale stallions, the demand for which has never been better than now. This is probably owing somewhat to the number of heavy horses that have been in requisition for the war and which means a good deal of slaughter; and also owing to the fact that the Belgian horses are practically no longer in existence; and a large number of Percherons—a French breed which is a great favourite in the United States—have also been destroyed. Many breeders of Percherons also have been killed on the battle fields of Northern France. Every little village in the Perche district of France, where Percherons are bred has its improvised hospital for wounded soldiers. The women are doing what they can on the farms to take the place of the man, and not a few of them are loading and spreading manure and ploughing. Old men who had ceased to work have turned out again.

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CONSTITUTION IN HORSES.—The constitution of a horse determines to a great extent his usefulness and longevity. A closely knit, heavily muscled frame is desirable; large active internal organs are required and a rugged persistent vitality is an absolute necessity. The whole body must also be permeated with vigor.

The indications of constitution should be carefully studied by everyone on whom devolves the responsibility of selecting horses for any purpose. The degree of a horse's vitality is not always readily recognized, but it dominates his health and usefulness. Breeders and buyers need to become familiar with its manifestation.—*Breeder's Gazette*, Chicago.

POULTRY NOTES.

Ducks are not so commonly kept as fowls, which are more generally useful. But in many parts of Jamaica, fowls do not thrive with as little trouble expended on them as ducks do. This is particularly the case in very wet districts. In such parts it is often difficult to raise chickens, and to keep fowls clear of roup. Now ducks are nearly proof against colds, which are the result of damp and chills. We have many such wet districts here where people struggle along with their fowls under difficulties which would not be experienced with ducks. Not that they would not have troubles, but these would only be such as are met with, incidentally, in rearing any live stock. We do not mean at all that people who live in dry parts, or districts which are not very wet, should not keep ducks. There is no reason why they should not, even if there is not enough water to provide a swimming pond. In fact ducks are often more easily and more cheaply raised than fowls, where there is no water for them to swim in, but where they have a good range and plenty of water to drink. The ideal place is a banana walk that is irrigated. Ducks are, moreover, preferable where there are gardens kept, or when seeds are being planted. Hitherto it has been considered that ducks are not so prolific as fowls and therefore, that there is not so much to be made out of them, because they do not lay so many eggs. This, however, does not now hold good, because, just as there are modern breeds and modern strains of fowls in which almost phenomenal laying powers have been developed, so the fecundity of ducks has been greatly increased, and improved breeds and strains introduced, both for table and for laying purposes.

Indian Runner Ducks are like Leghorn and Minorca fowls; they are non-sitters, and lay perhaps 180 to 200 eggs under favourable conditions, in the course of a year with good treatment. There are not many breeds of ducks usually used in the United Kingdom or United States that are suitable for our conditions in Jamaica—neither Aylesburys, or Pekins, or Rouens, or Orpingtons are, but Indian Runners suit the climate. Indian Runners however, have their faults; they do not make nests, nor will they lay in a nest, as a rule, unless coaxed by being shut in a house or pen every morning, with a comfortable nest of straw in a corner and a nest egg in it. If left alone to wander, they drop their eggs anywhere, many are thus lost. It is wise to keep Indian Runners in a pen from early morning until the afternoon and then turn them out. In this way the eggs are saved. They are very easy feeders.

The most common breed in the West Indies, and what may be looked upon as the native duck, is the Muscovy. This grows to as large a size as any other breed such as the Pekin or Aylesbury, for instance, and is very hardy. It is usually pure black, or pure white, or black and white in colour, the black having a green sheen as in the Langshan fowl. The Muscovy is not however, a very good layer, though this may be owing to the fact that the breed has never been taken in hand, as have other breeds more popular in the North, and improved by careful breeding and feeding. In fact it is a breed very little used in the North. With this breed it must have been a case of survival of the fittest before it reached its present degree of hardiness, for it thrives and multiplies in the gutters and back yards of tropical cities, and we have seen Muscovy ducks paddling along the gutters

of lanes in Kingston, with trains of active youngsters following, right among the feet of passers by. The capacity to live under the roughest conditions, breeding anywhere and anyhow, is or has been obtained however, at the expense of quickness of growth, fecundity in egg laying, and tenderness of flesh. In these points the Muscovy cannot compare with the well-known, improved, modern breeds mentioned above. There is an opportunity however, for enterprising breeders to improve this breed, by careful mating and feeding, building upon its hardiness and activity, which should be retained by selection. By this means a fine breed might, ultimately, be produced most suitable for the ordinary planter in the West Indies, who may wish to have ducks about his place to pick up odd trifles and be ready to be fattened for table when wanted, but who does not mean to spare much time and trouble over ducks. Such a man is almost always willing to buy a fresh drake from a known breeder at a fair price, so that he may have fresh blood to keep up the size and stamina of his flock. As a breed Muscovies have been greatly inbred, and we have been the only ones we think to import fresh blood among Muscovy ducks that we can recollect. The first progeny of these imported ducks were very fine birds, very quick growers, very large birds. We have however no love for Muscovies among our fowls and passed them all on to other breeders.

The Muscovy is a different species from other ducks and it must be particularly noted that the eggs take five weeks to hatch instead of four weeks, and that the cross with the ordinary ducks, Pekin, Aylesbury, Rouen, etc., results in mules, that is, the ducks of such crosses will lay, and are usually fine layers, but the eggs will not hatch. The Muscovy duck does not lay many eggs, just as many as she can cover, twelve to twenty. She makes a good mother, being attentive and careful, though vicious in other respects. The Muscovy drake is often very cruel to other birds kept in the same yard, and it is not wise to keep a lot of Muscovies running among fowls. At the same time unless the wings are cut, they are hard to keep apart, as they have powerful wings, and can fly like a wild bird.

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COMMENTS.
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SUBSCRIPTIONS.—Members of this Society who have not yet paid their subscriptions, please note to send the amount in as soon as possible this year.

BRANCH SOCIETIES.—The affiliation fees of the Branch Societies are now due and the amount with the revised list of members, i.e., the names of those who have paid their new subscriptions, should be sent in as soon as possible.

MEMBERSHIP.—The membership of this Society, that is those who are direct or full members entitled to write to the office for all information they may want (agriculturally) and use the office to the fullest in this respect, those entitled to attend our Half-Yearly General Meetings and who possess voting privileges, is not what it should be, considering the number of correspondents we have who are not even members of Branch Societies. The subscription to the Society is only 4/- per annum. Some of those keenly interested say it should be a guinea! Surely those who directly participate in the benefits of a central office and its organization should become members!

DISEASES OF PLANTS.—We hope to be able to publish the new Law on this subject together with the Rules, in our next JOURNAL. The subject was so important that a Special Meeting of the Board of Management was held to discuss the points of the Law carefully, and probably some useful revisions will be the result. We think it was unanimously felt that there should be no playing with Panama Disease of Bananas at least. When the Law is published with the Rules under the Law, we shall ask the Instructors to make it a subject of discussion at each of their Branch Meetings so that all the points may be understood.

