

Thesis for the Degree of Doctor of Philosophy in the
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Title. The British West Indies Sugar Industry
 1865 - 1900.

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PREFACE

The lengthy introductory survey to this thesis has been found necessary in order to lay a foundation from which to begin the thesis, there being no specialized work on the subject for the period, 1800 - 65.

The thesis is based chiefly on material obtained from Parliamentary Papers and Colonial Office correspondence with the West Indies Colonial Governments.

This thesis, which was intended to cover the period 1865 - 1900, has been carried up to the date of the abolition of bounties 1903, in order to round out the history of the bounty system's effect on the British West Indies sugar industry.

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A SURVEY

of

THE BRITISH WEST INDIES

SUGAR INDUSTRY

(1800 - 1865.)

The purpose of this general survey is to provide, as clearly as is possible, a picture of the sugar industry of the British West Indies during the period 1800 - 1865. It is intended to be preparatory to a thesis covering the ensuing period, 1865 - 1900.

If there is one evident fact that emerges from an examination into British West Indian history, during the early nineteenth century, it is that distress existed in the sugar industry long before the Emancipation of Slaves in 1834, and the passing of the Sugar Duties Act of 1846.

There appears to have been a progressive decline extending back into the eighteenth century, and cries of distress were heard, almost in conjunction with the establishment of the sugar industry in the islands, in the seventeenth century. ¹In endeavouring to establish the cause of this distress it is difficult to escape the conclusion that much of it arose from indebtedness acquired as a result of the slave system. Long says "the purchase of new negroes is the most chargeable article attending these estates and the true source of the distresses under which their owners suffer, for they involve themselves deeply in debt to make these inconsiderable purchases, and lose so many by disease, or other means in the seasoning that they become unable to make good their engagements and are plunged in law-suits and anxiety" ². There is evidence that this opinion was held by other persons, not only in the British West Indies but in foreign sugar colonies as well³.

The expense involved in acquiring the requisite slave stock for a sugar plantation was very great, - rated at one-third to one /

one-half the total value of the sugar property, - and constant replenishment was necessary. Toward the end of the eighteenth century the slave system became more and more expensive to maintain. The cost of food imports rose to double after the War of American Independence,¹ the provision grounds provided on the estates for the slaves were becoming exhausted through years of cultivation.² Thus the expense of feeding the slaves rose increasingly. Wastage of life was enormous and continued right up until the abolition of slavery.³ The rise in the price of sugar during the period 1808 - 1818⁴, added incentive to the planters to work their slaves more strenuously, and excessively long hours of work were reported⁵.

Thus, initial cost of slaves, their maintenance and loss by wastage, imposed a heavy burden upon the British West Indian planter who had also to meet charges imposed on his estate by marriage portions, annuities and interest on legacies and mortgages. The distress felt by the planter had reached such a stage by the end of the eighteenth century that petitions and complaints are manifested very frequently during the first three decades of the next century.⁶ Space permits of reference to only a small number of these. A parliamentary commission in 1792 reported that in the course of twenty years 177 estates in Jamaica had been sold for payment of debts and 92 more were in /

in the hands of creditors and that executions had been lodged in the provost-marshal's office for 22, 563,786¹1. In a report for 1804 it is stated that "every British merchant who holds securities in Jamaican estates is filing bills to foreclose" and that "all kinds of credit is at an end". A West Indian Committee reported in 1807, that since the year 1792 there had taken place "a progressive deterioration in the situation of the planters". A report of the House of Assembly in the same year declared that within the five or six previous years 65 estates had been abandoned in Jamaica and 32 estates sold under decrees of Chancery and that there weresome 115 more "which suite^s were pending and many other bills preparing. Moreover that "the sugar estates lately brought to sale and now in Chancery in this island and in England amount^t about one-fourth of the whole number in the colony"². In 1832 Mr. Huskisson was remarking in Parliament on "the deplorable distressed state of the West Indian planters".³

The above cries of distress were voiced at a time when great numbers of slaves were being introduced into the islands (up to 1807) and it was during these years that the British West Indian sugar industry received a number of boons. In 1791 a slave rebellion in St. Domingo had wiped out the sugar industry there. Prior to this annihilation of her sugar producing power /

power, St. Domingo had exported annually a volume of sugar equivalent to that of all the British West Indies combined.¹ The withdrawal of this great amount from the sugar market created such a demand for sugar, clayed or otherwise, that the British West Indies found it more beneficial to ship sugar in its raw form rather than clay it as they hitherto done. The destruction of the St. Domingo sugar supply raised sugar to a famine price.² In Jamaica estates were planted in places and on soils which could only pay under a system of protection or during a period of very high prices. These estates were the first to collapse on the break-up of the slave trade and during the later difficulties met with in the nineteenth century.³

The introduction of the Bourbon or Otoheite cane at the end of the eighteenth century⁴ also proved a blessing to the sugar industry. The advantages of this cane from the Pacific were soon apparent. Introduced into Jamaica in 1799 the Otoheite cane had raised production to 150,352 hogsheads in 1805, the highest it had ever been and indicated the zenith of Jamaica's sugar industry.⁵

Another boon occurred in 1807 when the prohibition of spirits in England made from corn or grain created an increased demand for rum.* In 1825 there were adjustments favourable to commercial prosperity. British West Indies ports were thrown open /

* Such a prohibition was not unprecedented - See Pares, R. *Wages and Trade* op. cit. pp. 484-5.

open to foreign ships and duties on West Indian produce in a few instances were decreased.

Sugar prices averaged the highest on record between the years 1808¹ - 1818⁴ but from 1818⁴ on a progressive drop was recorded.¹ The acquisition of British Guiana and Trinidad, the enhanced production of Mauritius² caused expansion that contributed to a severe fall in the price of sugar in England - from 9s. 10d. in 1815 to 47s. 8d. in 1831.³ The price fall plus the forecast of abolition of slavery, a hurricane which devastated the Leewards and Barbados in 1831, and a destructive slave uprising in Jamaica in 1831 - 2, brought matters to the stage where a Select Committee was appointed to inquire into and devise remedies for the plight of the Sugar Colonies. The Report of the Commission was to the effect that over-production was the cause of depression. The British West Indies with this greatly enhanced production, resulting from the acquisition of British Guiana and Trinidad, produced more than the United Kingdom consumed. The resulting overflow went to Europe, where, meeting the competition of foreign sugar, a price decline set in.⁴ The Report also stated that difficulties arose from monopolies, to which the British West Indian planter was subjected to - especially in respect to the prohibition imposed on their refining their own sugar.* The result of this prohibition /

* A prohibition in the form of heavy duties on refined sugar entering the United Kingdom.

prohibition was an amazing waste in bringing over muscovado sugar which was of benefit neither to the United Kingdom nor to the West Indies.¹

The British West Indies derived little benefit from the Report of 1831 - 2. Its few recommendations were not implemented by the British Government and its chief value was in the information obtained respecting the financial relationship that existed between the planter and the consignee merchant in England.

Sugar planters in the West Indies almost always appeared to be short of capital, although their chief desire was to accumulate sufficient capital to enable them to retire and live at home on a competency.² To obtain this capital it was essential that the planter keep his estate working and, if possible, increase cultivation. This he was able to do only by continually obtaining advances from a lender, in his case, a mercantile correspondent at home. Briefly, it may be said that most of the inconvenience and frustration that the planter was subjected to arose naturally from his trading on borrowed capital.

The Sugar planter would usually establish a connection with a merchant in London, Bristol, Liverpool or Glasgow, who undertook the entire charge of receiving and realizing the consignments /

signments of sugar and furnishing supplies. The consignee would grant the planter an advance of money securing that advance by a mortgage on the sugar estate. In addition to the interest at six per cent on the mortgage the merchant also received a commission of $2\frac{1}{2}\%$ on the amount of sugar sold (duty advanced included) and on plantation stores sent out, along with $\frac{1}{2}\%$ on all insurance effected.

The interests of the planter and merchant did seem to be mutually identified. If the planter became embarrassed, the merchant did not escape embarrassment. If prices fell and the planter's advance was not covered by a sufficient consignment, the merchant would equally be in difficulty in that usually his business consisted of multiple transactions and the plight of one planter was usually the plight of other planters. The capital of the merchant, unless it were very large, might be absorbed and placed beyond his control. The mortgages were of value to the merchant only in an ultimate sense; they served as an instrument to bring the planter's sugar into the hands of the merchant and they returned a good interest as long as the estate was in active cultivation. But to foreclose and to take possession of an estate was often a hazardous course.¹

The Report of 1831 - 2² failed to produce evidence whereby the merchant could be accused of dishonest practice. The planters/

planter's freedom of choice was restricted and higher charges were paid for different facilities, as a result of his connection with the merchant, but it is difficult to believe that these could have been avoided by a planter working on borrowed capital no matter from what source that capital were obtained.

The evidence of the Report showed that there were advantages accruing to the planter as a result of his connection with the merchant. Planters who were not tied to a consignee merchant stated that shipping facilities provided by the consignee were far superior to those of a "seeking vessel". The consignee's ships were especially constructed for the sugar trade, and ran on a schedule that suited the planter's time-table. Plantation stores were needed at the end of December or early January when crop time commenced. Sugar, if not shipped, quickly lost weight once it was stored in hogsheads. The consignee merchant if he did not have his own ships usually chartered them and was responsible for payment of demurrage if loading was not completed within the specified time¹. Incomplete loading and a short cargo meant that the charterer had to pay on "dead freight"². At the home port the charterer had to ensure quick unloading. True, freight charges levied by the consignee on the planter's sugar ^{etc} was higher than those charged by the "seeking vessel" but the planter had his coals and freight brought out free of freight charge. Ship-owners /

owners of seeking vessels stated that they could afford to carry sugar at a cheaper rate than the consignee's vessel only if they had the advantage of freight on cargo outwards.¹

The consignee merchant did not look to ship-owning as the profitable part of his business, although it was an essential part if he were to have the planter's sugar channelled to him when he wanted it. For the profit the merchant hoped to make, and did, he depended on his commission for selling and buying and on the interest he received for his mortgages.

Although the recommendations of the Commission of 1831 - 2 were not acted upon and distress was still evidenced, the Abolition of Slavery in 1834 did not result in the complete collapse of the sugar industry as had been predicted.² A gradual decline had already existed and by 1834 the sugar exports of Jamaica had fallen to 84,756 hogsheads from the high figure of 150,352 hogsheads in 1805.³ The production of the other colonies had also declined but not so much and they were gradually to recover their position in the future, but Jamaica never did, not even in the twentieth century.⁴ For all the British West Indies, the period immediately following Emancipation was one of confused re-adjustment. The first problem was that of financing the wage bill. There had always been a shortage of cash in the West Indies⁵ and now it was very much accentuated. Prior /

Prior to the period of apprenticeship, there had been no banking system, banking business being transacted through the medium of the large mercantile houses. This was now inadequate to meet the problem of finding specie for payment of wages. So great was the scarcity of silver in the first few years of Apprenticeship that planters paid premiums of 6 to 6½% for it, where required to pay wages.¹ This deficiency of specie in small units and the lack of capital on the part of the planter resulted in tardiness in paying wages and caused ill-feeling between planters and negroes.

The first attempts to establish a banking system were made during this period of Apprenticeship. The growth of Joint Stock banks in England led to the formation of the Colonial Bank in Kingston, Jamaica in 1836, and branches were established throughout the other islands.² The success of the Colonial Bank led to the founding of two local banks in Jamaica, the Jamaica Bank and the Planter's Bank. The absence of coinage continued, the newly found banks putting out a disproportionate paper circulation, until in 1839, the Jamaica Legislature passed laws restricting banking operations in the Colony, and gradually the change of having all notes redeemable in silver was effected.³ In 1836 Mr. Burge, Agent for Jamaica, applied to the British Government for a supply of small coin. The result was that 200,000l. of the /

the 500,000 l. granted to Jamaica at this time, was actually made up in small coinage and sent out on board a man of war.¹ In this manner, the shortage of cash for wages was gradually eased.

In many ways the planters misused their opportunity during Apprenticeship of establishing a sound basis for future relations with the labourers. There were many cases of undue and excessive valuations of apprentices to retard their purchasing their freedom,² and there were also excessive demands of work. It was reported that "Negroes now do 160 cane holes in the same time they used to dig 90 during slavery³". Many planters still gave those benefits to the negroes as was the custom during slavery - such as providing provision grounds, rations of rum, grinding the labourer's cane, and giving him medical care. Other planters, however, discontinued these benefits.⁴ The inability of the majority of resident planters to pay wages to the negro; the irritation of overseers whose power was gradually transferred to the new magistracy, and also opposition of the negro and reluctance to labour without assurance of prompt payment of wages, and a disposition to withhold his own time⁵ - all these factors operated to bring about a state of affairs where, as it was stated, all classes were at cross-purposes with each other.⁶

The end of Apprenticeship in 1838 saw practically a complete exodus /

exodus of negroes from the sugar estates in all the British West Indies, except Barbados. In some of the islands it was a gradual process as in Antigua, where, in 1846, Governor Higginson reported "the number of labourers withdrawing from estates continued to increase and up to 1846, 9,300 of them had withdrawn forming 70 settlements".¹ In Jamaica, the exodus was complete and rapid and brought industry to an impasse. Governor Barkly reporting for the parish of St. Thomas in Vale said that the canes rotted to the ground and, in the first year of freedom, scarce 1,000 hogsheads of sugar were realized.¹ The labourers took to the hills or squatted on abandoned estates where they depended for a livelihood on their provision grounds. By May, 1839, it was reported of Jamaica, that "all the best and most valuable and only efficient part of the population of the estates are gone or going - becoming a yeomanry."² In Trinidad, the disposition of the Creoles to settle away from the sugar estates was at length checked by a territorial ordinance under which people could obtain legal possession of Crown land only on paying moderate rates.³ In British Guiana, the movement took the form of an exodus into the interior and along the shores of the great rivers. This "internal haemorrhage" as it was termed was remarked on by Governor Barkly in his journey up the Demerara river; he reported that he saw the banks lined 50 or /

or 60 miles with huts and clearings.¹

An interesting feature of this withdrawal from the estates was the purchase of estates by groups of negroes, for substantial sums. In British Guiana estates were purchased by negroes who paid sums ranging from £11,000 to £16,000 and showed that the negro, in some cases, had not been lacking in thrift during Apprenticeship.²

The termination of Apprenticeship (1838), took the sugar proprietors by surprise. In Trinidad, planters claimed they had only four days notice that on August 1st, 1838, their apprentices would be absolutely free.³ The first reaction of the sugar planter was, in many cases, a muddled attempt to economize. In Jamaica, lack of labour resulted in the practice of hiring hands only in crop time - thus cleaning and cultivating were neglected.⁴ In British Guiana, stipendiary magistrates were instructed to attempt to induce labourers to consent to a reduction in wages.⁵ In St. Lucia, "canes were cut before they were ripe and the sugar shipped half-cured" as a result of lack of labour and improved processes.⁶ In many cases, planters attempted to seduce labour from each other and Lord Grey spoke of the effect this had in making the negro a disinterested labourer.⁷