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WAR GIFTS.—We are still sending some of these away, but at this time of the year we cannot send much fruit. We have shipped, however, by the S.S. "Chagres," which left on May 10th 37 boxes of mid-year Oranges from St. Ann, 45 boxes of Lemons and 15 boxes of grape-fruit from Manchester. Not many Lemons are raised in Jamaica, but in the St. Thomas Ye Vale District and in Manchester a good many trees were planted some years ago and this cultivation could be made profitable if the trees were regulated so as to bring the fruit in during the summer in the United Kingdom and the United States. By Lemons we of course do not mean the Rough Lemons or Wild Lemons of the country, which is a useful fruit locally and which grows vigorously in the mountains; we mean what are usually called Italian Lemons which are fine skinned and very juicy. We have also sent a quantity of Preserves, chiefly Guava Jelly and Grapefruit Marmalade. We shall have an opportunity of sending more, and now that the Guava season is in, we shall be glad to hear from anyone who can provide a War Gift in the shape of Guava Jelly. We will send out a 10lb. tin free—or as many tins as anyone want.—to be filled. The organization of the War Office seems so complete that we are able also to ship individual Gifts to individual soldiers or sailors almost anywhere—even right into the trenches. Anyone, therefore, who has a relative or friend in the military or naval service can send a gift of Preserves. Those who are not in a position to make Preserves themselves can get them through us.

We have also been instrumental in shipping another kind of War Gift by the S.S. "Erymanthos", in a body of 10 young men fit and active for military service; these were all medically examined at Camp and passed for service.

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PRICE OF COCOA.—Mr. Cradwick writes:—"In George T. Benton's Market Report for March, Cocoa is quoted as follows:—Trinidad, 80/- to 87/- per cwt.; Grenada, 81/- to 87/6 per cwt.; Jamaica, 80/- to 86/- per cwt.; Guayaquil, 82/- to 89/- per cwt.

This is interesting in view of the statement recently made in the newspapers—that Jamaica cocoa could never fetch as high a price as Trinidad cocoa. 1/- per cwt. difference is getting near it at any rate, and reflects great credit on Jamaica curing, if the oil, as it is stated in the newspaper correspondence, is really not in the Jamaica cocoa."

* * * * *

We replied, that war time prices were no criterion; that at the present time when stocks are low in the United Kingdom almost any cocoa would pass muster, but when there is keen competition, that is a different story. The present enhanced price of coca is not

because of increased demand through increased consumption, or because of crops of cocoa being poor at the sources of production, but because of the interruption of over-seas trade through the scarcity of shipping facilities, so many ships having been taken over by the Admiralty for their own use. There is plenty of cocoa available, and whenever shipping is available, the price will probably drop to normal.

We do not think there is any doubt that a large quantity of Jamaica cocoa is picked in an unripe stage, is not well cured, and cannot have the same percentage of oil as cocoa from countries where greater care is taken. This does not apply to estate cocoa here; but a large percentage of our cocoa is grown by small settlers who sell in the pod to small speculators who have neither the knowledge nor the equipment to cure cocoa. This is a wasteful way of growers selling cocoa. Are we not, too, as a Society at present very much concerned over the buying of cocoa pods in an unripe state, and has not the subject been referred to our Branch Societies for discussion with a view to checking this evil by legislation? We do not think anyone growing or selling cocoa should judge of the prospects of the trade in the future by present prices.

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KILN DRYING OF CORN.—Mr. Cradwick also writes that Western St. Mary has reaped a large crop of corn and it is raining every day: how is it to be dried? Is not this an argument for the erection of central kilns to dry corn?

We replied that central kilns would be useful no doubt if the idea could be proved workable. However, corn can be dried without kilns. There are now bakers ovens established all along the roads in all parts of the Island not very far apart, and these can be utilized for drying corn without any particular expense. Men can take their corn along, put on the fire, keep up a moderate heat and dry their corn in an hour or two, paying a trifle for the use of the oven. If some corn gets a little charred that does not matter if it is to be fed to beasts: it would not of course do for cornmeal: and of course corn meant for seed cannot be artificially dried—it has to be cured in the cob and kept in the cob until planting time.

This subject of drying corn is worthy of more discussion.

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PRAEDIAL LARCENY.—At the last session of the Legislative Council, a Law was passed entitled "A Law to Amend Law 4 of 1909 entitled A Law in Aid of the Laws Relating to Praedial Larceny", which abolishes in connection with the Law dealing with "Authorized Persons" the distinction between Common Larceny and Praedial Larceny.

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FLIES.—We have often written of these plagues, and how to get rid of them by the use of "Formalin." There are many kinds of flies but the common house fly is the most obnoxious.

At this time of the year flies begin to appear in numbers, especially in kitchens where food is exposed in the course of preparation.

On page 499 of the JOURNAL for November 1911, we wrote of the usefulness, the exceeding great usefulness of the hand Syringe or Sprayer (to be got from the hardware firms advertising in this JOURNAL) and how we ourselves used it successfully in the constant fight kept up against insect pests of various kinds. We have published regular numbers since of the necessity of fighting the fly plague without relaxation.

A saucerful of milk and water and a little formalin added with a little sugar sprinkled round the edge, to attract the flies, kills hundreds of flies in an hour. The results from this method have to be watched for as only a few flies actually die in the milk, the table may hold a few score, but on the floor there will be hundreds.

One teaspoonful of formalin to the saucerful of sweetened milk and water is enough but it should be renewed every day.

Prevention is better than cure. The virulent diarrhoea which prevails in the last months in some districts among children, is probably the same as the summer diarrhoea which kills young children by the hundreds in the big cities of great Britain; and the cause, or one cause, is supposed to be the housefly which carries infection. Whether or not the common fly can and does carry infection of all sorts is hardly open to question; it haunts the most filthy spots, feeds on garbage and excretions and seeks change and refreshment by a trip to our milk and sugar and jam. So our readers should not shrug their shoulders and say it does not concern them, but make some individual effort to get rid of house flies. The formalin can be got from our advertisers, E. D. Kinkead & Co.

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WOODASHES.—Those who keep stock have often found the necessity of giving their animals a "Condition Powder." Such a powder usually contain what are called stomachics, that is drugs which are simple vegetable product is like ginger, pepper, or some form of what are virulent poisons, but which used in very small quantities exercise a beneficial effect on the whole nervous system, like arsenic and strychnine; or compounds of many medicinal ingredients all calculated to secure specific effects on animals.

Trees need Condition powders too and every one has the best of all at hand and that is Woodashes. Bone meal is often fed to animals in small quantities because naturally it is rich in phosphates or bone making material; so woodashes being derived from trees, are the best medicine that a tree can get. Save every ounce of your woodashes and apply to your trees, but do not heap them close to the trunk; dig them in the surface soil lightly, right out at the end of the branches where the feeding roots are.

It will also be found that plain woodashes given to pigs in their food, exercise a most beneficial effect.

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WAR GIFTS.—The Spalding Branch contributed 50 boxes of Oranges and Grape Fruit, and into each of the boxes put a note asking whoever got the fruit to acknowledge it. Mr. W. Hyde Macaulay, the President of the Branch, has received several acknowledgments with thanks for the fruit and stating that the fruit was opened in good condition.

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PESTS.

RATS.—In this JOURNAL we have published a good many articles on rats telling of the loss they caused us in £ s. d., the danger they were to our well-being generally, and to be practical gave methods to get rid of them. And we wrote from practical experience as it has been our misfortune to have had to tackle badly infested places three times.