The lack of labour and difficulty in adjustment at the end of Apprenticeship had a telling effect on sugar production. In comparing /

comparing the years 1839 - 42 with the years 1835 - 38, sugar production of Jamaica and Grenada declined by one half: British Guiana by three fifths: St. Vincent by two fifths and Trinidad by one fifth. Barbados alone maintained her production and, as well, in the latter period showed a sharp increase in production.¹ According to the argument advanced in the Report of 1831 - 2, this reduction in sugar production of the British West Indies should have given the planters a full monopoly of the British market and have maintained a high price by equating production to consumption, but such did not happen. Foreign sugar imports were increased despite the higher duty they were subject to. Mauritian sugar production more than trebled and East Indian sugar had been admitted on equal terms with West Indian sugar into Great Britain. By 1842, the average price of British West Indian sugar was 49s. cwt. compared to that of Brazil and Cuba which was 21 s. cwt.² The protection given to the British West Indian sugar industry was stated as a tax of £2,000,000 on Britain for the benefit of the sugar proprietor.³ Despite this protection, the sugar industry in the British West Indies was not in a healthy condition. The greater portion of estates in Jamaica were mortgaged at the time of Emancipation and in most of these cases, compensation money was awarded to the mortgages.⁴ Except in British Guiana very little of the compensation money received for the slaves was /

was used to buy labour-saving improvements and to improve the technique of sugar manufacture. Immediately after the payment of compensation money in Jamaica many of the encumbered estates ceased to be cultivated. A return presented by the Jamaican House of Assembly in 1843 showed that of 600 sugar plantations during the time of slavery, 300 were immediately dismantled and said that these 300 estates less in cultivation was an extinction of 300,000 l. annually in work and wages.¹ In the first four years after Emancipation, British Guiana reported a diminution of 57 estates from a total number of 308 at the 1st January, 1838.²

A Select Committee was appointed in 1842 to inquire into the commercial state of the British West Indies.³ The resolutions of this committee were to the effect that Emancipation had been productive of most gratifying results, but unhappily, with this betterment in the negroes' condition there had been a great diminution in the staple production of the West Indies, the principal cause of which was the difficulty in obtaining steady and continuous labour.⁴ The Committee urged immigration to compensate for this deficiency. The principle result of this Select Committee was the institution of immigration schemes to bring labourers into the various colonies.

Attempts to supplement the labour force took various forms in /

in the first half of the nineteenth century. Early efforts to bring in Europeans availed of little use. The climatic effect and the habits of living into which they quickly degenerated, destroyed any potential value that these Europeans might have had, as the nucleus of a dependable labour supply.¹ The Portuguese proved to be the most capable of these European immigrants, however, as soon as they acquired enough savings they invariably left the estates and took up shopkeeping and huckstering.² Attempts were also made to recruit free African labour from West Africa and Africans freed from captured slave ships.³ These immigrants never amounted to any substantial number and were soon enticed away from the estates by the Creoles.⁴

Attention was early turned to the Coolie of India and it was from here that by far the greatest number of immigrants were introduced into the British West Indies. More Coolies were introduced into British Guiana and Trinidad than into any of the other Colonies of the West Indies,⁵ and, generalizing, Coolie immigration was successful in these two Colonies, but with the exception of perhaps Antigua it was of negligible importance in resuscitating the sugar industry in the rest of the British West Indies, up to 1865. British Guiana and Trinidad had some difficulty at first in organizing their immigration system and much misery and ill-feeling prevailed but by 1848 difficulties in organization /

organization and medical care had been straightened out.¹ Coolies applying for renewed periods of indenture were very many in number, and the value of savings taken home by those who returned to India indicated that the system was working to the advantage of the Coolie at least in British Guiana and Trinidad².

In Jamaica, immigration never obtained to the extent that it did on British Guiana and Trinidad, although at the time of Emancipation it was evident that there would be a scarcity of labour since Jamaica had so much available land on which the Creole negro might squat and grow provisions and, as Carlyle said "where a black man by working about half an hour the day (such is the calculation) can supply himself by aid of sun and soil with as^{much} a pumpkin as will suffice, he is likely to be a little stiff to raise into hard work."³

Apart from the ease with which his wants could be satisfied by little effort, there were other reasons for the lack of inclination to work on the part of the Creole negro. Emancipation and Apprenticeship were followed by periods of confusement. No real basis of wages and hire had been determined and a confused mixture of tenancy and wages prevailed in most of the colonies except Barbados. It was the consensus of a number of informed persons that the unsatisfactory tenure of land and the absence of clear-cut agreements respecting wages was the cause of abandonment /

abandonment of estates by the Creoles.¹ In Barbados when^{re} labour was abundant, it was long maintained by planters in other colonies that the command of labour resulted from the pressure put on this labour by scarcity of land in Barbados. This was an incorrect opinion according to officials in Barbados. Satisfactory relations in Barbados arose from other causes - such as the just treatment accorded the labourers - tenancies were not at will as in most of the other Colonies, but were guaranteed, wages were paid weekly, not monthly or even at longer intervals as in some of the other islands, and the Barbadian planter also granted certain perquisites to the labourer - such as grinding his cane and boiling the juice, and, finally, there did exist a definite patriotism in Barbados which made the labourer loath to emigrate.² In Barbados, unlike the other colonies, negroes continued to occupy the same houses as they had during Slavery and Apprenticeship and provision grounds were conveniently situated to these - not as, for example, in Jamaica, where the negro complained of having to travel good distances from his place of labour to his provision grounds.³ Task work was largely resorted to in Barbados and the labourer could thus earn his 1 s. per task in much less time than by day wages as obtained largely in the other colonies.⁴

Coolies were first introduced into Jamaica during the period
1845 /

1845 - 47, by private recruiting agencies. Mismanagement followed and by 1851 out of 4,556 Coolies introduced, more than 3,000 were dead and the survivors unfitted for labour.¹ The charge incurred had been secured on the revenues of the sugar estates and, finally, was thrown on the island treasury. Jamaica managed without Indian immigration until 1859, and then recommenced in a small way. Apart from the fiasco of the early attempt at immigration, there were other causes of this small influx of immigrants into Jamaica. Opposition of coloured members in the Legislative Assembly and that of missionaries who were much vocal had much to do with the meagre supply of labour received from India.²

Inter-island immigration never tended to establish an equilibrium between supply and demand for labour as existed in the various colonies individually. Governor ^{Hicks}~~Henke~~, in a despatch of May 1st 1858, said "it is a remarkable fact that considerable emigration is constantly taking place from Colonies, which are importing immigrants, at a great expense to the public, to other colonies in their neighbourhood. The obvious cause is the difference in the rates of wages. There is a great demand for labourers in Grenada as in St. Vincent and yet a stream of emigration is constantly flowing from the former island to Trinidad."³ In addition to the inducement of higher wages in Trinidad, Grenadiani /

Grenadianⁱ tended towards Trinidad because that island was Roman Catholic in religion as was Grenada, and also because the wind blew from Grenada to Trinidad, making sea-navigation easier in that direction.¹ Creoles did emigrate in small numbers from the crowded island of Barbados and they were familiar as house-servants throughout the rest of the West Indies, but on the whole they were loath to leave their home island. Jamaican Creoles, with difficulty were induced to leave their native parishes to obtain work when it was more plentiful in other parishes, and were more so reluctant to leave the island. These factors which operated against a transference of labour within the colonies to where work was available was not taken into consideration by those who reiterated that there was no need for immigration and that the expense incurred thereby was solely for the benefit of the planter at a cost to the whole community.²

The cost of immigration was large³ and despite their having this immigration, the sugar planters still evinced distress which was received with a degree of distrust by opinion both in the Colonies and Great Britain. It was stated by planters (who appeared to think that indentured Coolie labour was the nearest return to slavery) that they would rather pay for Coolie immigration than use the money to purchase improved machinery⁴ and ~~and~~ statements as these did not win them support at a time when /

when they were being criticised for their backward technique.

Obsolescence of technique in sugar manufacture was one of the most common charges directed against the British West Indian sugar proprietor in the nineteenth century. Compared with a number of foreign sugar colonies, the technique was admittedly crude, especially when these other sugar regions were rapidly modernizing their methods towards the mid-century.¹ It is not true that the West Indian proprietor was unaware of, nor indifferent to the possibility of improved technique. Besides the very important factor of lack of necessary capital to institute technical improvements, there were other reasons for the sugar proprietor not wanting to install better appliances. The total sugar production of the British West Indies during the period 1800 - 1865, consisted almost entirely of muscovado² - that is raw sugar obtained by evaporating the sugar cane juice and draining off the molasses, no further refining process being involved. It did not pay the sugar proprietor of the British West Indies to refine his sugar because refined sugar was subject to a discriminating duty in Great Britain. Under the mercantile system refining in the Colonies was forbidden and improvements thereby discouraged.³ In 1850, Governor Barkly of British Guiana stated, "improvements in sugar boiling apparatus, there can be no doubt, are retarded as pointed out in several of these returns, by the discriminating duty at present levied in Great Britain upon sugar considered /

considered to be the equal to white ^cclayed" which really constitutes as stated a "penalty upon improved processes of manufacture."¹

The "claying" of sugar, (that is - partially refining sugar) had been largely carried on in the British West Indies up to the end of the eighteenth century. The annihilation of the St. Domingo sugar industry in 1791 had left such a demand for sugar in any form that it no longer paid to clay it.² The gradual depletion of the labour supply in the sugar industry made it sufficiently difficult to obtain labour for cutting, grinding and boiling, apart from carrying on the skilled process of claying. Evidence given in the Report of 1831 - 2 showed that at this date, already, the art of claying was lost and would not be easy to revive.³

The concentration on muscovado sugar was not a blind one. Crude though the muscovado process was, it had reached in its own right a high level of native skill based on empirical methods.⁴ Each sugar colony in the British West Indies had its own type of sugar, "strong" sugar from Jamaica, "oscillated" sugar from Barbados and Demerara "best grain".⁵ In addition to the inducement offered by the prevailing tariff policy of Great Britain, the importance of by-products tended to maintain the popularity of the muscovado process. Rum had always bulked large in the West Indian /

Indian sugar industry, being about the most profitable item the planter sold.¹ During the nineteenth century, the production of rum became of increasing importance to the planter.² Other sugar colonies were concentrating on improving and refining sugar and did not produce rum equal in quality to that obtained from the molasses from drained muscovado sugar. Jamaica rum maintained its high reputation long after sugar had dropped to third or fourth place in the island's list of exports. Rum from Jamaica was imported into Germany and used as a base to improve the quality of the poorer grade of rum made from sugar beet molasses.³ The importance of rum as a profitable export explains much of the obsolete methods of manufacturing and shipping. Delay in shipping sugar from the estate and difficulty of ships in obtaining full cargo^es was frequently due to time required for drainage of molasses.⁴ The huge cumbersome hogshead of the British West Indies was considered an ideal conveyer of sugar and yet permitted the drainage of molasses and obviated the danger of bursting that might result from fermentation. The hogshead was packed with raw sugar from the estate's sugar mill and then bundled on to trestles where the bulk of the molasses drained off, however the drainage continued on board ship and again at the port of landing.⁵

Cuba and Brazil were packing their drier sugar in chests, sometimes /

sometimes, in barrels and bags. Mauritius and the East Indies packed theirs in Jute bags.¹ These chests and bags stacked more compactly and allowed of greater cargo and were more remuneration² to the ship-owner than the cargo made up of hogsheads.² Ship-owners objected to the hogshead because of the greater weight carried for nothing, the freight charged being that on the sugar alone, while the tare amounted to upwards of ten per cent. The hogshead did provide a convenient container for coals on the outward journey,³ but its disadvantages seemed to outweigh the reasons offered for its being used. At the beginning of the nineteenth century, the average weight of a hogshead was approximately 14 to 15 cwt. but by 1862 this weight had increased to about 18 - 22 cwt. so to escape paying a higher tare duty.⁴ Inconsistency in computing the weight of hogsheads arose from the fact that this weight was computed according to the measurement of the true⁵, regardless of the quality of the sugar (which determined weight) and the possibility that hogsheads might be incompletely filled.⁵ The adherence to the use of the hogshead as a container for sugar, meant that the consignee merchant who provided his own ships would have them specially constructed for the sugar trade. They had to be stout ships of teak or oak to bear the weight of the heavy cargo,⁶ their beams must be placed just wide enough for two hogsheads between each pair /

pair; and a depth of hold was required of at least 19 feet.¹ No provision was usually made on ships carrying British West Indies sugar to catch the leakage of molasses; this drainage was mixed with bilge water and had to be pumped out on docking. The mixture of bilge water and molasses, if redeemable, was usually sold at a reduced price.² The loss by drainage from muscovado sugar was enormous and was generally estimated at anywhere between 5 to 12%. In cases where sugar was weighed accurately on scales in the West Indies, and again at port of landing the loss was known accurately and proved to be rarely less than 10 - 12%.³ Cuban ships were fitted with iron tanks to catch what leakage did arise, and this drainage was brought home without waste.⁴ By 1862, it was reported that ships carrying British West Indian sugar were also being fitted with tanks, but objections to these were raised on the grounds that they were conducive to fermentation.⁵

In addition to inefficiency in shipping methods, the crudeness of British West Indian sugar manufacture was a by-word. Admittedly for best results, the sugar manufacturing process does become highly complicated but in comparison to the level attained elsewhere the sugar planters were still carrying on the manufacture of sugar in 1842 in the same state "as a 100 years ago".⁶

Evidence given in the Reports of 1831 - 2, 1842 and 1847 - 8, and /

and annual returns given in Blue-books shows that machinery was but slowly being adopted in the British West Indies.¹ British Guiana alone could be said to have shown any spirit of enterprise. The steam engine had already been introduced thereby 1815, and the vacuum-pan process was in use in 1832 on Vreed-en-Hoop estate.² Mechanization continued in British Guiana throughout the century and figures of machine imports indicate that they were practically confined to this colony, that is as far as improved refining machinery was concerned. By 1861, the sugar production of British Guiana was about 55,000 tons yearly, of which 15,000 tons was vacuum-pan sugar, and it was claimed that but for the 16 s. duty on such sugar, the figure would have been much greater.³ Governor Barkly, in a despatch to Newcastle, Nov. 10th, 1852, stated " apparatus for carrying manufacture of sugar to a higher stage was adopted earlier here than in any tropical country. The vacuum-pan having been put up on several estates 20 years ago" ... "if there was one rate of duty charged on sugar without reference to its fineness;" Barkly believed that "the vacuum-pan would become universal on all estates making 500 hogsheads up".⁴ Estates in British Guiana were of a large size and could support the large expense involved in installing vacuum-pan equipment, and production of cane on these was sufficiently great to permit working the vacuum-pan process /

process to its proper capacity. British Guiana was considered the one colony where it was advantageous to import machinery and imports of this description during the period 1850 - 60 were double the amount of the preceding ten years.¹ However, the rest of the colonies imported a very small amount of sugar equipment. One estate in Cuba imported machinery greater in value than that imported by all the British West Indies in one year, British Guiana excepted.²