Periodically there are scares of various kinds, a hurry and a flurry over something, which lasts a month, and this has been the case in the battle with rats. Some few persons indeed keep up the fight against these pests year in and year out, especially estate proprietors where *material damage is done* by these pests, especially to sugar and cane and cocoa. But the vast majority do nothing at all; and even all that is being said and written now about the menace rats are to public health will not awaken many from their lethargy and get them to make some effort to do their part. Yet the efforts of a few are set at naught if all their neighbours do nothing. There should be no breeding places of rats allowed. Efforts should never be relaxed. Whenever there is a fresh scare of plague there is a sudden effort made by the civil authorities and others to get rid of rats; after the scare is over there is again little concern. But the way to get rid of these pests is for everybody, or if that cannot be looked for, all sensible people, to keep up the fight against rats, using various kinds of poisons and different kinds of traps and a variety of baits, taking care in the setting; training dogs and rats to be ratlers, &c. We like to be practical and when we wrote before about various means for getting rid of rats, correspondents immediately asked us to send them a safe and effective exterminator and this we have been doing. *It has been so successful that we continue stocking it.* There may be many as good, may be some even better, but we do not know of any; at any rate, E.X.O. has been found fairly effective.

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WAR GIFTS.

We published in December and in March JOURNALS, lists of the War Gifts we had sent in the shape of fruit, preserves, etc., together with some acknowledgements we had received from the various Military Hospitals throughout the United Kingdom.

The organizing and collecting of these War Gifts involves a good deal of labour, which, however, is cheerfully given. All the fruit, etc., is, of course, given free of charge, but the shocks and wrapping paper for the Oranges and Grape Fruit are paid for out of the Central War Fund. His Excellency the Governor has authorized supplies of War Gifts to be kept up continually, until further notice, and the Board of Management of this Society has given permission to the Secretary before, to organize these.

As will be seen in another paragraph of this JOURNAL we are shipping some mid-year oranges, but not many of these are available now. We shall be glad to hear from any districts where there is likely to be any good fruit coming on in June. We are also able to ship a considerable quantity of Preserves, principally Guava Jelly, but we wish more.

As will be seen from the acknowledgements below a good proportion of the last shipment went to the Fleet. It is very gratifying to see that, as a whole, the fruit arrived in good condition, though it was all carried on the decks of the steamers.

H.M.S. "Iron Duke".—

I am desired by Admiral Sir John Jellicoe to ask you to be good enough to convey to the West India Committee the very warm thanks of the officers and men of the Grand Fleet for their kindness in procuring 175 cases of grape fruit and oranges and 8 cases of various West Indian preserves for the Fleet.

The fruit is being distributed and will be very greatly appreciated by officers and men.

(Sgd.) V. H. T. WEEKES,
Secretary to the Commander-in-Chief.

H.M.S. "Ancon".—

I write to thank you on behalf of the officers and ship's company, of this ship, for the very welcome present of Jamaica oranges, just received. Gifts of this nature are particularly suitable at this time and are thoroughly appreciated.

(Sgd.) C. E. EVAN THOMAS, Lieut. R.N.

H.M.S. "Hecla," Fourth Destroyer Flotilla.—

I beg to acknowledge the receipt of fruit for which I thank you on behalf of H.M.S. "Hecla" and the destroyers of the Fourth Flotilla.

(Sgd.) H. W. PARKER, Captain.

H.M.S. "St. George".—

I am directed by the Admiral of Patrols to thank you for your very kind gifts to the men of H.M. Ships, destroyers and torpedo boats under his command, which have been very much appreciated by the recipients.

(Sgd.) W. DAVES,
Fleet Paymaster.

Shotley Barracks, Harwich.—

On behalf of the Senior Naval Officer I beg to thank you for the Grape Fruit and Oranges received here for the officers and men in the Fleet. I assure you it is very much appreciated.

(Sgd.) R. M. HARCOURT.

Royal Naval Hospital, South Queensferry.—

I beg to inform you that I received 3 boxes of Oranges and 1 box of Grape Fruit in good condition, which you kindly forwarded. I shall be glad if you express my thanks to the Jamaica Agricultural Society for their very nice gift, which will be greatly appreciated by the patients.

(Sgd.) V. WAGET JONES, Fleet Surgeon.

Admiral's Office, Rosyth.—

I am directed by the Admiral Commanding, Coast of Scotland, to acknowledge with many thanks the receipt of the following for distribution to the men of the Fleet which will be much appreciated:

46 packages of fruit from the West India Committee.

These were distributed among the torpedo Boats and Destroyers attached to Grand Fleet.

(Sgd.) L. G. TIPPINGE, Captain.

H.M.S. "Fearless".—

A consignment of grape fruit and oranges has been received by me from the Admiral Commanding, Rosyth, for distribution to the officers and men of the First Destroyer Flotilla.

The officers and men of this Flotilla have experienced a large amount of sea time since the war commenced—mostly under unfavourable weather conditions—and a not too luxurious diet, and I can assure you I am only expressing the feelings of all of us when I tell you how very much your delightful gift was appreciated.

I should also like to convey to you personally our grateful thanks for the time and trouble which we know you must have expended in collecting and forwarding such a generous consignment.

(Sgd.) N. F. BLUNT,
Captain (D), First Flotilla.

H.M. Naval Base, Great Yarmouth.—

I beg to acknowledge the receipt of your letter dated 5th March in which you inform me that the gift of fruit was sent by the Jamaica Agricultural Society.

Will you be good enough to convey to these gentlemen my thanks on behalf of the crews of H.M. ships attached to this base, and assure them that their gift was very much appreciated by all hands.

(Sgd.) H. C. SNERBROOKE,
Commander,
Senior Naval Officer.

Naval Base, Lowestoft.—

I have received 5 cases of Grape Fruit and Oranges, for distribution, at this Base, and have been informed by the Secretary of the Vegetable Products Committee that the Jamaica Agricultural Society has been good enough to send these cases.

I shall be much obliged if you will thank all concerned and assure them that their gifts will be much appreciated by the officers and men in mine-sweeping vessels attached to this base.

(Sgd.) A. ALLISON,
Captain-in-Charge.

The Red Cross Hospital, The Green, Richmond.—

I am directed by the Commandant to thank you most gratefully for your kind gift of oranges and grape fruit to this hospital. The patients will greatly appreciate the fruit and will be very interested to hear that they come as a patriotic gift from the Jamaica Agricultural Society to the wounded soldiers.

(Sgd.) E. F. CHRISTIE,
Quartermaster, Surrey 4.

Clifton House Military Hospital, Shirley, Southampton.—

The most beautiful oranges arrived this morning in excellent condition and have already been very much appreciated by the Belgian wounded. With renewed thanks.

(Sgd.) M. BAXTER,
Matron.

Ottermead Hospital, Ottersham, Chertsey.—

Very many thanks for the lovely big box of oranges just received from you on behalf of the Jamaica Agricultural Society.

They are simply delicious and are being much enjoyed by all our patients who are most grateful for the kind thought which prompted the gift and which has, I am sure, added to their enjoyment of the fruit.

Personally, I had no idea before that Jamaica Oranges were so sweet and juicy and altogether satisfactory.

(Sgd.) Ida H. WOOD,
For the Matron.

The Grange Hospital, Red Cross, Chertsey.—

Please convey to the Jamaica Agricultural Society the warm thanks of the patients in this Hospital, and of myself, for the generous gift of oranges which has just reached us. I cannot say how much we all appreciate the treat they have provided for us, or how deeply we feel their thought and consideration for the soldiers of England.

Such thoughts help us to feel our brotherhood all over the world and to assure us that the country which is mother to us all cannot fail.

(Sgd.) DIANA M. H. RAIKES,
In charge of the Grange Hospital.

Coldhayes Relief Hospital, East Liss, Hampshire.—

Your magnificent present of fruit has just arrived, and I have again to thank you most heartily for so kindly remembering us.

The soldiers are thoroughly enjoying the fruit, and we are all very grateful to the Jamaica Agricultural Society for their generosity.

(Sgd.) M. HARRISON,
Sister-in-Charge.

"Rockwood," Red Cross Hospital, Torquay.—

Many thanks for the 2 boxes of oranges and grape fruit you have sent to the wounded in the Hospital.

Please convey to the Jamaica Agricultural Society our most grateful thanks for such a splendid gift. I took some round to the 38 patients this morning and they much enjoyed eating the fruit. The men much appreciate the kind thought.

We shall also acknowledge the gift in our weekly local paper.

(Sgd.) M. PITMAN.

Red Cross Hospital, The Barracks, Grantham.—

I wish to thank you most heartily for the beautiful case of oranges which was sent to our Hospital this week.

The fruit is most delicious and very much appreciated by our patients. Please thank the members of the Jamaica Agricultural Society most warmly for their kindness.

(Sgd.) MRS. V. M. PIM,
Commandant, No. 12 Lines.

Military Hospital, Lakenham, Norwich.—

I beg to acknowledge with many thanks the receipt of one box oranges and one box grape fruit for the patients in this Hospital. We have 100 wounded soldiers, all from the front. The last convoy arrived on the 11th (83). All the patients much appreciate the kind gift of fruit from the Jamaica Agricultural Society as well as the kind thought of the senders.

The Oranges were rather badly bruised but the grape fruit were in excellent condition. With very grateful thanks.

(Sgd.) E. A. DOWSE,
Matron, 2 A.T.M.N.S.

Bricket House Hospital, St. Albans, Hertfordshire.—

I beg to acknowledge the receipt of the case of oranges received on March 8th—the second one you have so kindly sent us from the Jamaica Agricultural Society—for our hospital of 40 beds.

Both cases of fruit have arrived in excellent condition and been very much enjoyed by the sick Territorials who much appreciate so acceptable a gift from our colonies, and are interested to know where the oranges come from.

(Sgd.) L. BOYCOTT.

The Red Cross Hospital, Foxlowe, Leek, Staffordshire.—

The officers of the Leek Red Cross Hospital wish me to thank you very much indeed, for the handsome present of the box of Oranges from the Jamaica Agricultural Society.

The fruit arrived quite safely and in good condition, and will be greatly appreciated by our patients, who are now suffering from frost-bite. Again thanking you.

(Sgd.) S. A. BREALEY,
Quartermaster, L.R.C.H.

Red Cross Hospital, Weinflect, Lincolnshire.—

We have just received a beautiful box of grape fruit; please give our most hearty thanks to the members of the Jamaica Agricultural Society for their very handsome gift which our soldiers and Belgians will very greatly appreciate.

The fruit was in splendid order, only 4 were had in the case. With many, many thanks.

(Sgd.) EDITH PELHAM TINDALL,
Matron.

"Wallacefield" Convalescent Home, Croydon, Surrey.—

Will you please convey to the Jamaica Agricultural Society our most grateful thanks for the splendid box of grape fruit. It arrived in perfect condition and is being greatly enjoyed by the 26 men who are here. To some of them the tasting of the first one was a new experience but they all expressed the hope it would not be the last.

(Sgd.) ETHEL LINK,
Hon. Sec.

Oatlands Convalescent Home, Erin Lodge, Oatlands Park.—

We beg to acknowledge the safe receipt of a box of magnificent grape fruit sent through you from the Jamaica Agricultural Society.

Please accept our grateful thanks for the kind gift which is much appreciated. Any further kind gifts will be most acceptable especially gifts of oranges.

(Sgd.) H. H. LARNOCK,
Hon. Sec.

Royal Mineral Water Hospital, Bath.—

I write to acknowledge the safe receipt of one box of oranges and one box of grape fruit in good condition.

Will you kindly convey to the Jamaica Agricultural Society the cordial thanks of the Committee and assure the donors that their gift is greatly appreciated by the 130 wounded and rheumatic soldiers now in this hospital?

(Sgd.) T. KIRLEY,
Registrar.

Hemlington Sanatorium, Marton S.O., Yorkshire.—

We have now received 5 cases of oranges which you have so kindly sent for the use of the wounded soldiers.

At the Present time we have many serious cases of pneumonia, and if you could just see how these poor fellows enjoy the juice of the oranges, it would do your heart good.

I am sure they are all most grateful to the Jamaica Agricultural Society and they all fully appreciate their kindness.

(Sgd.) ROSINE M. WEBB,
Matron.

Indian Gift House, North Road, Brighton.—

On behalf of the S.M.O. General Hospitals for Indian Troops, the Ladies' Committee acknowledges, with thanks, the receipt of the kind gift of 10 boxes of Grape fruit and 10 boxes of oranges from the Jamaica Agricultural Society.

(Sgd.) G. A. BRAILEY,
Hon. Sec.

The St. John Ambulance Association, Emergency War Committee, Southampton.—

Lady Lane and the members of the Emergency War Committee, St. John A. A., thank you most sincerely for forwarding the two boxes of fruit from the Jamaica Agricultural Society. Will you please convey our thanks to them? The fruit will be much appreciated by our wounded soldiers.

(Sgd.) M. ALLEN,
pro V. VINCENT,
Hon. Sec.

Voluntary Aid Hospital, St. George's Hall, Willesden, Middlesex.—

Please forward to the Jamaica Agricultural Society our sincerest thanks for the case of oranges sent on their behalf.

The fruit is far better quality than we could possibly get for the men ourselves, and is thoroughly enjoyed by them.

(Sgd.) GRACE STEVENS,
Secretary.

Kent Nursing Institution, Tunbridge Wells.—

I am truly thankful to the Jamaica Agricultural Society for sending one box of oranges and one box of grape fruit for our wounded soldiers. The fruit is very fine and arrived in excellent condition for which please accept our best thanks and gratitude. Naturally the men will enjoy it and appreciate your generosity.

(Sgd.) A. E. MOTTRAM,
Matron.

Red Cross Hospital, Ickleton, Great Chesterford, Essex.—

The box of oranges has just arrived and they look most delicious. I hope you will tell the Jamaica Agricultural Society how very kind we think it is of them to send such a handsome present to the wounded here. The men are so touched at their kind thought of them and do so enjoy the oranges.

(Sgd.) GERTRUDE BOWEN,
Commandant.

The Miller General Hospital, Greenwich Rd., London, S.E.—

I beg to acknowledge with grateful thanks the receipt of the two boxes of oranges and grape fruit which you have so very kindly sent for our sick and wounded from the Jamaica Agricultural Society. Will you please thank the Society very much and say how much the fruit is enjoyed and also how much their kind thought in sending it is appreciated.

(Sgd.) HARRY A. FOHE,
Secretary.

Beraz Hospital, Sandgate, Kent.—

Very many thanks for the boxes of oranges and limes which arrived safely to-day.

Please convey our thanks to the Jamaica Agricultural Society. I wish they could hear the nice things which the soldiers say about their kindness in sending us such a lovely present.

(Sgd.) CICELY DALE,
Commandant V.A.D. Kent 36.