Throughout the British West Indies the plough was the one instrument that could have economized labour,³ although the Report of 1842 stated that on the whole that it was a rarity on the sugar plantations.⁴ Planters offered various objections to the use of the plough, many of which objections appear unsound and naive. Some planters claimed that the plough pulverized the soil too much, affording no hold to the roots of the cane.⁵ On hill soil it was said to be conducive to soil erosion; it was claimed by other planters that the plough exposed the soil to the injurious rays of the sun.⁶ The only authentic objection to its use came from British Guiana, where an elaborate drainage system was maintained and the drains prevented traversing with a plough, but in British Guiana an ingenious device was brought into use in lieu of the ordinary plough.⁷ The introduction of the spade was a slow process on the sugar estates and, like the plough /

plough, was not in use until the planters were absolutely forced by the want of labour to adopt it. Criticism that the negro could not use the spade did not take into account the fact that he wore no shoes and that to sink a spade into the clay soil required a driving thrust which could be given only by a man well-shod. As late as 1870, it was observed that labourers were driving the spades into the ground by the movement of their arms and shoulders and the muscle tension involved was remarked on.¹ The fork also was practically unknown in the first half of the nineteenth century and negroes were observed loading dung with their hands.²

The indifference towards improvement in implements extended in all activities and was expressed in lack of fencing; the use of proper carts with depressed axles which would have made loading and unloading easier, the use of wheelbarrows and efficient cutting tools.³ Bigelow in 1851 speaks of their not having even the ordinary axe in use.⁴ In North America the axe had been developed into a finely balanced, effective instrument for use in the lumbering industry. The axe would have much eased the task of cutting fuel on the sugar plantations, and cutting fuel was one of the most arduous forms of labour as carried out on the estates and this difficulty was one of the reasons offered in explaining the lack of steam power.⁵

The steam engine was early introduced into the British West Indies but never became widely used.¹ Difficulty in providing fuel was perhaps the chief obstacle to the use of the steam engine on the sugar estate apart from the initial expense of installing it. Wood was scarce in some of the islands and in Barbados was unobtainable. In Barbados, there was a scarcity of water for human consumption let alone for steam engines and salt water could not be used.² The windmills on which Barbados depended were fairly satisfactory. The Trade Winds blew steadily and if need be could be supplemented by animal power, but there were disadvantages, the windmills provided an irregular motion and a resulting incomplete extraction of cane juice, and were only satisfactory on high ground and on the windward side of the island.³

Steam engines were condemned by some proprietors on the grounds that their use would lessen the amount of manure available for fertilizer⁴ - this did not apply to British Guiana and Trinidad where rationing could be carried on for a number of years without renewing fertility. However, as in Barbados, the lack of fresh water in Trinidad operated against the use of the steam engine. Lack of mechanical skill and early experience with defective machinery did make planters chary of investing in steam power. Barbadian proprietors combined to hire one engineer to /

to service the steam engines on a number of estates.¹ Creole negroes could be trained as mechanics and it was a peculiarity, remarked on, that the Creole negro was much superior in this way than the Coolie.² Fuel difficulties were rarely solved. Coals, even when carried freight free, were expensive in the West Indies and it was stated that three or four times as much coal was required to raise steam on the sugar estates as was needed in Great Britain.³ Assurance of having fuel shipped when wanted was not always to be had and "A planter is sometimes disappointed with great expense in the labour of cutting wood. It costs treble the money to cut fuel even upon the planter's estate, it is so much labour".⁴

Investment in a steam engine usually involved further capital outlay because the whole sugar mill had to be speeded up, and field operations, carrying of cane, and taking away bagasse all must be increased in tempo. Steam power was most economical if a 24 hour day was in operation as in Cuba, otherwise it meant getting steam up rarely before 9 a.m. and letting fires die out by 5 p.m. Cuban mills were highly mechanized, steam power was raised by fuel cut by slaves and with their up-to-date equipment, Cuban mills were obtaining 75% extraction of cane juice compared to 35% in the British West Indies.⁵

Colonial legislatures were not indifferent to agricultural improvements /

improvements. The Jamaica Legislature had early attempted to encourage improvements and had granted financial assistance,¹ and British Guiana, by 1847, had hired an agricultural chemist, Doctor Shier, formerly of Aberdeen University.² Doctor Shier carried on research work in the sugar industry in the colony and then returned to England to supervise the construction of utensils suitable for the industry in British Guiana. A number of model ploughs were sent out and on a number of estates improved drainage was instituted. Covered drainage, which would have permitted the use of the plough, was adopted in a number of cases, but the necessary capital was great and deterred proprietors generally from putting it into effect. Planters in British Guiana were impatient of Doctor Shier's work and looked to quick results that he could not promise.³ In addition to impatience on the part of the proprietors, their present open drainage system had an advantage which made them reluctant to change. By open drains their estates had periodical floodings that provided a form of flood fallowing which renewed the fertility of the soil.⁴ By 1851, sugar proprietors in British Guiana were also utilising the great shell banks on the coast and forking the lime into the stiff clay soil⁵ - a procedure that Bryan Edwards had advocated some sixty years previous.⁶

During the period of Apprenticeship and the first few years
of /

of adjustment afterwards - approximately from 1834 to 1847 - 8, a great withdrawal of capital took place from the British West Indies. This withdrawal was the result of old families selling out, abandoning, or being forced to relinquish their West Indian assets because of overwhelming debts. A good number of merchant houses also liquidated their West Indian assets during this period. The process of withdrawal of capital was gradual and the movement of the old families had begun early. In 1812, a memorial from Jamaica planters stated that "the ruin of the original possessors had been completed."¹ By 1831 - 2, there were in St. Kitts "but three hereditary proprietors remaining"² because of doubt cast upon the security of West India property. Jamaica lost a large number of the original possessors and in British Guiana, by 1866, of the original Dutch planters only one hereditary proprietor remained.³

A new type of planter took the place of the old who withdrew from the estates. In many cases, this new planter was the former overseer, manager or attorney who had scraped together enough savings to place a down-payment on an estate, which had deteriorated in value - in some instances, by two-thirds.⁴ During the years of Apprenticeship it had been to the interest of these agents to depreciate these estates of which they were in charge and to buy them up at greatly reduced prices.⁵ A number of these
 new
 /planters /

planters did well, others, chiefly from lack of capital, were in no position to withstand the competition and trials that awaited in the coming years of the nineteenth century.

A Mr. Borthwick, representing the Chamber of Commerce, Kingston, Jamaica, (a body of resident planters and merchants) reported in 1847, "We are resident proprietors and all of us have, with one exception, purchased or leased our properties since Emancipation and parties who were victims of the 1846 Bill, were many who lately became proprietors".¹ Sir Henry Light in giving evidence in the Report of 1849, stated that when he arrived in British Guiana in 1838 men were buying up estates and paying very little down on them and he gave a list of such cases.² Governor Higginson of St. Kitts spoke of the disappearance of the old families and the increased influence of the class of attorneys.³

Prices were sufficiently high in the period of the early forties to enable these newly established planters to make a profit and the labour situation had begun to improve with the prospect of immigration. The blow came in 1846 when the Sugar Duties Act of 1846 removed prohibitory duties on refined sugar and abolished discriminatory duties against slave grown sugar. Reduction of duties, providing a preference to colonial sugar, was to take place until, in 1851, duties on foreign and colonial sugar /

sugar were to be equalized. The effect of the Sugar Duties Act on the West Indies was one of depression for the British sugar planter. The last report of stipendiary magistrates in Jamaica, for 1846 gave a prosperous picture,¹ but by 1848 a Select Committee was appointed to investigate the commercial distress prevailing in the Sugar and Coffee industry.

The Select Committee of 1847 - 8² was timely, in that it showed the effect of a severe commercial crisis that was occurring in England, on the West Indies, and also in that its Report, about a year after the Sugar Duties Act of 1846, produced evidence as to its effect on the sugar industry. Distress was definitely acute according to the evidence of witnesses and had worsened in the current year. One third of Jamaican planters were bankrupt, and purchasers could not be found at any price.³ Estates put up for auction in London brought only three or four persons in attendance.⁴ In Trinidad, a great many houses advertised their unwillingness to make advances to planters on their crops, being consigned to their correspondents in England.⁵

The difficulties of the sugar planter were greatly increased by the state of the money-market and the credit of their correspondents in England. The crisis within the Bank of England resulting from a railway boom and other causes in England led to a contraction of credit⁶ and at the same time the collapse of the West /

West Indies Bank, which had its headquarters in Barbados, and the collapse of the Planters Bank in Jamaica in 1847, caused the collapse of a number of big merchant houses. Between August, 1847, and August, 1848 thirteen West India Houses went into liquidation.¹ "In two years nearly all the Scotch and English houses were struck down."² The failure of these mercantile houses with their large interests in the West Indies had a ruinous effect on many sugar proprietors.³ In Barbados, the failure of the mercantile house of Barton, Irlam and Higginson which had extensive claims on planters caused great inconvenience in that these were now called for, and similar cases occurred in other sugar colonies.⁴

The over-all effect of the commercial crisis of 1847 was a tightening of capital advances to planters, and, remarking on this want of money and credit, Lt. Governor Darling of St. Vincent attributed it to the "extreme difficulty with which advances are obtained from those sources that were so long bounteous fountains of pecuniary supplies" and Darling urges that "estates must pass from the hands of merely nominal owners whose profits go to mortgagees and other creditors to those who possess capital" - in stating this, Darling was anticipating the West Indies Incumbered Estate Act.⁵

The passing of the Sugar Duties Act and the resulting depression /

pression in the British West Indies sugar industry appeared to justify the charge that the British sugar proprietor was "enervated by protection." Despite the depression that did obtain in the British West Indies at this period, importation of sugar from there into Great Britain increased from 2,842,555 cwt. in 1846 to 3,566,394 cwt. in 1852. The price of sugar in London in 1846 was - Havana, 24/8d.; West Indies, 35/3d.; and at the end of 1852 it was - Havana, 22/-; West Indies, 23/8d., showing that a gradual equalization had taken place, and if the tendency continued, British West Indian sugar might soon be cheaper than Cuban slave grown sugar.¹ The British West Indies cry that they could not compete with slave grown sugar was a frequent one in the first half of the nineteenth century but does not appear to be an authentic grievance. Earl Grey in 1852 drew attention to the fact that Cuban planters were so satisfied that free labour was cheaper that they were taking measures to introduce 8,000 Chinese free labourers.² It was distinctly stated by the British Commissary Judge at Havana Mr. Crawford in 1860 that the cost of a slave to his owner in Cuba was 8/10d. a day, whereas the sugar planter of the British West Indies paid a wage of from 1s. to 1/6d. per day and had no interest in providing food, clothing or medical care as was necessary for the Cuban planter to give to his slave.

Cuba's advantage resulted from other factors than that of having slave labour. Mr. Crawford in a despatch of February 21st 1848 stated that ratooning was carried on in Cuba for many years, not less than 15 or 20, and the land was then abandoned for a time.¹ The great Cuban estates were maintained by a system of prairie agriculture and Cuban productiveness resulted from the rich virgin soil on which sugar could be ratooned up to 50 years and with a very modest application of labour. The greater fertility of Cuba was expressed, in an average production of four hogsheads per acre to one per acre in Jamaica.² The advantage of ratooning on virgin land was brought home to the sugar planters of the older British sugar colonies at the beginning of the century when they expressed concern over bringing the virgin land of the newly acquired colonies of British Guiana and Trinidad into competition with the old.³

Besides This advantage of virgin land Cuba had other advantages. On Cuban estates ample wood for fuel was present and a command of slave labour with adequate American cutting tools. In the Report of 1831 - 2, it was stated that Cuba and Brazil either furnished their own lumber or, if they did import it, required much less than the British West Indies because of the less bulky containers required for their dry sugar.⁴ Cuban estates were of a comparatively recent origin and had not accumulated debts /

debts such as the British West Indian proprietor had been pushing ahead from year to year - Cuba had up-to-date machinery, much of it imported from Germany as early as 1831.¹ Sugar was carried to Europe at cheaper rates (3/6d. to 3/9d. cwt. in 1831), compared to that charged on sugar from the British West Indies to Great Britain (Consignee Merchants charged the sugar proprietor 5/- cwt. but in reality only paid 3/- cwt. to shipowner).² These advantages, as enumerated, were the determining factors in enabling Cuba to produce sugar more cheaply than the British West Indies, not solely the result of having slave labour. As has been shown, the British West Indies had practically overtaken Cuba in the matter of producing sugar at low prices and the threat from this quarter had been lessened chiefly as a result of economical management in Barbados and by improved methods in British Guiana and Trinidad. These three colonies largely accounted for the increased production of sugar from the British West Indies after the Sugar Duties Act of 1846.

The British West Indies purportedly enjoyed an advantage over East India sugar in the market of the United Kingdom up to 1835 as a result of the lower duty on West Indian sugar. The advantage enjoyed was not so great as appeared. Exports from Great Britain to the West Indian sugar colonies had fallen off considerably after the first decade of the nineteenth century³ as /

as a result of greater imports from North America by the West Indies; depression in the sugar trade and abolition of the slave trade. Outward bound ships to the West Indies were thus carrying incomplete cargoes and carrying ballast as a result of the decreased imports from Great Britain.¹ Carried as ballast, lime, bricks and even soot (used as manure) were being carried freight free - as evidenced in the Report of 1831 - 2.² Evidence of this feature of West Indian trade at this period is that stone mills were built largely of stone carried as ballast from Great Britain.³

In the case of the East Indies matters ~~marked~~^{were} marked in reverse. The volume of export trade from Great Britain to the East Indies was very large and steadily increasing⁴ while the tonnage of sugar carried on the homeward journey was proportionately small in relation to the tonnage of shipping involved. Thus, we find sugar frequently carried as ballast from the East Indies to Great Britain.⁵ In the British West Indies the carrying trade to Great Britain depended largely for its income on the freight paid on sugar carried to England. So much was it necessary to obtain a freight paying cargo home, that ship-owners frequently paid a premium to get sugar as a cargo.⁶

This feature of the flour trade to and from Great Britain which had tended to balance the advantages of the East and West Indies /

Indies in the United Kingdom sugar market prior to 1835, worked to the disadvantage of the West Indies after this date and added to their other difficulties.

The question of absenteeism of planters from their sugar estates in the West Indies was raised frequently in the evidence given in Select Committees and was quoted as one of the evils that lay behind the depression in the sugar industry in the period under review.

There had been absentee planters in the West Indies since the seventeenth century, the number had greatly increased in the eighteenth until, by the early nineteenth century, it could be said that a rough approximation would be about two-thirds of the sugar proprietors were absentees.¹

It is impossible to indict absentees as a body. Each case of absenteeism depended on the merit of the man himself, not whether he resided in the West Indies or in England. Governor Barkly in a despatch to Newcastle, May 26th, 1854, remarked, "It will be perceived from the examples I have cited that the fortunes of the sugar planters of Trelawny are of a very chequered character and very little, if at all, dependent on their presence or absence from their estates, though no doubt where a resident proprietor possesses capital and understands the management of his agricultural and manufacturing operations likewise, he must be more likely /

likely, caeteris paribus, to succeed."¹ In the Report of 1847 - 8 it was stated a number of times that the mere presence of the proprietor made no difference in the estate bearing a profit or a loss.² Evidence given in this Report tended to show that absentees spent more money on improvements and imported more machinery than resident proprietors.³ The important factor was whether the proprietor, resident or absent, had capital or not, and evidence given in 1842, showed that during the depression prevailing immediately after Apprenticeship, resident proprietors suffered most, being those who recently acquired property and who were short of capital.⁴

The belief that the sugar proprietor by being present in the colony saved paying a hierarchy of agents was not wholly true. The sugar proprietor though resident did not necessarily live on his estate, and if he did usually had his overseer and "book-keepers".⁵ In Barbados it was stated "absentees have appointed men of experience and some of the best-managed estates in the island are those of non-resident estates."⁶ "As to whether it may be easier for a person to introduce improvements if acting for himself and not as agent - it may be easier in one respect but in another it may be more difficult, for as agent he may be agent for a rich person and of limited means as a proprietor".⁷

Planters who admitted that residence was beneficial stated that /

that on many estates it was perfectly impossible for a proprietor to live with his family because good houses were lacking and white men were quickly attacked by ague, unless accustomed to the island and the quick turnover of estates prevented this.¹

A number of planters giving evidence in 1847 - 8 expressed the opinion that they felt themselves to be of little use on an estate.² Absentees generally had more capital ^{or} were more in touch with it than resident planters. Agents were more likely to try experiments not being at their own cost. In 1831 it was stated "there are a considerable proportion of resident proprietors in Demerara and their estates were encumbered, to the same extent as absentee proprietors" and "absentee estates in Demerara, were very well run, the persons appointed managers have been capable men".³ Bigelow writing in 1850, says that the proportion of absentees was not diminished appreciably, the depression of 1846 - 8 had caused foreclosures of mortgages and estates were taken over by absent money-lenders.⁴ The number of absentees was continually being altered by this method. But the necessity of handing over an estate, hastily acquired through foreclosure of a mortgage, to the charge of an attorney, who in some instances had a dozen or so estates under his charge, was not the best way in which to run it efficiently. Numerous cases were mentioned of the absentee coming out to the sugar colonies to /

to find conditions on his estate much worse than he had been led to believe from the attorney's report.¹

The select committee's report of 1847 - 8 on the commercial distress in the British West Indies, expressed the view that the legal machinery of the sugar colonies was inadequate to the problem of dealing with encumbered estates.²

A similar problem had been faced in the Danish West Indies and had been dealt with by the Danish Government.³

In the British West Indies this problem of estates with "blistered" titles, as termed in the colonies, was to be handled by the setting up of an Encumbered Estates Court. This subject is treated in a later section.

The depression of 1846 - 8, was followed by a very severe cholera epidemic in a number of the sugar colonies which further prolonged their difficulties. The labour population was decimated in a number of the islands and increased the demand for immigrants and raised the wages paid to labour.⁴ But by 1853, reports from all colonies, with the exception of Jamaica, indicate that their difficulties had been almost completely surmounted and by improving manufacture and cultivation and economy measures /

measures such as using women and children in "piccaninny" gangs, the exports of sugar were not only maintained at their former amount but in some cases very considerably increased.¹ Prices which had risen in the mid 1850's (a rise which the Crimean War had helped to bring about), yielded a fair, though moderate profit to the planter. The rise in prices and increased consumption in Great Britain stimulated production and in all the Sugar Colonies, and as well in Jamaica where depression still existed, a number of abandoned or partially abandoned estates were brought back into cultivation indicating that optimism was not dead.

Those sugar proprietors who had purchased their estates at reduced prices during the period of Apprenticeship and immediately after, and who had managed to weather the crisis of 1847 - 8 were now raising themselves up to the position of the successful proprietor. Shrewd, possessed of practical skill and local knowledge, but devoid of available capital, their position could only be sustained by high prices. The fall in sugar price and depression of 1847 - 8 had caused the ruin of many of these new planters but those who got through the crisis were now fairly assured of their future.

In all the sugar colonies there were a number of proprietors who had somehow managed to hang on over the shock of 1847 - 8 but were in such a weak condition and so heavily mortgaged that the /

the retention of their estates was impossible. Completely dilapidated and semi or non-cultivated there was no scheme that could save them except sale to persons with capital and initiative. This was the type of estate which was to be catered for by the West Indies Incumbered Estates Court and the work of this Court was largely concerned with bringing these estates to sale and distributing the purchase money. In British Guiana between 1851 and 1870 the decrease in number of estates from 171 to 153 was a result of the abandonment or assimilation of these near-derelect estates.¹ Their loss did not materially affect production figures and their liquidation was beneficial in making more labour available to estates in cultivation.

Jamaica never regained her position as the chief sugar producing colony in the British West Indies during the remaining half of the nineteenth century. Jamaica differed from Barbados and the old sugar islands, in having a greater quantity of fertile land accessible to the negroes, on which they could subsist without labouring in the plantations - and on the other hand from the newer sugar colonies of British Guiana and Trinidad in having refused to avail itself of the offer made by Her Majesty's Government in 1848 of a guaranteed loan for immigration and having imported a very small number of immigrants in proportion to the field of cultivation.² Both British Guiana and Trinidad had /

had obtained a very large number and compensated themselves for the reduction in price by increase of quantities.¹ Thus the exports of Jamaica which were in 1840, 517,217 cwt. remained at nearly the same point in 1852 being then 511,247 cwt. whilst the exports of sugar from British Guiana, which were in 1840, 579,644 cwt., had increased in 1852 to 838,298 cwt. Looking to the return of immigration in the respective colonies we find that between 1840 - 1852, 49,544 immigrants had been imported into British Guiana and only 14,132 into Jamaica. In like manner the exports of sugar from Trinidad increased between 1840 - 52 from 245,778 cwt. to 483,853 cwt. with an immigration of 24,899 Coolies.²

Thus it would not seem incorrect to presume that Jamaica's distress was due to lack of money being paid out for immigrants. There thus appears to have been in the case of Jamaica a connection between the fortunes of the sugar industry in that island and the management of financial and political matters.³

By 1865 more than one-half of Jamaica was still owned in estates averaging 1,000 acres, many of which were non-cultivated or only partially so, and of a total acreage of 2,848,160 acres, approximately 1,000,000 acres were abandoned.⁴ The tradition of "bigness" was maintained and opposition of proprietors to selling these properties in small lots resulted in most of the original /

original patents being unbroken.¹ Except on large estates near the sea or in specially favoured locations inland, such as was enjoyed by Worthy Park estate of the Price family, producing sugar did not pay in Jamaica in the year 1865.²

Of the smaller colonies Barbados remained the most prosperous during the years 1855 - 1865. The highest crop in her history was gathered in 1857 and this was surpassed in the year 1866.³ Speculation during these years as in the other colonies, resulted in a rise of the value of estates. The report of 1859 stated that as long as an estate capable of producing 100 hogsheads of sugar was worth in the market about 10,000 l., it may be safely inferred that there was an average profit on the cultivation of sugar cane.⁴ Economical use of labour, skill in cultivation - in 1858, 80,000 tons of Peruvian manure were imported⁵ - maintained high productivity. Considerate treatment of labourers appeared to pay dividends. Labour, although abundant in Barbados, commanded an equivalent price to that received in the other sugar colonies, excepting British Guiana, and little desire to emigrate from Barbados was evinced.

Considering the other small colonies - St. Vincent during the depression of 1848 - had turned to the production of arrow-root. The soil of the island was suitable to the growth of this product and, being early in the field, St. Vincent had largely captured /

captured this limited market. The West Indian Incumbered Estates Court, first introduced into St. Vincent, evidently was beneficial to that colony. Estates dealt with by the Court were revived and again producing.¹ St. Vincent, by 1865, was free from public debt and had a high productivity of both sugar cane and arrow-root.

St. Kitts and Nevis also increased production in the period 1855 - 1865 and a number of partially abandoned estates were revived as had been done in the other sugar colonies during the same period.² The problem of fuel shortage in all the sugar colonies, where steam power was being used, was alleviated at this time by the introduction of multitubular boilers. In 1866, St. Kitts reaped the largest crop ever yielded and the Report for the year, 1865 expresses a feeling of confidence in the progress made.

Antigua, Grenada, St. Lucia and Dominica evidenced similar satisfactory conditions and high productivity.³ Machinery imports into these smaller sugar colonies had increased in the few years prior to 1865, manure was increasingly imported,⁴ and it is of interest to note that the French Government, interested in the evident prosperity of St. Kitts, obtained information as to the causes of that prosperity.⁵

A brief summing up of the sugar industry's position in 1865 shows, that apart from Jamaica, there was prosperity of a moderate kind /

kind in the sugar colonies, British Guiana, Trinidad and Barbados being the most prosperous; British Guiana especially, had modernized and increased her productivity. The lesser islands all displayed more vigour and were complaining less of distress than formerly. Excepting Jamaica, the British West Indies were in a position where it would not be too optimistic to say that they had a good chance of meeting sugar beet competition, which was to be their chief threat for the remaining years of the nineteenth century.

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although when he has obtained his decree, he
hesitates to enforce it because he himself must
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from fatal experiences he knows the consequence".
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 "The greatest proportion of estates in all the Colonies are subject to very heavy encumbrances mostly mortgages. The mortgages are generally West India merchants - the interest paid in many cases is 6% (the legal interest in the W.I.) the proprietor is also under the necessity of consigning his produce to the tender and obtaining through him all his produce and his freight. The committee would not say that the planter thereby pays a higher price for articles and interest, but thinks that the connection does render unavailing all the measures of late years for giving the Colonies the benefit of foreign markets. The charges, direct and indirect, of mortgaged estates are said to be not less than 10% upon the debt. In the present situation of W.I. property it is impossible to obtain loans in any other mode than advances by the merchant consignee".
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 and passim.
2. Edwards, Bryan. The West Indies. London 1819 -
 19. vol. II. p. 137.
3. Martin. The British Colonies. Div. 8. p. 107.
4. 69,341 tons was the highest figure recorded in the
 1940's.
 Handbook of Jamaica. 1948. p. 395.
5. Penson. Colonial Agents. p. 139. gives illustration of this shortage of each.

- Page 10. 1. Gardner. A History of Jamaica. p. 414.
 2. Martin. Statistics. p. 20.
 3. Gardner. A History of Jamaica. p. 413.
- Page 11. 1. Parl. Papers. vol. 15. 1836. p. 418. 458.
 2. Ibid. p. IV.
 Q.5564. 5569.
 3. Parl. Papers. 1866. vol. 51. p. 247.
 4. Parl. Papers. 1836. vol. 15. p. 460.
 5. Parl. Papers. 1836. vol. 15. p. 387.
 6. Parl. Papers. 1854. vol. 43. p. 44.
- Page 12. 1. Ibid. p. 44.
 2. C.O. 137/247.ZZ. quoted from Olivier, Jamaica.
 p. 133.
 3. Parl. Papers. 1848. No. 280. p. 38.
- Page 13. 1. Parl. Papers. 1851. vol. 39. p. 76.
 2. Hansard. 1842. vol. 61. p. 1097.
 3. Underhill, Edward Bean. The West Indies.
 London. 1862. p. 68.
 4. Parl. Papers. 1836. vol. 15. p. 419.
 5. Parl. Papers. 1849. vol. 11. p. 134.
 6. Parl. Papers. 1850. vol. 36. Annual Report.
 (1849 - 50) St. Lucia.
 7. Parl. Papers. 1847 - 8. vol. 23. Part III.
 Q.16549.

- Page 14. 1. Martin. Statistics. Appendix. p. 3.
British Colonies. pp. ---
2. McCulloch. Commercial Dictionary (1882 edition)
p. 1341.
3. Hansard. 1842 - 63. p. 1163.
4. Parl. Papers. 1842. vol. 13. Q.5891-94.
- Page 15. 1. Parl. Papers. 1866. vol. 51. p. 109.
2. Parl. Papers. 1842. vol. 13. p. iii - p. vii.
3. Parl. Papers. 1842. vol. 13. Select Committee
on W. Indies Colonies.
4. Ibid. p. iii - p. vii.
- Page 16. 1. Underhill. The West Indies. p. 280. Parl.
Papers. 1847 - 8. vol. Part I. Q.4507-11 and
passim.
2. Parl. Papers. 1847 - 8. vol. 23. Part I.
pp. 446 - 8.
3. Parl. Papers. 1850. vol. 39. p. 283.
Immigration statistics, including numbers of
liberated Africans.
4. Parl. Papers. 1859. vol. 20. p. 314. Also
see Index to Parl. Papers. 1842. vol. 13.
"Africans Liberated". Parl. Papers. 1864.
vol. 40. Annual Report. 1862. p. 32.
5. Parl. Papers. 1857 - 8. vol. 24. Appendix.
pp. 97 - 98.
- Page 17. 1. Underhill. The West Indies. p. 66. Parl.
Papers. 1849. vol. 11. p. 143.

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2. Parl. Papers. 1857 - 8. vol. 24. p. 55.
Commissioners Report on Emigration.
 3. Quoted from Bigelow. Jamaica in 1850. p. 118.
- Page 18.
1. Parl. Papers. 1859. vol. 21. Barbados. p. 44.
Also Davy, John. "The West Indies Before and
After Emancipation. London. 1854. p. 528.
 2. Parl. Papers. 1859. vol. 59. p. 44. (British
West Indies)
 3. Parl. Papers. 1859. vol. 21. pp. 80 - 81.
Parl. Papers. 1859. vol. 21. pp. 45 - 51.
 4. Ibid. pp. 45 - 51.
- Page 19.
1. Hansard. 1859. vol. 154. Jamaica Immigration
Act.
 2. Hansard. 1858. vol. 149. p. 445.
 3. Parl. Papers. 1859. vol. 21. p. 129.
- Page 20.
1. Parl. Papers. 1847. vol. 37. Annual Report
1846. Grenada. No. 9.
 2. Hansard. 1859. 154. see Jamaica Immigration Act.
 3. Underhill. The West Indies. p. 376. Jamaica
between 1837 - 1859 spent £200,000 on immigration
schemes. British Guiana spent £360,685 on Coolie
immigration during the period 1841 - 48.
Martin. British Colonies. p. 179.
 4. Parl. Papers. 1847. vol. 37. Annual Report.
1846. Nevis.
- Page 21.
1. Parl. Papers. 1862. vol. 13. Q.1381-85.
Q.5489-91. Q.5494-97.
Parl. Papers. 1847 - 8. Part. I. Q.1771. Q.2382.
Hansard. 1844. vol. 76. p. 34. 37.