Ped Cross V.A.D. Hospital, West Cults, Aberdeenshire.—

The Committee of the West Cults Hospital send most grateful thanks for the case of beautiful oranges which have just arrived. The Hospital is greatly indebted to the Jamaica Agricultural Society for their kind gift to the soldiers who greatly enjoy the fruit.

(Sgd.) E. M. TERRY,
Quartermaster.

Indian Military Depot, Milford-on-Sea, Hampshire.—

Reference to your No. 385 of 8th March. The 10 boxes of oranges and the 10 boxes of grapefruit have arrived safely.

The Indians very much appreciate the generous present of the Jamaica Agricultural Society. The fruit arrived in excellent condition.

I hope you will give the warmest thanks of the men and myself to the Jamaica Agricultural Society for this splendid gift.

(Sgd.) R. W. NELSON,
Lt.-Col.

BRANCH NOTES.

RURAL HILL (Portland).—Our annual general meeting was held in the School-room on the 30th March, 1915, when there were present Rev. S. I. Moodie, President, and Secretary; also nineteen other members. Arising out of minutes *re* Cocoa Competition for 1916; also a debate on 'An evening spent at the J.A.S. or an evening at the shop corner, which is more profitable?' After the discussion, the J.A.S. was carried. Five new members were enrolled: S. N. Mitchell, Teacher; E. Miller, Joseph Panton, Mrs. C. Berry, Mrs. Aug. Sutton, all Long Bay P.O. Received one shilling for grindstone, three shillings for subscription. Mr. Kelly gave us a song entitled *Far Away*; a recitation by Mr. Maxy Richards. All these are our efforts to make the meeting lively, so that members may attend, and bring in others beside, and we find that from the start of this debate our meetings are lively, well attended by both members and visitors. Mr. W. Goffe promised to speak on Tobacco at the next meeting; and our debate will be 'Home training for children and School training, which is more profitable?' Meeting adjourned for last Tuesday in April, 1915.
A. A. FLEETWOOD, Secretary.

CAMBRIDGE-WOODFORD (St. Andrew).—A meeting was held on the 1st April, in the schoolroom at Woodford. The President, Rev. S. T. A. Jones, A. P. Hanson, the Secretary, thirteen other members, and several visitors, were present. There was a lengthy discussion on the rapid spread of the "black blight" disease, and of the havoc it is doing to citrus trees. During the discussion a vial containing some of the insects, collected by the Secretary, was passed round to each person and examined. The Instructor spoke at length on the disease, advised that it be attended to at once, recommended the purchasing of a spraying pump, and gave instructions

on the compounding of the necessary emulsions. The members agreed to subscribe the required amount for a pump. The treasurer's account and the Secretary's annual report were presented and adopted. The election of officers for the ensuing year resulted as follows: Rev. S. T. A. Jones, President; Messrs. A. Linton, J.P., and R. Nelson, Vice-Presidents; Mr. R. A. Clare Secretary and Treasurer. At the request of the Instructor, Mrs. Claypole was admitted a member.

R. A. CLARE, Secretary.

CHRISTIANA (Manchester).—The first regular meeting of this Branch for the year 1915-16 was held in the Court House. Present: The Chairman, two Vice-Chairmen, Secretary and 18 other gentlemen, and Thos. Powell, Esq., Instructor. Report of "War Fund" was adopted. Correspondence from Parent Society was read and discussed. Two Authorized Persons were present and gave a report of work done. The President addressed the Members on the importance of manuring land for ginger cultivation. It was decided to offer three prizes of £5, £3, and £2 respectively for the best ginger grown under the conditions to be laid down. The Treasurer's report showed a balance of £2 3s. 10½d. to the credit of the Society. Discussion as to membership and interest in the Branch, took place. Several suggestions were made, but nothing definite arrived at. All the officers who served during the past year were re-elected. The Managing Committee with the addition of three new names remain the same. Meeting adjourned.

M. M. O'MEALLY, Secretary.

COOPER'S HILL (Portland).—The annual meeting was held on the first of April. There were present, Mr. D. S. Morris, first Vice-President, presiding; 13 members, the Secretary, and Mr. W. S. Broughton, visitor. The Secretary's report of the work of the Society during the past year was then presented and adopted. It showed satisfactory work being done. The Secretary was accorded a hearty vote of thanks. The Treasurer next presented his report. This was also adopted and the Treasurer received the thanks of members. The retiring Vice-President then gave an address. He congratulated the Society on its achievements and advised the members to aim at co-operating more for the common good of the Society and district. He was given a hearty vote of thanks. The election of officers next followed. This resulted as follows:—The Rev. S. M. Binger, President; Messrs. Joshua Micklejohn and D. S. Morris, 1st and 2nd Vice-Presidents respectively; Mr. J. B. King, Treasurer; Mr. J. E. Brooks, Secretary, and Messrs. Amson Bradshaw and R. J. Valentine, Assistant Secretaries. The date of the regular monthly meeting was changed from the 1st Thursday to the 4th Thursday of the month in order to have the President more often at the meetings. The Secretary suggested that the members form themselves into Co-operative Bodies of Workers to do work in their fields. A committee was formed to make plans for it and to report at the next meeting. Mr. King said he was no longer able to keep the goat. It was decided that the Secretary keep him. The meeting adjourned.

J. E. BROOKS, Secretary.

STURGE TOWN (St. Anns).—On April 3rd, the regular meeting was held in the Schoolroom, presided over by Mr. T. J. Lawrence. It was decided to procure a grindstone for the use of the members of the Society in June. The debate was left over till next month. Our Authorized Persons received their badges and handcuffs. Mr. Rennie paid us a surprise visit on the 31st March, and he did a little work in the School garden, which was shewn to the members on the 3rd April. It is gratifying to note how the members are making good use of their books. Many minor matters of local interest were discussed and then the meeting terminated with the National Anthem.

S. J. PALMER, Secretary.

ALBANY (St. Mary).—The regular monthly meeting was held at Friendship on the 7th April, with the Hon. R. P. Simmonds presiding. There were twenty-two members present. Reports were presented by three Authorized Persons one being absent. It was decided that at the next meeting a debate on the subject "Which is more payable, ten acres of coconuts or bananas, after cultivation for 20 years"? The Chairman next dealt with the question of the sale of cocoa pods indicating on what lines the subject should be viewed. The matter however having been discussed at previous meetings and resolutions sent up, the Secretary was asked to look up notes for the next meeting.

C. L. DRYDEN, Secretary.

WARSOP (Trelawny.)—Annual meeting of this Branch was held on the evening of the 7th April, 1915, at the usual place. Present: Rev. E. B. Heighington, Chairman, E. Arnett, Esq., the Secretary and over twenty other members. On the annual report being given by the Secretary, election of officers for the current year was proceeded with. Result:—The Chairman, the Secretary, and first V. P. re-elected; Mr. Chas. Wright was elected second V. P. The Instructor gave valuable hints by which the meetings of the Society can be made more interesting. Eighteen members paid in their dues.

U. K. WALTERS, Secretary.

MORAVIA (Manchester.)—The regular meeting was held on the 7th April, 1915. Members were urged to secure Eucalyptus plants. The resignation of the Rev. W. Z. Getfield as President and member of the Society in consequence of his removal to other fields of labour. Resolution embodying his invaluable service to the Society, the district and its surroundings. Election of officers for 1915:—President, Mr. L. R. Flemming; Vice-Presidents, Messrs. Geo. T. McNamee and Hezekiah Richards; Secretary and Treasurer, Mr. J. N. Simpson. Addresses by the Agricultural Instructor, Mr. Schleifer: (a) Attend the meetings of the Society regularly; (b) study the Agricultural JOURNALS; (c) watch for any signs of diseases especially among bananas and report to the proper authority; (d) grow cocoa; (e) how to treat choked animals. Vote of thanks and the National Anthem terminated the meeting.