- Page 21. (contd.)
2. Parl. Papers. 1862. vol. 13. Appendix.
p. 299 - 303. (Statistics.)
 3. Adam Smith - quotes Grenada as an instance of the extent to which the commercial policy of Great Britain in the 18th Century killed out the manufactures of the Colonies. Grenada under French rule refined extensively. Chapter, 'Causes of the Prosperity of New Colonies' from "The Wealth of Nations", ed. Edwin Cannon. London. 1904. vol. II. p. 83.
- Page 22.
1. Parl. Papers. 1850. vol. 39. p. 240.
 2. Parl. Papers. 1831 - 2. vol. 20. p. 762.
 3. Ibid. p. 766.
 4. Olivier. p. 213. Parl. Papers. 1862. vol. 13.
Q. 2785-86.
 5. Parl. Papers. 1862. vol. 13. p. 264.
- Page 23.
1. Smith, Adam. "Rum & Molasses defray whole expense of cultivation". vol. 1. p. 158. Underhill. p. 451. - evidence of importance planters attach to production of rum.
 2. Gardner. "A History of Jamaica". p. 322. (Increasing number of puncheons of rum, in proportion to number of hogsheads of sugar, evidenced.)
 3. Parl. Papers. 1831 - 2. vol. 20. p. 922.
 4. Loss by drainage in dock alone estimated at $2\frac{1}{2}\%$.
Parl. Papers. vol. 13. p. 262. p. 19, passim.
- Page 24.
1. Martin. British Colonies. Div. 8. p. 107.
footnote.
 2. Parl. Papers. 1831 - 2. vol. 20. pp. 883 - 8.

Page 24.
(contd.)

3. Parl. Papers. 1847 - 8. vol. 23. Part III.
Q.16662.
Note. Sugar was taken from a temperature of about 90° - 95° in the curing house to a temp. of 120° - 125°, in the hold of the ship.
Parl. Papers. 1862. vol. 13. p. 262.
Lady Nugent on her journey back to England in 1805, "repeatedly complains of the smell of sugar, and everything tastes of it and the vapour that arose from it blackened everything." Journal. p. 310.
4. Parl. Papers. 1842. vol. 13. Q.3643.
Parl. Papers. 1862. vol. 36. St. Kitts. p. 86.
5. Parl. Papers. 1850. vol. 36. Annual Report.
St. Lucia.
6. Parl. Papers. 1847 - 8. vol. 23. Part I.
Q.555-57.

Page 25.

1. Parl. Papers. 1831 - 2. vol. 20. p. 870.
2. Parl. Papers. 1862. vol. 13. Q.Q.6222-24.
3. Parl. Papers. 1847 - 8. vol. 23. Part III.
Appendix. p. 394. computed loss by drainage at £700,000 annually for British West Indies.
Parl. Papers. 1862. vol. 13. p. 262 - 3.
4. Parl. Papers. 1847 - 8. vol. 23. Part II.
Q.10616-18.
5. Parl. Papers. 1862. vol. 13. pp. 252-3-5.
Parl. Papers. 1847 - 8. Part II. Q.10616-18.
6. Parl. Papers. 1847 - 8. Part II. Q. 13406-12.

Page 26.

1. See Appendix of these Report under "Machinery".
2. Gladstone's estate - Deerr. Historical Conspectus.
p. 608.
3. Parl. Papers. 1862. vol. 13. Q.5409-39,
especially, Q.5421.

Page 26.
(contd.)

4. It was stated in 1862 that on an estate producing only 400 - 500 hogsheads it would not be worth installing machinery - as they only use machinery three or four months in the year, except in Demerara where they make sugar all the year round.

Page 27.

1. Parl. Papers. 1862. vol. 13. p. 242.
Appendix. p. 327. Exports of machinery from U.K. to West Indies 1840 - 1860.
2. Glasgow Herald. Oct. 11th, 1850 evidences extensive machinery being sent to Cuba. Kerr, 'Practical Treatise', p. 131.
3. Underhill. "The West Indies", p. 235, (ploughing and harrowing by plough cost 20s. per acre, digging holes with the hoe cost £3: 12: Od. per acre. See also Wray. "Practical Sugar Planter". p. 59. for comparative figures showing plough more economical.
4. Parl. Papers. 1842. Appendix. vol. 13.
Heading "Use of Plough", also Bigelow, p. 132.
5. Underhill. p. 235. Parl. Papers. 1842. vol. 13.
Q.6826-08.
6. Parl. Papers. 1847 - 8. vol. 23. Part II.
Q.13851. Part III. Q.16642.
7. Parl. Papers. 1842. Q.2062. "there is a steam engine placed in an iron punt which turns a drum, another punt is placed opposite furnished with a wheel to correspond with the drum, the ploughs are dragged between the two punts by a rope working on the drum & wheel.

Page 28.

1. Jenkins "The Coolie". p. 53.
2. Parl. Papers. 1847 - 8. Part I. Q.7836.
3. Kerr, Thos. "Practical Treatise". London 1851.
Appendix. Parl. Papers. 1847 - 8. Part I.
Q.8032

- Page 28. (contd.)
4. Bigelow. Jamaicain. 1850. p. 129.
 5. Wray, Leonard. "The Practical Sugar Planter". London. 1848. p. 51.
- Page 29.
1. Wray, Leonard. "The Practical Sugar Planter" London. 1848. p. 59.
ff. contains information on this subject;
see also Statistics of Machinery Imports in Annual Reports.
 2. Parl. Papers. 1847 - 8. Part I. Q.5504-7.
 3. Kerr. "A Practical Treatise". p. 79.
Parl. Papers. 1847 - 8. Vol. 23. Part II.
Q.11264.
 4. Parl. Papers. 1831 - 2. Vol. 20. p. 856.
- Page 30.
1. Kerr. "A Practical Treatise". p. 79.
 2. Parl. Papers. 1847 - 8. vol. 23. Part II.
Q.10784.
 3. Parl. Papers. 1847 - 8. Part I. Q.5446-7.
 4. Parl. Papers. 1831 - 2. Vol. 20. p. 913.
 5. Martin. British Colonies. p. 187.
- Page 31.
1. Gardner. A History of Jamaica. p. 322. Sums totalling £5,380 were voted at various times, by the Assembly, to different gentlemen for improvements they made in the manufacture of sugar and valuable suggestions they had given. See Gardner for particulars.
 2. Parl. Papers. 1849. Vol. 11. p. 60.
 3. Ibid. p. 60.
 4. Report of British Guiana & British Honduras Commission. C.md. 7533. pp. 42 - 3.

- Page 31. (contd.)
5. Parl. Papers. 1851. vol. 39. p. 175 - 7.
British West Indies.
 6. Edwards, Bryan. vol. II. p. 257.
- Page 32.
1. Martin. British Colonies. p. 153.
 2. Parl. Papers. 1831 - 2. vol. 20. p. 782.
 3. Jenkins. The Coolie. London 1871. p. 72.
 4. Parl. Papers. 1831 - 2. vol. 20. p. 782.
Parl. Papers. 1849. Vol. 11. p. 1., p. 41.
 5. Martin. British Colonies. p. 71.
- Page 33.
1. Parl. Papers. 1847 - 8. vol. 23. Q.12870-71.
 2. Parl. Papers. 1849. vol. 11. pp. 1, 44.
British Guiana.
 3. Parl. Papers. 1850. vol. 36. St. Kitts. p. 47.
- Page 34.
1. Parl. Papers. 1854. vol. 43. Jamaica. p. 24.
 2. Parl. Papers. 1847 - 8. vol. 23. Parts 1, 2
and 3.
 3. Hansard. 1848. vol. 96. p. 100.
 4. Ibid.
 5. Parl. Papers. 1847 - 8. vol. 23. Part II.
Q.10453.
 6. Clapham, Sir John. The Bank of England. pp. 198 - 9.
p. 206.
- Page 35.
1. Parl. Papers. 1847 - 8. vol. 23. Part I.
Q.2599. Q.6041-44. Q.7458.

- Page 35. (contd.)
2. Underhill. The West Indies. p. 72.
 3. Parl. Papers. 1847 - 8. vol. 23. Part I.
Q.6041-44.
Parl. Papers. 1847 - 8. vol. 23. Part II.
Q.Q.112.94; 13386.
 4. Parl. Papers. 1854 - 5. vol. 37. p. 1.
Large firms which went bankrupt at this time
were W. R. Robinson and Co. and Reid Irving and
Co. - see Clapham. p. 206.
 5. Parl. Papers. 1850. vol. 36. pp. 39 - 42.
- Page 36.
1. McCulloch. Commercial Dictionary. (1882 Edition.
pp. 1340 - 41).
 2. Hansard. 1852. vol. 122. pp. 100 - 101.
- Page 37.
1. Parl. Papers. 1859. vol. 21. Barbados.
pp. 32 - 5.
 2. Underhill. The West Indies. p. 464.
 3. Parl. Papers. 1859. vol. 21. St. Lucia. p. 3.
 4. Parl. Papers. 1831 - 2. vol. 20. pp. 795, 817.
- Page 38.
1. Parl. Papers. 1831 - 2. vol. 20. p. 815.
 2. Parl. Papers. 1831 - 2. vol. 20. pp. 663; 800;
876.
 3. Martin. Statistics. Appendix. p. 1. (Exports
from Great Britain to the British West Indies had
fallen in value by one half - 1814-36.)
McCulloch, Commercial Dictionary (1882 edition)
p. 359.
- Page 39.
1. Parl. Papers. 1831 - 2. vol. 20. pp. 705, 867.
McCulloch, Commercial Dictionary (1844 edition)
"West India ships very seldom take a full cargo
outwards - the average does not perhaps exceed a
third."

- Page 39. (contd.)
2. Parl. Papers. 1831-2. vol. 20. p. 867.
 3. Ibid.
 4. Martin. Statistics. Appendix. Asia. p. 128.
 5. Hansard. 1823. vol. 9. p. 444.
Ibid. 1845. vol. 77. p. 1070.
 6. Parl. Papers. 1831 - 2. vol. 20. p. 900.
- Page 40.
1. Parl. Papers. 1831 - 2. vol. 13. Q.Q.248-9.
- Page 41.
1. Parl. Papers. 1854. vol. 43. p. 47. Jamaica.
 2. Parl. Papers. 1847 - 8. vol. 23. Part I.
Q.5075.
 3. Ibid.
Q.4506.
 4. Parl. Papers. 1842. vol. 13. QQ.2696, 3606-8,
6565, 6567.
 5. Jenkins. The Coolie. p. 72.
 6. Parl. Papers. 1842. vol. 13. QQ.1674-7.
 7. Parl. Papers. 1847 - 8. vol. 23. Part I.
Q.4506.
- Page 42.
1. Parl. Papers. 1847 - 8. vol. 23. Part I. Q.4506.
 2. Ibid.
QQ.5075, 6196.
 3. Parl. Papers. 1831 - 2. vol. 20. pp. 846 - 7.
 4. Bigelow. "Jamaica in 1850". p. 118.

- Page 43. 1. Bigelow, Jamaica in 1850. p. 118.
2. Parl. Papers. 1847 - 8. vol. 23. Part I.
QQ. 4929 - 36; 6904-06; 12964.
3. Pares, A West India Fortune. London. 1950.
p. 79.
4. Out of Barbado's population of 135,939, there
18,000 persons who died from cholera in 1851.
Parl. Papers, 1864, vol. 40. p. 12.
- Page 44. 1. Increased employment of women and children as
field labour in the years after Emancipation
was evident in all the British West Indies.
see Parl. Papers, 1866. vol. 51. p. 187.
Jamaica.
- Page 45. 1. Jenkins. The Coolie. p. 71.
2. Parl. Papers. 1854. vol. 43. p. 116. Jamaica.
- Page 46. 1. Parl. Papers. 1862. vol. 36. Annual Report.
British Guiana. p. 42.
2. Ibid. Jamaica. p. 116.
3. Loc. cit.
4. Olivier. Jamaica. p. 140.
- Page 47. 1. Olivier. Jamaica. p. 140.
2. Ibid.
3. Parl. Papers. 1860. vol. 44. Barbados Annual
Report. pp. 53 - 4; Parl. Papers. 1867.
vol. 48. p. 43.
4. Parl. Papers. 1861. vol. 40. Barbados Annual
Report. p. 46.

(1854 - 1893).

Page 47. 5. Parl. Papers. 1860. vol. 44. Barbados Annual
(contd.) Report. pp. 53 - 4.

Page 48. 1. Parl. Papers. 1867. vol. 48. St. Vincent
Annual Report. 1865.

2. Parl. Papers. 1862. vol. 36. St. Kitts-Nevis
Annual Report. 1860.

Parl. Papers. 1865. vol. 37. St. Kitts-Nevis,
St. Vincent. Annual Report. 1863.

3. Parl. Papers. 1867. vol. 48. Antigua, Grenada,
Dominica, St. Lucia. Annual Report. 1865.

Parl. Papers. 1861. vol. 40. Grenada, St. Lucia.
Annual Report for 1859.

4. Evidence of increased imports of machinery are
given in the above annual reports. see also
Parl. Papers. 1862. vol. 13. Appendix.
p. 327 for statistics.

5. Parl. Papers. 1862. vol. 36. St. Lucia, Annual
Report. 1860.

Page 47. (contd.) 5. Parl. Papers. 1860. vol. 44. Barbados Annual Report. pp. 53 - 4.

- Page 48. 1. Parl. Papers. 1867. vol. 48. St. Vincent Annual Report. 1865.
- 2. Parl. Papers. 1862. vol. 36. St. Kitts-Nevis Annual Report. 1860.
- Parl. Papers. 1865. vol. 37. St. Kitts-Nevis, St. Vincent. Annual Report. 1863.
- 3. Parl. Papers. 1867. vol. 48. Antigua, Grenada, Dominica, St. Lucia. Annual Report. 1865.
- Parl. Papers. 1861. vol. 40. Grenada, St. Lucia. Annual Report for 1859.
- 4. Evidence of increased imports of machinery are given in the above annual reports. see also Parl. Papers. 1862. vol. 13. Appendix. p. 327 for statistics.
- 5. Parl. Papers. 1862. vol. 36. St. Lucia, Annual Report. 1860.

The West Indian Encumbered Estates Court.

(1854 - 1892).

The Parliamentary Commission which reported on Commercial distress in the British West Indies in 1847-8, revealed that the majority of estates were heavily encumbered by charges placed on them in the heyday of the sugar industry. The extreme intricacy of these charges and the delay and expense of legal proceedings in the various colonies rendered it impossible to make out an indisputable title to any would-be-purchaser.¹

A cheap and prompt mode of transfer had to be devised if a sale was to be effected to persons who could retrieve these estates from their neglected condition. The Danish West Indies had partially met this problem of encumbered estates by means of loans from the National Debt Commissioners of Denmark in the 1820's.²

In the British West Indies St. Lucia was the first colony to attempt a solution of the problem of transference of encumbered estates to solvent persons. An office for the registration of deeds and mortgages was first established in St. Lucia in 1829 under a law originating with Sir John Jeremie, president of the Court of Appeal. A term of eighteen months was allowed for the registration of all then existing mortgages which, if enrolled during the period specified, retained the original /

original priority. Before the expiration of the eighteen months no less than 1,918 mortgages were placed upon the rolls, representing the sum of £1,199,000 sterling, as debt and liabilities of the proprietary body. The consequence of this disclosure was the enactment of a law to authorize the seizure and sale of immoveable property, and known in the colony as the "saisie réelle" - being very similar in effect to the Encumbered Estates Law of Ireland.³ This enactment did not come into force until January, 1833, when the immediate consequence was the levy and forced sale of estates which continued year after year, until, by the end of 1843, 69 sugar estates out of the island's total of 81 had passed by judicial sale under new titles. By 1851 there were only twelve proprietors in St. Lucia whose title deeds were of a date antecedent to the abolition of slavery.⁴

Although precedents in the way of these measures of St. Lucia, the Danish West Indies - and Ireland, existed as a method of meeting the problem of encumbered estates, there was no attempt made by the British West Indies as a whole to have an Encumbered Estates Act passed. Sir Charles Metcalfe, Governor of Jamaica, had recommended such /

such a measure in 1841, and the question was raised in Parliament in 1848 by the Duke of Newcastle who stated that Governor Barkly of Jamaica urged such a measure and that the West Indian Association advocated it.⁵

In 1852, the affairs of an infant proprietor of an estate in St. Vincent being brought under the cognizance of the Court of Chancery, Lord St. Leonards pronounced an opinion that, as the expenditure on the estate had for some years exceeded the income and the continuance of its working only tended to accumulate debt it would be for the benefit of the infant if the estate were sold, and that other West Indian sufferers would be benefited by a similar remedy to that of the Encumbered Estates Law of Ireland.⁶ The Governor of St. Vincent shortly after this incident drew the attention of the Home Government to evils arising from the great number of encumbered estates in St. Vincent and urged an Encumbered Estates Act.⁷

The question of an Encumbered Estates Act for the British West Indies evoked little comment when introduced in Parliament. Lord Brougham, who said he had opposed the Irish Encumbered Estates Act had to admit that it proved productive of much good and therefore he had great hopes /

hopes of a similar result in West Indies. The Lord Chancellor criticised the Bill in that he considered it "ruinous" that each colonial legislature could pass an act to effect the objects of the Bill when the proprietors and mortgagees were in England. The Duke of Newcastle, who introduced the Bill, spoke of the difficulty in implementing such an act in that the laws in the West Indian Colonies frequently were at variance with one another. In British Guiana, Trinidad, Martinique, and St. Lucia, for example, laws more resembled those of Holland, France and Spain respectively and thus flexibility would be needed.⁸

The West Indies Encumbered Estates Act was passed in 1854 and was based on the Irish Encumbered Estates Act, but, unlike Ireland, the introduction of the Act into the West Indian Colonies was dependent on the will of each colony.⁹

The object of the Act was to facilitate the sale and transfer of land held by insolvent proprietors. This object was effected by means of a central court in London and local courts in the several West Indian colonies established under local statutes. The local encumbered /

(Barrister at Law) as Assistant Commissioner administered the encumbered estates courts were offshoots of the central court in London, and the local commissioners were usually the judges of the local supreme courts in each colony. The local encumbered estates courts had the same right of appeal to the Privy Council as the local supreme courts. The local commissioner when required, was provided with a secretary, and both were remunerated by means of a percentage of the money received from sale of estates. The local commissioner was to receive one-half per cent and the secretary, one-quarter per cent of the sales money.

The central court in London was to ensure uniformity of decisions and proceedings, and to provide protection for West Indian merchants and proprietors resident in England. The central Court in London was composed of a chief commissioner at a salary of £500 per annum, and an assistant commissioner at £400 per annum. The assistant commissioner also partook of the duties of secretary to the Commission.^{9(a)} For the greater portion of the Court's existence, Mr. J. Fleming (Her Majesty's ^{? Council} Council) as Chief Commissioner, and Mr. R. J. Cust (Barrister /

(Barrister at Law) as Assistant Commissioner administered the duties of the Court. The central court in London also had the assistance of two clerks at £150 and £100 each per annum. The London Court in the first three years of its existence was located in an obscure office at 8 Park St., Westminster, however in 1862, solicitors practising in London sent a memorial to the Treasury, applying for the removal of the offices of the commissioners to the vicinity of Lincoln's Inn. The central court was thus removed to St. Martin's Place, Trafalgar Square.^{9(b)}

It was the duty of the commissioners who administered the West Indies Encumbered Estates Act, to enquire into the ownership and titles of estates and to distribute the purchase money, deciding all questions of fact and law, among the encumbrancers according to priority.¹⁰

Proceedings in the court, local or central, could be originated by the owner or any encumbrancer and, if within a limited time no sufficiently valid reason presented itself the estate was to be sold. The proprietor and the applicant for sale need never to come into contact.¹¹

Although the West Indies Encumbered Estates Act was passed in 1854, no action followed immediately.¹² The Act was found defective in a number of material points. There was inadequate provision for preventing the sale of an estate where the yearly income from that estate gave /

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gave some possibility of meeting the interest on encumbrances. Thus the original Act was amended and the commissioners were prohibited, upon the application of any encumbrances, from selling an estate unless the yearly interest on the encumbrances exceeded one-half of the yearly ^{Gross} income of the property, such income to be calculated on the average of the preceding seven years.¹³ Provisions regarding stamp duty had to be corrected; the definition of the word 'owner' was also defective and confused with tenant-for-life, and the section providing for the duration of the offices of commissioners, for six years, was also ambiguously framed and had to be righted.¹⁴ These corrections were no sooner made than the operation of the Act was further delayed by the death of the Chief Commissioner, Mr. Phipps in 1857, and a few months elapsed before a successor was appointed. Thus it was not until 1858 that the Court was ready to begin work.¹⁵

St. Vincent was the first colony to adopt the Act, the Legislature of this colony addressing the Crown in 1856, but due to the delays forementioned no business was done until the amendment act received royal assent in /

in August 1858. Tobago also addressed the Crown early in 1858.¹⁶

The first estate dealt with was that of Arnos Vale in St. Vincent, sold by the Court on November 1st, 1858, in London.¹⁷ The sale of this estate posed knotty problems in the way of tracing out titles and various claims, that were typical of those estates sold later by the Court.

Arnos Vale which in the heyday of the sugar industry had produced an income of £10,000 a year, was brought to sale in the Encumbered Estates Court, charged with jointures legacies and annuities^{ACCUMULATED} to the extent of £30,000. At the time of sale it was entirely unproductive and had been from 1854, when it was abandoned by its owner and placed in Chancery. Arnos Vale had comparatively good equipment. It had a good cast-iron water wheel (the majority of estates in St. Vincent depended on water power), a complete mill and a good shipping bay 1,000 yards from the works. This property was rated potentially as one of the best estates in the colony but could no longer make headway in the face of disproportionate demands on it.¹⁸ The estate was sold for the sum of £10,050 /

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£10,050, the highest sum ever paid for an estate sold through the Court. It was in connection with this sale that the Commissioners enunciated the principle of the "consignee's lien" which was to be a source of much contention in the future, and which is treated later in this section. There was no opposition in this case to the consignee's lien, the owner having abandoned the estate four years previously.

Apart from St. Vincent and Tobago no other colonies accepted the jurisdiction of the Court in the first two years of its active existence. Prosperity was of sufficient degree throughout the colonies in the years 1858-60 to lessen the need for the Court. In a circular despatch to the British West Indies on December 6th 1860, Sir George Cornwall Lewis recommended the adoption of the Act by the various colonies. He stated that the Act had proved its worth in the few cases where it had been adopted to date. He also added that the expense of the Court was borne by the Home Government, but it was questioned how long this expense would be borne unless the West Indies colonies took advantage more generally of the Act.¹⁹

The injunction of Sir George Cornwall Lewis appears to /

to have had a stimulating effect. In 1860 the Virgin Islands and St. Kitts adopted the Act, followed by Jamaica in 1861. Jamaica presented a field where much work could be done by the Court. In an abstract of August 1852, it had been shown that there were in Jamaica 168 estates that had been at one time under sugar cultivation but were now abandoned. In addition to these there were 63 sugar estates partially abandoned.²⁰ Mr. Hossack, ^{Treasurer} Finance Minister of Jamaica, in 1861, stated that he advocated the Act from his complete knowledge of the number and value of abandoned properties in Jamaica, and added, - "I am sure a vast amount of property must pass through the Court pretty quickly under the stimulus of the deep cry for cotton which has set in since the Americans have quarrelled"²¹

In the year following the adoption of the Act in Jamaica, thirty-two estates were sold in that colony through the Court. The price of these estates varied from £100 for 100 acres to £4,500 for 2,388 acres.

A number of the purchasers of the estates sold by the Court in Jamaica did turn to cotton hoping for a keen demand as a result of the American Civil War. In addition /

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addition to attempts made to cultivate cotton a number of the estates were recultivated in sugar as a result of improved prices in the early sixties. The scale of duties in the United Kingdom still favoured the muscovado type of sugar made by Jamaican estates without exception.²² The invention of the centrifugal, which made possible the separation of molasses from the sugar in much less time than the old system of natural drainage, also induced a continuation of the muscovado process and the profitable rum industry which was of increasing importance in Jamaica, considering that the muscovado market was diminishing.

This impetus to the work of the Encumbered Estates Court in Jamaica was checked by disturbances associated with Eyre's Rebellion during Governor Eyre's term of office. These disturbances brought commerce in Jamaica practically to a standstill.²³ A Colonial Office dispatch (of 1867) quoted the Commissioners as having stated, - "Owing to recent events in Jamaica commercial prosperity there was temporarily paralysed and in consequence the Commissioners thought it advisable to defer for the present the sale of estates."

While /

While from November 1862, to February 1864, twenty-eight estates in Jamaica were sold by the Court, during the period from February 1864 to the end of 1865 only three applications for sale were made.²⁴ The latter period approximately covers that of Eyre's rebellion. These interruptions were short-lived and by 1866 the Court was again busy in Jamaica. Some of the largest and what were formerly prosperous estates passed through the Court. A few examples of these are as follows.

Worthy Park, the first estate sold by the Court in Jamaica, and containing about 4,000 acres, had been considered one of the finest estates in the island, despite its landlocked location in the centre of the colony. This estate formerly belonged to Sir Rose Price, Baronet, who died in 1834 and had devised it to his trustees to manage and cultivate it and to raise portions, for his younger children. The trustees carried on the cultivation for several years at a great loss and ultimately applied for sale in the West Indies Encumbered Estates Court. The estate was sold by the Commissioners in 1863 to the Earl of Shrewsbury for £8,550. At the time of sale the total amount of encumbrances on the estate exceeded /

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exceeded £68,000. The whole of the purchase money was paid to the trustees.²⁵

Swanswick estate in Jamaica, containing 1,162 acres had belonged to Edward Hyde Clarke who in pursuance of a family arrangement charged it with an annuity of £700 a year, in favour of his younger brother. The annual profits were insufficient to keep down the annuity, and the annuitant applied for a sale. The estate was sold in 1863 by the Court for £2,300.

Garbrand Hall and lots of land adjoining containing in all about 15,000 acres had belonged to the Barrett family and had been charged in the early part of the century with two legacies of £10,000 each. Reid, Irving and Company, who had carried on the cultivation for many years, finally petitioned for sale of the Court. The total number of encumbrances were found to be £69,600. The estate sold for £4,450, the bulk of which went to Reid, Irving and Company.²⁶

Many other cases dealt with by the Court were similar to these. Mexico, Hyde, Mickleton Pen, Up Pen were all large estates of 2,000 acres and over;²⁷ in a number of cases the owner had abandoned the estate and could not be /

be found. In practically all instances the estates were burdened with heavy encumbrances, many times the market value of the estates.

Following Jamaica, Antigua adopted the Act in 1864, Montserrat in 1865, Grenada in 1866, Dominica and Nevis in 1867.²⁸

In Antigua more estates were sold by the Court than in any other colony excepting Jamaica. Estates in Antigua were not so large as in Jamaica, but they were also heavily encumbered. Unlike Jamaica sales in Antigua were practically all to the consignee merchant in the first few years. Perhaps the reason why most of the estates in Antigua were sold to the consignee merchant was that these estates, although heavily encumbered, were in cultivation at the time of sale and under nominal ownership. Thus a consignee merchant was usually actively connected with the estate and petitioned for its sale, being granted priority under the consignee's lien. In Jamaica most of the estates sold in the first five or six years were those which had been many years abandoned and no active connection with a consignee merchant was in effect. Petitions for sale of the first Jamaican estates were /

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were usually by those who had claims on the estate in the capacity of nominal owner, legatee, annuitant or mortgagee.²⁹

Most of the estates in Antigua sold for small sums - for example, Elmer Creek in Antigua containing only 161 acres, but with total encumbrances of £27,000, sold for £700, the consignee merchant obtaining the estate for this sum. Vernons, containing 440 acres had belonged to the Vernon family for several generations and was subject to divers legacies and family charges. The cultivation of this estate had been carried on by the consignee until 1865 when the Court provided the means of quick sale. The total amount of encumbrances on this estate was £31,000.³⁰ A number of sales made through the Court, in Antigua and Jamaica revealed that the mortgaging of legacies was not uncommon in the years of depression following the abolition of slavery.³¹ It was also shown that the consignee merchant often worked the estate without having purchased it, due to the impossibility of obtaining a clear and speedy title through the legal institutions in the colonies.³² Thus no time was lost in bringing the estate to sale when the institution /

stitution of the West Indies Encumbered Estates Court offered a Parliamentary title in a manner that cut through a maze of claims. In St. Kitts only one estate was sold in the first two years following the adoption of the Act. In Tobago there were ten sales in the first four years of the Court's jurisdiction. As in Antigua estates were brought to sale most often on petition of the consignee.³³

Barbados, St. Lucia, Trinidad, and British Guiana did not place themselves under the Act. These colonies considered that sufficient remedy was obtained under laws prevailing in each colony, based in the case of the last three colonies, on the French, Spanish and Dutch systems.³⁴

Barbados declined the Act on the ground that no need for an Encumbered Estates Court existed. There were no abandoned estates in Barbados and there were few estates so heavily mortgaged that they could not carry the charges imposed on them. In the few instances where an estate fell into Chancery, it was worked profitably by the Receiver, who distributed profits earned to meet charges on the estate.³⁵

The St. Lucia system was as follows:- Encumbered estates could be brought to sale under the law "saisie réille /

réille". The sale was made in an open court before the judge, a clear title being granted free from all previous encumbrances. The proceeds of the sale were paid into court and distributed according to a scale of ranking drawn up by an officer of the Court - according to the nature of privileges and priority of mortgages. Any balance remaining was returned to the late owner of the estate. This system, which was similar to that of the West Indies Encumbered Estates Court, except that it recognized no priority of a consignee's lien on the corpus of an estate, had worked well in St. Lucia. There had been no complaints nor appeals to the Privy Council. Two thirds of the estates in St. Lucia were held under this title.³⁶

In British Guiana a sale of land was effected by advertising the transfer for three consecutive weeks in the official gazette, the vendor and the purchaser appeared before a judge, there were no title deeds, the purchaser was simply put on the register as the proprietor of the estate. Every mortgage was dealt with in a similar manner, that is by registration, and anyone had access to ascertain what mortgages were placed on an estate.