J. N. SIMPSON, Secretary.

MARLBOROUGH (St. Mary.)—The monthly meeting was held on Thursday, 8th April, at 5 p.m. There were present: The President, 2 Vice-Presidents, the Secretary, and 14 other members. Read letter from Parent Society dealing with the Produce Protection Law, the publishing of Branch Notes, and the promptness of taking JOURNALS from the Post Office. After some discussion the following were agreed to:—(1) That the buying of cocoa in pods be stopped entirely, as the buying of green cocoapods is very common. (2) That the Secretary send only concise reports of meetings to the General Secretary, in order to ensure their publication. (3) That there being no serious neglect on the part of members of the Branch in taking their JOURNALS from the P.O., the General Secretary be so informed. Messrs. Pedley and McFarlane gave reports of their work as Authorized Persons for the previous month. The Secretary promised to give a paper on Pig Rearing at the next meeting.

R. SAML FINLAYSON, Secretary.

COMFORT HALL (Manchester.)—On the 8th instant, this Branch had its quarterly meeting. There were present: The President, Thos. J. Powell (Instructor), ten members, the Secretary, and Messrs. Hibbert and Prayag among the visitors. Mr. French became a member, and Mr. T. A. Morris of Wear School, was nominated and elected a member. The Secretary read the annual report which showed the Society's work for the year under review to have progressed. Its membership stands at 54. All its regular meetings fairly attended, and the lectures and discussions have always proved beneficial. Though more could have been accomplished yet the members felt that the year just closed has recorded more to the good of the Branch than any other past year. The next business was the election of officers, and all the outgoing officers were re-elected. Mr. R. A. Munroe was re-elected Secretary and also Treasurer. The Instructor gave a very instructive lecture on the cultivation of cocoa. He dealt with situation, soil, planting out and after cultivation. He gave it as his opinion that it would be a profitable crop to grow in the district and in order to encourage a start he would write to the Montpellier Nursing to find out if he could get seedlings to distribute to the members. Notices were given that at next meeting the Branch should consider some ways and bring to effect the suggestions in the paper on Thrift by Mr. Jacobs. *Re* the suggested local Show at the next meeting the committee will begin to make arrangements as to what should be done and how. Reports were asked for from the Authorized Persons of the Branch but the persons were not present and neither sent in any report. It was agreed on that in future these persons must either be present to report what they have done or send a report in writing to the Secretary.

A. A. MUNROE, Secretary.

MALDON (St. James.)—At the annual meeting held 9th April, there were present: Rev. R. G. Chambers (in the Chair), eleven other members, the Secretary and one visitor. The yearly report was read and adopted. A vote of thanks having been accorded the recording Secretary for his valuable services to the Society, the items on the report were commented on. The smallness of attendance at monthly meetings was very prominent; three meetings fell through, and the average attendance was 31 per cent. This was thought to be consequent on the apparently inconsistent arrangements for meetings. The explanation given by the President, however, showed that the fault was somewhat due to negligence of the corresponding Secretary. Members would be informed only on their way to meetings, that there was none. One member even testified how he came and sat down to an officer's meeting. It is to be hoped that the office of corresponding Secretary will prove itself more useful in the future. The Treasurer's report was next given and adopted. Then came the election of officers for the ensuing year: Rev. R. G. Chambers, President; Mr. J. Morrison, 1st. Vice-President; Mr. A. Jarrett, 2nd Vice-President; Mr. E. W. Clisholm, Recording Secretary, and Mr. S. C. Reid, Corresponding Secretary. The monthly meeting was fixed for the 1st Friday. The distribution of JOURNALS caused for much discussion, and it was agreed that a small amount be provided for each, and that the teachers of this School around be asked to circulate among the scholars. Mr. W. A. Wright, an authorized person, gave his report. As the result of a discussion on roads Nos. 7, 11 and 28, the President decided to send a printed letter to the Superintendent. Meeting was adjourned until the 7th May.

J. T. MORRISON, Secretary.

DARLINGTON (Westmoreland.)—The monthly meeting was held in the St. John's Schoolroom on Friday, 9th April, 1915. Present: Messrs. J. W. Mennell, R. C. Somerville (Instructor) six members, one visitor, and the Secretary. The President pointed out that there was a misunderstanding in the advertisement of the lecture of the microbiologist at Savanna-la-Mar, which was really on Coconuts and not on Bananas. The Instructor said the meeting was largely attended by representative planters and was very interesting. There was a discussion on rat-killing, and Mr. Goodin of New Roads said that he was glad to hear the desire to exterminate rats made here, as they were trying to do the same at New Road. The Instructor moved the following resolution which was carried: "That hearing with much pleasure that the New Road Branch was starting a rat killing campaign using E.X.O. Be it resolved: That this Branch start a vigorous similar campaign using Blue paste in the manner described by Mr. Percy Brown, and that reports from both branches be exchanged on the results." Mr. Somerville said that he found on investigation that there were a few JOURNALS in connection with this Branch lying at the Post Office, but he was surprised to find that they belonged to three dead members; he would ask the Secretary to report the death of members or their removal from the district, to the General Secretary. In reply to the above, the Secretary said respecting the JOURNALS of the three dead members their relatives should claim their JOURNALS till the end of the financial year for they have been paid for. Mr. Goodin said he thought the JOURNALS should be published only half-yearly. He gave reasons for this. Among them he said that it was a waste of public money. He knew that he would lose his position—the Instructors and the General Secretary were financially interested. Mr. Somerville said such an utterance was very unworthy of a man of Mr. Goodin's intelligence. If he found that JOURNALS were kept in his district P.O., it pointed not to the worthlessness of the JOURNAL, but to the low standard of intelligence of the people in that Branch. The JOURNAL was becoming increasingly useful. It did not matter to him personally, if the JOURNAL was not published, but he would be very sorry for the people, as he was convinced in his own mind that the JOURNAL was doing more in disseminating agricultural knowledge in all its Branches than any other channel of information. The President in summing up said, he should be very sorry to see the publication of the JOURNAL curtailed. On being put to the meeting, Mr. Goodin's motion was lost. Addresses. As promised at last meeting. Mr. McKenzie said he was proud to be a member of the Society. He was very prejudiced at first to the Branch; however, like many others, he did not understand it, but the present Instructor had persuaded him;

had even proposed him behind his back and now he was very grateful. Since his joining he had been greatly benefitted. He brought a very large yam and a parcel of Irish potatoes. He had produced these by using manure, and he now told the meeting that he followed the lessons he had learnt here. He would ever attend the meetings and he for one will do all he can to follow what was taught there. He would ask every able bodied landowner to become members and active members of the Society. Mr. J. Williams gave some of his experiences in planting breadfruits. He had planted 100 plants and only caught 15. Mr. Brown said he found the soil responsible. The Instructor then gave a lecture on the planting of breadfruit. He spoke very interestingly in circumposing. Mr. Gooding moved a vote of thanks to Mr. McKenzie for his address. Meeting adjourned to Friday, 14th May, at the St. John's Schoolroom, at 9 a.m.