Proprietors /

Proprietors in British Guiana spoke unfavourably of the old-fashioned long rolls of title-deeds that prevailed in most of the other British West Indies.³⁷

In Trinidad, as in British Guiana, a system of registering mortgages prevailed, and, as in British Guiana and Barbados, heavily encumbered or abandoned estates were not common.³⁸

The system of mortgages prevailing in all the British West Indies differed from that in England in a material point that appears to have had appreciable effect on the solvency of estates. In England the rule of 'tacking' was recognized. Under the rule of 'tacking' where there were several mortgages, the third or subsequent mortgagee might tack his mortgage to a precedent mortgage and thereby obtain a preference to the intermediate encumbrance or encumbrances, of which he had no express notice served on him at the time he executed his mortgage (registration of a mortgage was not in itself notice).

In addition, a mortgagee (not necessarily the first) might tack to his security further sums if he had no notice of the intervening encumbrance or encumbrances at the time of making such further advances.

This rule of 'tacking' was justified on the ground that the person holding the precedent encumbrance, and having the priority that went with it, had law on his side, and in addition /

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addition because no notice was given at the time he executed the encumbrance which he tacked to the precedent encumbrance, he had equal equity with the intermediate encumbrance. Summing up, the person who implemented this 'tacking', having both law and equity on his side, had preference over the intermediate encumbrancer, who had only equity on his side.

"where there is a legal title and equity on one side, and equity only upon the other, they will never suffer the side in which both these rights concur, to be hurt by that in which one of them only is to be found".^{38a}

The consequences of the rule of 'tacking', was that in England no ^{prudent} precedent person would lend on a second mortgage unless he was represented by the same solicitor as the first mortgagee, or had otherwise established such relations that he would be certain no third mortgagee would be allowed to get possession of the first mortgage, and thus, by virtue of the rule of tacking, deprive him of his priority. Also if an owner succeeded in borrowing from several independent mortgagees, the subsequent mortgagees as soon as they discovered how matters stood, would compete with each other for the first mortgage and very soon all the mortgages would be in the same hand, or in those of persons understanding each other and ready to work together.³⁹

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The Registry Acts of the British West Indies did not recognize the doctrine of tacking.^{39a} No reason is given as to why this was so, but the explanation may be that as there was only one registry office in each colony, it was possible for a person executing a mortgage to ascertain what other encumbrances were on an estate. In England, where there was no central registry office, this would have been physically impossible.

In the British West Indies mortgages had priority according to the date they were registered.^{39b} This registering was however often haphazard as was found out by the Commissioners of the Encumbered Estates Court.

During the period of prosperity, prior to Emancipation, the owner of a sugar estate might encumber with a dozen independent mortgages the same property. The income from sugar estates in these years of high prices, was usually sufficient to meet the interest of charges imposed on them. Since the doctrine of tacking was not recognized, and because priority was assured according to date of registration, there was little inducement to consolidate these mortgages.⁴⁰

During the depression years after Emancipation when sugar prices dropped from a maximum of 97s. a cwt. in 1814 to a low of 20s. a cwt. in 1854, estates could no longer meet interest /

interest and claims to which they were subject. Mortgagees were now faced with the difficulty of trying to realize what they could from insolvent estates. Various procedures could be adopted. A mortgagee creditor whose interest was overdue could enter upon and take possession of an estate. If he did this he would be faced with the task of advancing large sums of money for carrying on cultivation. Estates of insolvent owners were likely to be in a run-down condition, and it took at least two or three years to bring an estate back into cultivation if once allowed to lapse. There was also no knowing when another claimant, with a better title than the mortgagee-in-possession professed, might come forward to dispute the right of possession.

The mortgagee-creditor, when he took possession of an estate, abandoned the position he before held of a mere creditor having a lien upon the estate for his principal and interest, and having a right at any time to secure his satisfaction after the debt was due. By taking possession, to some extent, he put himself in his debtor's shoes. He was now accountable to the other creditors and must record on oath the whole of the current accounts, proceeds of sale, and how much was applicable and had actually been applied to his mortgage.^{40a} Taking possession of an estate was not a cheerful prospect /

prospect, it gave no right to sell the estate, and, unless the mortgagee creditor was an experienced planter and with capital, it was apt to be more trouble than what it was worth. As an alternative to taking possession, the mortgagee creditor might obtain a judgment for his debt. The judgment could be executed at any time, provided it had not lain dormant for a year or more, in which case a new writ of execution would have to be obtained.^{40b} With the writ of execution, the judgment creditor could levy on the goods and personal effects of the debtor. These were however likely to be worth little, if estates sold by the Encumbered Estates Court are considered to be representative.

It was found that in the case of many of these estates the erstwhile proprietor had stripped them of anything of value, and, in a number of cases in Jamaica had sold the sugar machinery to Cuba.

Execution of judgments in the British West Indies differed from England in that, the British statute, 5.Geo.11;C.7.

"lands, hereditaments and real estate within the colonies are liable to debts, and subject to the like process of execution as personal estate."^{40c}

This ruling meant that in the sugar colonies a writ of execution for a judgment authorized the provost-marshal to levy /

levy on the lands as well as on the goods and personal effects of the debtor, if the latter were insufficient to meet the execution. In the Windward Islands, when the debtor's lands were more than sufficient to pay off the execution the debtor was permitted to choose which part of his lands he would have sold and this was to be appraised by the provost-marshal.^{40d} But as a sugar estate did not readily bear partition this qualification in the Windwards was of little help to judgment creditors concerned there.

In all the sugar colonies, except Antigua, the proceeds of the levies were applied according to the order in which the executions were delivered to the provost-marshal. In Antigua the proceeds were applied equally to all executions as were lodged^{40e} within a certain period of time (usually thirty-nine days).

The obtaining of a writ of execution for a judgment was usually the signal for other mortgagee creditors to do likewise. Finally, unless the estate found a purchaser, there was little value in executing a judgment. Estates after Emancipation were very much reduced in value, and charges on them were so great that the proceeds of a sale often failed to satisfy even the first creditor. This was the frequent experience in regard to sales through the Encumbered Estates Court, where legal /

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legal expenses were much less than usually obtained in the Colonies. ~~When failed to complete his purchase the plantation was~~ Another course that a mortgagee creditor might take to recover his debt, was to file a foreclosure bill in Chancery.^{40f} By filing a bill of foreclosure the mortgagee did not take possession. If there was some prospect of working the estate, the Court of Chancery could appoint a Receiver who took possession and worked the estate, distributing net income to creditors according to priority. As soon as an estate had been in Chancery for twelve months, the Receiver was called to bring in his accounts, all vouchers and receipts, and to report to Chancery. If an application by the mortgagee for a sale was pending, the Court of Chancery summoned a number of appraisers (usually seven sugar planters). They put a value on the whole property, including crops, stock and all machinery, and the property was then set up for sale. If the estate was not sold at the expiration of twelve months it was appraised again and set up for sale once more, the Receiver in the meanwhile working the property. This procedure would be repeated until the estate finally found a purchaser.

When a decree of sale was completed, the liens on the plantation were ranked and a statement made showing the lienholders who came within the appraised value. The purchase money /

money was distributed according to this statement of priority. If a purchaser failed to complete his purchase the plantation was taken possession of again by the Receiver.^{40g}

As the expenses incurred by the Receiver in cultivating and managing the estate were granted a first lien on the property, and as the legal expenses involved in a sale through Chancery were usually very high, the process of putting an estate in Chancery was only successful if the property was highly productive as in Barbados. In the other sugar colonies estates that fell into Chancery after Emancipation were often abandoned for years, as the records of the Encumbered Estates Court reveal.

Only in Barbados did the Chancery system work satisfactorily and, in this colony, few estates were ever abandoned or fell into Chancery. The few instances where the Receiver worked estates in Barbados they were profitably cultivated and /

Local lawyers from the first, opposed the Court and engendered criticisms of it because it took from them the lucrative business as existed in the local Chancery Court.⁴⁸ Much of the later criticism of the consignee's lien, came from the lawyers, and planters warned by the lawyers that they would lose their estates under the jurisdiction /

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and to-date were able to meet demands made on them.

The variance in existing laws of the different colonies and the inadequacy of the general laws relating to real property in meeting the requirements of the changed conditions were obvious by the first decade after the emancipation of the slaves, and thus the clear parliamentary title granted by the West Indies Encumbered Estates Court was preferable to the system of title deeds and the indefinite multiplication of mortgages. Under the old system estates had remained in the Court of Chancery from thirty five to forty years in many instances.⁴¹ The West Indies Encumbered Estates Court usually required two to four years to bring an estate to sale. There was still much tracing of titles and ascertaining of boundaries which, in conjunction with the required six months notice of sale, drew out the period required to make a sale. Local lawyers, from the first, opposed the Court and engendered criticism of it because it took from them the lucrative business ^{which} as existed in the local Chancery Court.⁴² Much of the later criticism of the consignee's lien, came from the lawyers, and planters warned by the lawyers that they would lose their estates under the jurisdiction /

jurisdiction of the Court.

The consignee's lien, although the principle was invoked frequently in the first ten years of the Court's life, did not evoke any appreciable criticism in the colonies. Evidence of the extent to which the principle could be pressed was evinced in Antigua where the consignee's lien was granted precedence over earthquake loans made to estates on the credit of the colonies of Antigua and Montserrat in 1843. These charges on estates were passed over by the Court in granting priority of the consignee's lien and four estates were sold in Antigua free of their liabilities. Apprehension was caused in Montserrat by this action of the Court in Antigua and representations were made to the Colonial Office. When asked for information the Commissioners of the Court stated that they could not depart from the usual procedure in regard to the earthquake loans. The matter was apparently dropped at that.⁴³

The West Indies Encumbered Estates Act had been renewed in 1862 for a further period of five years and when in 1867, the question of further renewal came up, the cost of maintenance of the Central court in London also arose /

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arose. The Colonial Office notified the colonies that in addition to the expenses of the local courts which they had agreed to defray from the first, they would be asked to contribute to the cost of the central court which to date (1867) the Home Government had met.⁴⁴ In July 1868, the Colonies were circularized as to the various modes for making the Court self-supporting and at the same time the Colonial Office expressed the view that each colony contribute fifty pounds towards the diminishing annual vote for the Central Court, made by the British Treasury, and which was to cease in 1870.⁴⁵

Reception in the colonies was unfavourable to any contribution towards the London Court. Most of the Governors reported that while the title granted by the Court was considered to enhance the value of the estate, and that estates which had passed through the Court were being recultivated, there was a disinclination to support the Court. This disinclination resulted, so it was stated, from a feeling that the bulk of work to be done had ^{already} been accomplished by the Court. In St. Vincent, additional objection was that the estates in that colony had been concentrated in the hands of a few individuals as /

as a result of the Court's recognition of the consignee's lien.⁴⁶ Governor Grant of Jamaica said that the Court discouraged resident proprietors and gave the merchants in London an opportunity of buying up estates at a cheap rate as the result of lack of competition at sales.⁴⁷ The Governor of Dominica also complained of the Court's giving merchants in London a monopoly of sugar estates in that Colony. The Governor of the Leeward Islands remarked that a title granted by the Court was now a common condition of sale but there was a feeling that the Court played into the hands of the merchants.⁴⁸

As a result of this lack of enthusiasm on the part of the colonies to make any contribution towards the London Court, the Commissioners of the Court in a report of December 1869,⁴⁹ summed up their work to date purportedly to show that the Court had done good work and to answer some of the criticism in the colonies contained in the replies to the request that they contribute to the maintenance of the London Court.

The Commissioners considered that the London Court commanded the confidence of suitors more than a purely local tribunal, and even in cases where some of the parties concerned /

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concerned were resident in the colonies the fact of the Court being independent of local influence was deemed a boon. In one case a sale was made in England directly on the grounds that the local commissioner was interested in the estate.⁵⁰

The difficulty in obtaining colonial legal assistance and the high scale of legal charges prevailing in the colonies, was another inducement to prefer the London to the local court. ^{Most of} All the fifty estates sold in Jamaica to 1869 had been sold in London, "where all the West India merchants had their agents and representatives."⁵¹ The sixteen estates sold in Tobago by 1868 had all been sold in London to the merchant consignee⁵² and in Antigua since 1864, thirty five estates had been sold practically all to the consignee merchant.⁵³ The Commissioners denied that estates were undersold in London and stated they did all in their power to prevent the sale of an estate at less than its real marketable value, and that the value of it was fixed upon information of eminent West India merchants and the assent of petitioners.⁵⁴

Fees of the Commissioners were reasonable, they pointed out, 2% on the purchase money, and a fee of two pounds /

pounds for each petition, fees in the local courts were very small, the local commissioners receiving $\frac{1}{2}\%$ on the purchase money.⁵⁵

The Commissioners quoted from letters of various merchants advocating the continuance of the Court and giving testimony of estates resuscitated. The purchase of one merchant alone had brought an ^{YEARLY} increase of 1,102 hogsheads of sugar apart from the molasses and rum.⁵⁶ Arnos Vale, in St. Vincent, after being out of cultivation for five years, was now producing from 300 to 500 hogsheads of sugar a year. Porter and Company in St. Vincent had obtained 1,000 barrels of arrowroot and 1,110 hogsheads of sugar in 1868 from the four estates they had purchased through the Court.⁵⁷

The Commissioners of the West Indies Encumbered Estates Court calculated that as a result of their sales in nine colonies under their jurisdiction import duties on sugar alone, irrespective of rum and molasses, had shown an increase of at least £40,000.⁵⁸

Following the report of the Commissioners the Colonial Office stated at the end of 1869, that though the value of the Court was undisputed it was a question whether the advantage /

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advantage to the United Kingdom was such as to justify contributions from the British Government. At the same time it was agreed that the charges of West Indies lawyers were usurious and that in London proceedings were cheap and speedy.⁵⁹

The West Indies Committee alarmed at the possibility of the abolishment of the London Court, passed a resolution in 1870, expressing the views of the London merchants as to the advantage of the central court. A deputation awaited on Lord Granville and expressed the opinion that the West Indies² Committee members felt they could induce the colonies to contribute to the support of the Court in London.⁶⁰ The British Government decided to continue financial support for two years.