J. H. HEADLEY, Secretary.

PORUS BRANCH (Manchester).—The above held its annual meeting in the Church of England Schoolroom on Monday, April 12th, 1915. Members present: S. A. Hendricks, Esq., (President), the Secretary, the Assistant Secretary and nine others. J. R. Ellis (Authorized Person) gave a report of his work done. It was moved and agreed that those Authorized Persons that were not present be written to, asking them to attend at the next meeting. The Secretary's annual report was read. "In reviewing the business of this Branch for the past financial year ending March 31st, 1915, I have to report that the membership was both increased to that of last year. Ten meetings were held at some of these meetings the attendance were not very encouraging, yet we should not be discouraged at this. At each of the meetings above, business of some practical nature was transacted, the financial position of the Branch for the year ending 1914-15 is good. Mr. Thomas Powell has given regular visits during the year, and at each visit gave very instructive lectures. This Society is greatly indebted for the invaluable services rendered by the President, S. A. Hendricks, Esq., J.P., M.P.B. He is always punctual and sincere in his efforts, and he takes great interest in the agricultural welfare of the district, and members should come forward and show their appreciation. Also the V.P., Rev. and Hon. W. B. Esson, M.L.C., Rev. J. N. Somerville, J.P., J. A. Ogilvie, Esq., J.P., should be congratulated for their interest shown from time to time. The members who have been making their appearance at the meetings are also to be congratulated for their untiring efforts, and I sincerely hope that this year will be more flourishing both in membership and attendance. The Treasurer also gave his report which was adopted and agreed to. Correspondence from Mr. John Barclay re the new financial year and Branch Notes were read. The enrollment of members for the year 1915-16 next took place. Officers to serve for 1915-16 were elected as follows:—S. A. Hendricks, Esq. (President); Vice-Presidents, Hon. and Rev. W. B. Esson, Rev. J. N. Somerville, J.P., J. A. Ogilvie, Esq., J.P. Secretary, A. S. Rose, Assistant Secretary, C. Rowland. A vote of thanks was moved to the officers for their past year's services. The President replied on behalf of the others. The President will give a lecture on 'Bean Culture' at the next meeting; he also promise to give a pint of Bean (English) for distribution to the members.

C. ROWLAND, Asst. Secretary.

SOUTHFIELD (St. Elizabeth).—The regular monthly meeting came off on the 16th April, 1915, and presided over by Rev. W. H. Cope. The Treasurer's report and the Annual Report were read and adopted. The Chairman impressed on the members to attend the meetings regularly. General election of Officers:—President, Rev. H. W. Cope; Vice-Presidents Rev. A. M. Smith and Messrs. L. C. Hibbert and L. D. Birns; Secretary and Treasurer, Mr. J. J. Miller. 14 new members were enrolled. Mr. H. W. Lynch was present and gave a very impressive address on Co-operation, and was accorded a hearty vote of thanks. The Chairman supported the address by referring to New Zealand which is being enriched by co-operation. The Instructor gave a short address encouraging the members to hopefulness. They should put forth greater efforts than usual in the way of cultivation so as to meet the hardships incidental with the war. Every member was asked to take an active part in the meetings. The meeting then adjourned after an enjoyable evening was spent.

J. J. MILLER, Secretary.

MT. REGALE (St. Mary).—The monthly meeting was held on the 16th April. The following were present:—Mr. C. A. Robinson, ten other members, and the Secretary. Read letter from Mr. Barclay giving a number of reasons why Mr. Cradwick could not attend meetings of the Branch since July, 1914; also letter from same source asking the opinion of the Branch re the purchasing of cocoa. This Branch is unanimous in opinion that the only solution of the problem is in the prohibition of the sale of cocoa pods. The sale of cocoa pods has reached a demoralizing point and should be stopped. The election of officers resulted in the re-election of all officers.
B. THOS. ATKINSON, Secretary.

BRANDON HILL (St. Mary).—At a meeting held in the Government Schoolroom on the 17th April, the following members were present:—Messrs. Alex. Allen, President; ten other members and the Secretary. The Secretary gave a general review of the work of the Society during the past year; there are forty-two members on the roll. Seven meetings of the branch were held and well attended. Many resolutions were passed, one of which was highly appreciated at the Half-Yearly General Meeting, held in January. A letter was read from the Parent Society reminding the Branch that the affiliation fee to the Parent Society is due. This, with the list of members, must be sent in at an early date.
CHAS. E. KELLY, Secretary.

LOWER ST. DAVID'S (St. Thomas).—On the 17th April, a special meeting was held at the usual place. There were present: Rev. J. A. Edwards, President; Authorized Persons, and sixteen members in all. This was the first meeting since the beginning of the financial year, and officers to serve for 1915 to 1916 were elected. The Secretary who has been serving the Branch since 1913, was re-elected unopposed, and Mr. R. A. Baker, was unanimously elected Assistant Secretary. Rev. J. A. Edwards was elected President; J. G. Barrant was elected Treasurer. It was unanimously agreed to, that Messrs. J. G. Barrant and A. T. Bogle, remain first and second Vice-Presidents, respectively, as hitherto. An interesting discussion arose with regard to a circular from General Secretary re sale of Cocoa (pods especially) under the existing "Produce Protection Law." The Secretary was directed to write to the General Secretary asking him to supply, if possible, a copy of the Law before the next meeting.
T. E. CLARKE, Secretary.

LETHF (St. James).—The regular monthly meeting was held in the Lethf Wesleyan Schoolroom on the 17th April. There were present: Messrs. A. A. Virtue, President, in the Chair; A. A. Gray, Secretary, and seventeen members, also J. Briscoe, Esq., (Instructor.) The President remarked on the paucity of attendance and impressed on the members the benefits to be derived by attending the meetings regularly and punctually. Communications from the Parent Society were read and discussed. The Instructor gave a very helpful and valuable address on the "Cultivation of Cocoa," defining the different varieties and recommending the planting of the Forastero, this being the most hardy and suitable for these parts. A lengthy discussion arose on the cultivation of the St. Vincent Yam, so as to enable the people to plant it throughout the year. Mr. C. Scott (snr.) gave a very interesting narrative of this yam based on matured experience. Several of the other members gave hints on the method of propagation. Several of the members complained of the heavy scum that canes B. 208, gave after being boiled to sugar: others gave satisfactory account of it. The differences of opinions were practically attributed to the soil. The President then thanked the Instructor for his helpful address and also the members for their presence. A very profitable and enjoyable meeting adjourned until May 15, at 3 p.m.
A. A. GRAY, Secretary.

CHESTERFIELD (St. Mary).—The usual monthly meeting was held on the evening of the 20th April, with Mr. C. G. Hunt in the Chair, seventeen members, and two visitors attending. A letter from the Parochial Board dealing with Road No. 50 of the Annotto Bay division was dealt with, and the Secretary was instructed to press for the improvements asked for on this road. Several matters of importance from the Parent Society were submitted, and in regards to the one dealing with Produce Protection Law the following decisions were arrived at. (a) License to remain as it is, so that any one who can satisfy all that the law requires, may secure

his license and buy. (b) Sellers of cocoa to be licensed, and can sell only on the production of his license, but B may sell A's cocoa, upon the production of A's license. Several members spoke urging the necessity of keeping cultivation free from weeds, and cocoa well pruned and cared for. Members were urged to pay their subscription, and the Secretary was instructed to pay the affiliation fee as soon as possible.

A. VIVIAN HAGUES, Secretary.

ST. GEORGE'S (Portland).—The meeting of the Saint George's Branch Agricultural Society, was held in the Court Room on Saturday, 20th March. Present: Rev. W. A. Thompson, Vice-President, presiding; six members, the President of Belvidere Sub-Branch, and the Assistant Secretary. Correspondence from the Secretary of the Parent Society re "authorized persons" was dealt with. The Assistant Secretary was requested to supply the information. Letter from Mr. R. A. Burgess re gift to war fund, was ordered "tabled." A letter from the Secretary of the Belvidere sub-branch, was read with a report for the quarter. The Secretary was instructed to acknowledge same and to express the society's appreciation of the very fine report. Mr. R. P. Dunn brought to the notice of the meeting the actions of a man who was posing as an "authorized person", and enquired if he was. His name was not in the list, and the Secretary was instructed to write the man that he must desist. The failure of the Fairy Hill sub-branch to conform to the by-laws of this Branch, in sending its report, was discussed. The Assistant Secretary was instructed to write the sub-branch on the matter. The Treasurer presented a bill of 15/6 for printing which was agreed to be paid. Attention was drawn to the next quarterly meeting of the Society to be held on the 17th instant; members were asked to interest themselves in it. Mr. Cradwick will be present, and deliver an address. The meeting then adjourned.

T. N. WYNTER, Secretary.

CLAREMONT (St. Ann).—The monthly meeting of the Claremont Agricultural Society was held on the 27th March. The Rev. A. W. Geddes, V.P., presided. The Secretary stated that every member was supplied with a prize list of the Show to be held on the 22nd April. The Secretary was instructed to ask those gentlemen who acted as Stewards of last year's show to do the same this year. The Secretary was instructed to get the permission of the Parochial Board for holding the Show in the Market Place. The Secretary was instructed to call a meeting of the Show Committee to arrange for the formal opening of the Show and to make final arrangements for same. The Secretary, for Mr. Hemming, moved that Rule No. 6 of the Society, be altered so that in future the Annual Meeting of the Society be held in April instead of in January. This was unanimously carried. Mr. Lewis Betton gave notice that at the next meeting of the Society he will move a resolution that the Agricultural Instructor use his influence in securing the manufacture of cleaner and better wet sugar by the small settlers. He stated that it is not infrequent for wet sugar to contain some amount of clay and sand. Mr. Edmund Knight is also down to move at the next meeting that the Society purchase out of its funds a Corn Mill for the use of the members residing in the Epworth district. The meeting then adjourned for the 4th Saturday in April.

T. P. ALEXANDER, Secretary.

WALDENSA (Trelawny).—The annual meeting was held on the 29th of April, when 13 members were present, the President in the Chair. The Annual Report was read. The meeting thanked the Secretary. Mr. Arnett (Instructor) for St. Ann, who was present, gave a few very kindly and encouraging remarks. At the election of officers to serve for the year, the Rev. A. G. Eccleston, Messrs. N. A. Livingstone, Thos. E. Chambers, and Wm. Gayle were returned, as President, Secretary, Vice-President and Treasurer respectively. Mr. Arnett was called upon to introduce Mr. Rennie to the meeting as Instructor for the district, and the latter in responding spoke in a few well chosen words. A hearty vote of thanks was accorded the officers for their past year of service, in which Mr. Arnett joined. Time for the next monthly meeting was fixed, and a large number of seasonable and useful hints on agricultural matters were given by Mr. Arnett, and the meeting was adjourned in the usual way.

N. A. LIVINGSTONE, Secretary.

WINDSOR FOREST (Portland).—The annual meeting was held at the Schoolroom on Monday, the 5th April, 1915, when they were present, John Panton, Esq., the President, in the Chair, 15 members and the Secretary. Matters arising from the minutes were discussed, after which the Secretary read his annual report, which was adopted. The keeper of tools also presented his report of the earning of tools for the months of February and March respectively; this report was also adopted. The finance, and matters arising from the minutes having gone through, the election of officers for the current year was next dealt with. It was proposed and agreed that all the officers be re-elected, also the Committee of Management. The affiliation fee for the current year was voted.

C. A. SMITH, Secretary.

GLENGOFF (St. Catherine).—The monthly meeting was held on April 6th. Present were: Alexander Carey, Esq., J.P., (President); A. P. Hanson Esq., (Instructor); the Secretary, 28 other members and two visitors. Messrs. A. Ricketts and C. Francis were received as new members. Correspondence from Mr. Barclay was read. Mr. Bryan exhibited the bamboo trap recommended by Mr. Barclay. The trap was passed over to Mr. Gobay for perfection and experiment, who will report results at next meeting. Mr. Hanson recommended that he E.X.O. or rat exterminator recommended by Mr. Barclay in the letter be procured and given to one member for use; or that Mr. Barclay be asked to supply a small amount and the same be given to Mr. Gobay who will experiment and report at next meeting. The Secretary also read other correspondence from Mr. Barclay, and arising out of an important discussion on same, the following resolution was carried unanimously:—*Resolved: "That we the members of the Glengoff Branch hereby pledge ourselves not only to place on the market none but the best cured agricultural products, but also to influence others to adopt the same principle."* The meeting was also in favour of responsible persons buying produce, but without irresponsible agents. The Treasurer's Report showed a balance in hand of £7 2s. 1½d.; also an increase of 9 members for the year. The Secretary's Report showed that on account of circumstances beyond our control, the Society's efforts to obtain the appointment of a D.M.O. for the district, and to hold an Agricultural Show in connection with the Branch were not consummate, but at last were successful in obtaining the appointment of a J.P. for the district. The Instructor's work was also highly appreciated, as well as the timely advices from the Secretary of the Parent Society, which have been of great benefit to this Branch. A vote of thanks to the President, the Vice-President, Treasurer and Secretary was moved and carried unanimously. The election of officers was then carried through as follows: President, Alexander Carey, Esq., J.P., re-elected; First V.P., Rev. F. M. Sherlock, re-elected; Second V.P., Rev. C. A. Spencer, elected; Secretary, T. Cote, Esq., re-elected; Assistant Secretary, Mr. J. R. Bryan, elected.; Reporting Secretary, Mr. J. R. Bryan, re-elected. A vote of thanks to Mr. Sherlock for the use of the room during the past year was moved and carried. Mr. Hanson then gave a very instructive lecture on "Trenching", for which he received the hearty thanks of the meeting. The meeting adjourned after singing the National Anthem. THOS. COOTE, Secretary.

MR. CHARLES (St. Andrew).—The Annual Meeting of this Branch was held on the 15th April, 1915. The President, Rev. C. B. Berry, Miss Berry, Mr. A. P. Hanson (Instructor), nine other members and the Secretary were present; Mr. Hubert Williams and Mr. Richard Hussey were elected new members. After thanking the officers for the work of the past year, they were all re-elected. The Instructor was thanked for his devotion to the work of the Society. He mentioned the fact that special attention is being given to the district, so the permanent crops should be improved. He spoke on the pruning and training of the cocoa trees, systematic and scientific cultivation. The authorized persons present reported work done. Several arrests have lately been made and some of the offenders punished. Correspondence from the General Secretary was read, and after thorough discussion, the meeting recommended that no Pod License be given for cocoa. This Society has always held that the license to buy pods is very injurious to the trade and facilitates theft.

W. R. SMELLIE, Secretary.