Considering the report of the Commissioners that the Court was an instrument of good and if, as was maintained, even by some of the sugar proprietors, it had brought estates back into cultivation, why was there growing criticism of the Court? The statement made by Colonial Legislatures that the bulk of work, in the British West Indies to be done by the Court, was finished, was not true. The number of later estates sold by the Court disproved this /

this statement, and in addition, Governor Grant of Jamaica had stated in 1867 that there was still much work for the Court to do in Jamaica.⁶¹ Most of the criticism of the Court from 1870 onwards was to the effect that it was but an instrument of the merchants and that by its recognition of the consignee's lien it was beggaring proprietors and their dependents. Complaints were that, instead of attracting capital as it was purported to do, the Court's decisions were deterring capital from entering the colonies in that no one, not a consignee merchant, would invest and take the risk of having his claim overridden by the consignee's lien. Lawyers in the colonies warned their clients that under the Act, their dependents were liable to lose all their claims on an estate in case of sale,⁶² in view of the consignee's lien as recognized by the Court.

An explanation of the opposition to the continuance of the West Indies Encumbered Estates Court, it would seem, requires a clarifying of the principle and history of the "consignee's lien".

One thing is certain from an examination into the history of the consignee's lien, and that is, that it was /

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was claimed long before the West Indies Encumbered Estates Court gave it recognition.

From the earliest days of the British West Indies mortgages of property in the sugar colonies contained covenants and stipulations not found in mortgages of property situated in England.

The risk to which a West Indies estate was subject, the fluctuations in the price of sugar and the necessity of arranging for its marketing in the United Kingdom had made the sugar proprietor an early applicant to the British merchant for a loan of money. Hence it became the practice that the merchant would make it a condition of the loan that the debtor consign to him for sale, on the usual commission, all the produce of the mortgaged estate, ship it in the vessels sent out by the merchant, and take from the merchant all the supplies required for the estate. The performance of this condition at first rested upon the honour of the proprietor but towards the latter part of the eighteenth century it became the subject of express contract, not introduced into the mortgage deed, but contained in a separate instrument.⁶³ The mortgage ex facie, would become forfeited if the mortgagor did not pay the principal /.

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principal and interest on a given day, usually six or twelve months after the date of mortgage. But by separate instrument the mortgagee agreed to extend the period for payment and to take no steps to foreclose against the debtor if he consigned all the produce to him, on board his vessels and received from him his supplies. Covenants by the mortgager to perform these stipulations were also contained in this separate instrument⁶⁴.

It would not have been thought that these stipulations would have been sustained under English law, as they gave the mortgagee a collateral advantage beyond the legal interest on his mortgage and were therefore excessive and tending to usury. The few times the validity of these covenants were submitted to judicial inquiry in England, decisions upheld them, (there is no evidence of their being submitted for judicial inquiry in the colonies). Both Lord Eldon and Lord Brougham decided in their favour.⁶⁵

In the case of Scott versus Nesbitt, 1808,⁶⁶ the Master's report, in regard to the enquiry on the petition of the consignee, stated that no evidence having been laid before him he did not find that there was any law or usage in /

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in Jamaica for a lien either by a consignee in respect to supplies, or a tenant-in-common having made advances for that purpose. Lord Eldon however admitted the lien and stated:-

"The concern of a West Indies estate cannot be carried on without consignees and all moral justice requires that, for what in the fair discharge of their duty they became liable to in respect of the management of the estate, they should be indemnified with priority to the claim of those who have interests in the estate to be so managed before any person can have any benefit from it."

In the case of *Bunbury versus Winter*⁶⁷, two years later, Lord Eldon also stated:-

"The ground on which the mortgagee lending money on a West Indies estate is allowed the benefit of a covenant for the consignments is two-fold, first because it furnishes him a security for his debt and secondly because the commission he receives is supposed only to be a fair compensation for his trouble."

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In the case of Scott versus Nesbitt Lord Wynford had stated:-

"This is the known mode of dealing between planters and merchants and stopping it would produce mischievous derangement of business. This practice is beneficial to the mortgagee as he derives from it the security of produce, and is beneficial to the mortgagor who, when his produce is consigned to his creditor, is certain of getting its value, and in event of bankruptcy his debt will be awarded to him under the bankrupt laws."⁶⁸

The decision given in the case of Miles versus Ather-ton in 1821, also recognized the priority of the consignee's lien⁶⁹ and the High Court of Chancery acted upon it subsequently. In the case of Morrison versus Morrison in 1854 the priority of the consignee's lien was recognized in accounting for compensation money for slaves.⁷⁰

The consignee's lien appears to have been peculiar to the sugar colonies, although an analogous principal was found in maritime law as regards the priority given to the latest bottomry bond.⁷¹ That is where supplies to /

to ships took precedence of mortgages on ships. However the master of the ship had the imperative duty to notify the owner if at all possible and in this sense it was different from the consignee's lien, which did not have to be publicly registered in any way and in fact was often known only to the owner of the estate and the consignee.⁷²

The West Indies Encumbered Estate's Court referred to the case of Scott versus Nesbitt as the precedent for their decisions and it was referred to in the first estate sold by them, Arnos Vale, in St. Vincent sold in 1858 (see p.).⁷³ In the case of Davis and Boddington in 1859, the Chief Commissioner, Mr. Stonor again allowed a consignee priority of lien. In the case of Harriott and Pengelly in 1862, it was ruled:-

"The consignee is entitled to a lien on the corpus of a West India estate for the advances made to him for its cultivation in priority to all other encumbrancers."⁷⁴

Throughout the years 1862 - 1870 the priority of the consignee's lien appears to have been invoked in approximately half the sales of estates. In the two cases /

cases that were brought before the Privy Council the principle of the consignee's lien was not in question, the decision turning on a different point. However in one of the cases, that of Fraser versus Burgess, 1860, Lord Kingsdown declared, in reference to the consignee's lien:-

"When the authorities are examined the question in what cases and against what parties and to what extent the consignee is entitled to a lien on the corpus of an estate seems left in some degree of uncertainty."⁷⁵

In the other case before the Privy Council, that of Chambers versus Burge, the consignee's lien was spoken of as "this presumed lien."⁷⁶ Thus from looking over the cases where the consignee's lien had been recognized it appears that what was needed was a test case in the Privy Council to decide once and for all the validity of the consignee's lien. Unfortunately, throughout the history of the Court, this was never obtained, chiefly because, so it was claimed by persons in the colonies, those who were injured by the lien could not afford the necessary /

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necessary expense of such an appeal.

Prior to Lord Eldon's decision there is no recognition of the consignee's lien in English law. Under Act 5, Geo III cap. 7 it was ordained that all just debts, duties and demands "are ultimately chargeable on the corpus of an estate" but there was no mention made of the consignee's claims or of their priority.⁷⁷

It would seem from the above that although the consignee's lien could have been invoked against the colonial courts, prior to the establishment of the Encumbered Estates Court, that this did not happen must be attributed to the unlikelihood of any colonial judge recognizing a principle directly in the face of the planting interest and, in addition, its invoking would have availed little without the sale of the estate. The West Indies Encumbered Estates Court performed both functions, and continued to deliver judgments based on the precedents mentioned above. Criticism of the consignee's lien, as has been stated, was not too apparent in the first few years of the Court's existence. Between the years 1862 - 1874, one hundred and fifty-four estates were sold. One third of those had been completely abandoned and many partially
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so.⁷⁸ Towards the latter part of this period the practice of bringing to sale estates, although heavily encumbered, still actively cultivated under the nominal ownership of a sugar proprietor, became common. It was a result of this growing practice that active criticism became manifest by the early 1870's. Many so-called abuses were said to arise from this practice.

It was stated in 1873, that merchants were petitioning for the sale of estates in London where there was little competition in the way of purchasers. These merchants were able to obtain the estates at very low prices. The priority of his lien as consignee being assured, the merchant had an advantage in bidding to the amount of his lien. There were local courts in the colonies but these were not usually resorted to. During the history of the Court's activities in Jamaica, of the total of one hundred and forty-eight estates sold in that colony, only two were sold in the local court.⁷⁹ In Antigua, where seventy-three estates were sold there were fourteen petitions for sale in the local court;⁸⁰ in St. Vincent, of a total of thirty sales, only three were in the local court.⁸¹ In the islands of Nevis and St. Christopher, considering the total number of estates sold, a greater proportion passed through the local court than /

than in any of the other sugar colonies. By 1874, all thirteen estates sold, passed through the London Court, but of the eight estates sold after 1874, seven were petitioned for sale in the local court. These seven estates were however of small size and were purchased for small sums. For example, Belmont and Dasent's, sold in May, 1880, brought in a total of only £2,420. Usually local sales were all to resident proprietors,⁸² but in the case of these two estates the London merchant consignee petitioned for sale and purchased the two estates through the local court. It was observed in regard to the seven estates sold in St. Christopher and Nevis, that the local courts were much slower in granting titles of sale than the London Court and that legal expenses were much higher - these factors in themselves, were sufficient reasons for preference for the London Court.

The continued sale of large estates through the London Court, so residents in the colonies claimed, was to prevent any bids from those, who living in the colony, knew the real value of the estate.⁸³ The Jamaican legislature in 1873 made an attempt to stop this drift of sales through the London Court by establishing in addition to the local court, created by Imperial Act, an independent Encumbered Estates Court possessing the same function as the Court in London and having concurrent jurisdiction with it.⁸⁴ This

attempt /

was conducive to the growth of absenteeism, and that it played /

attempt was not successful and by 1879, the Chief Commissioner of the West Indies Encumbered Estates Court stated that the Jamaican Encumbered Estates Court had not diminished business from Jamaica.⁸⁵

The first outspoken opponent of the Court and the consignee's lien was Sir Graham Briggs, a Barbadian planter who had gone to Nevis and was singularly successful there in introducing a garden-like cultivation that he had practised in Barbados to his profit.⁸⁶

Briggs had supported Governor Pope Hennessy in 1874, when the question of the federation of the Leeward Islands arose.⁸⁷ Mer-

chants connected with the Leewards opposed this federation on the ground that their influence in the individual islands would be thus diminished if federation took place. Briggs continued to

support Hennessy and was extremely critical of the West Indies Encumbered Estates Court, both local and London, in recognizing the priority of the consignee's lien.⁸⁸ In 1875, Briggs cor-

responded with the Colonial Office and denounced the Court, stating it was beggaring resident proprietors by its decisions, that it was conducive to the growth of absenteeism, and that it placed /

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placed a monopoly of estates in the hands of the United Kingdom merchants, and that it prevented capital from entering the colonies.⁸⁹ In further correspondence with the Colonial Office, Briggs criticised the local Encumbered Estates Court in Nevis, and stated:-

"The cost of putting an estate through this Court is, I maintain, now scandalous."

Finally, Briggs accused the Court of inventing the priority of the consignee's lien in favour of the English merchants.

The disclosure that the West India Committee had made a contribution of £250 towards the salaries of the Court in London in 1872,⁹⁰ tended to confirm opinion held in the colonies that the Court was but an instrument of the merchants. This subsidy from the West India Committee occurred only once, and was given in the interval between the cessation of Imperial grant for the upkeep of the Court, and the establishing of a basis for remuneration by fees and commissions for sale of estates. But as stated in a Colonial Office dispatch, it was an "unfortunate occurrence" and raised doubts in the Colonies as to probity of decisions of the /

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the Commissioners in London.⁹¹

Further attention was drawn to the consignee's lien by events in Barbados in 1879. Barbados had not adopted the West Indies Encumbered Estates Act. Land in Barbados had long been considered as first-rate security for investments and it was the common practice in Barbados when purchasing estates, for the vendor to leave a portion of the purchase money in the form of a mortgage on the estate because returns on such an investment were considered as certain and lucrative. A considerable portion of the interest paid on mortgages on Barbadian estates went to residents on the spot and was spent in the island. Abandoned estates in Barbados were unknown. Estates in Barbados that got into difficulties and could not meet obligations imposed on them were put in Chancery. The Master took possession of the estate and carried on cultivation for the benefit of the creditors by the appointment of a Receiver, whose expenses for that purpose were allowed to take precedence of all claims against the property⁹² (the nearest approach to the consignee's lien ~~as~~ was recognized in a West India colony.). Merchants took security for their advances according to date and all /

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all claims had to be registered with the Master of Chancery.⁹³ Good estates did not remain long in Chancery and even indifferent ones sold in Barbados. The majority of liens and encumbrances affecting estates sold in Chancery represented money due to people who did not want the principal sum, but only their regular interest. Mortgages held good in Barbados no matter how many times an estate was sold. The law in Barbados allowed money accumulated in the island's Saving Banks to be invested in sugar estates on mortgages⁹⁴ and the Barbados Mutual Life Assurance Company had substantial investments in the sugar industry of Barbados.⁹⁵ Unlike the other islands it was claimed that advances were never made in Barbados to prevent estates from being abandoned. Securities affecting every plantation in Barbados were recorded so that every merchant could know the claims against it and would know the actual money value of the estate.

The Barbadian system, as described, had worked well to date. In the 1870's the muscovado system of this colony was still prosperous and there was little sign of the depression that would be felt within the next decade. Thus /

Thus when in 1879, an attempt was made to introduce the consignee's lien it met immediate opposition.⁹⁶ Thos. Daniels and Company of Mincing Lane, London were a leading firm of West India merchants, with large interests in Barbados, as well as elsewhere in the West Indies. In 1879, the estate of a planter to whom this company had made large advances was placed in Chancery. Thos. Daniels and Company, well aware of the decisions of the Encumbered Estates Court in the other colonies, lodged a claim for their advances, alleging that as consignee for the estate their claim took precedence of all mortgages.⁹⁷ This claim caused considerable excitement among the planting interests in Barbados. The Barbados Association for the Protection of Liens against Plantations was formed.⁹⁸ The Barbados Mutual Life Assurance Company had invested £150,000 in plantations in the colony, and along with the Savings Banks gave their support in opposing the consignee's claim.⁹⁹ Following Messrs. Daniels' attempt to invoke the consignee's lien, the consignee creditors of Messrs. Hardy sugar proprietors, threatened to put in a consignee's claim at the Court of Chancery.¹⁰⁰ Faced with the possibility of a general attempt by consignee merchants to introduce /

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introduce this principle, the Association of Planters decided to hire counsel to fight their case.¹⁰¹ The Colonial Office was notified that the threat of the Consignee's lien was damaging investment possibilities and destroying confidence in the sugar industry in Barbados, and at the same time, it was stated, Barbadians did not want precedents established in other islands to be introduced in their colony.¹⁰²

The Colonial Office, in a dispatch commenting on Brigg's complaints a short time previously, had stated that if the consignee's lien was not desired in the colonies they could legislate against it.¹⁰³ This Barbados now did. The Barbadian Legislature passed an Act against the consignee's lien in the spring of 1882, stating:-

"Claims have recently been brought forward to have advances ranked as first liens, but there is no difficulty in borrowing money for estates or else in selling the estates at a good price. Such priority claims are inconsistent with and repugnant to the system of real property security. In Barbados real estate, as in England, is capable of alienation /

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alienation, mortgage and charge and thereby affording investments for capital which have always been considered sound and reliable, and on that account, been sought after with the same confidence as similar investments in England. Allowing such claims would cause a serious depreciation in the value of real estate; let these advances be ranked by priority of date and be open to inspection in the Record Office."¹⁰⁴

Daniels and Company had expressed an intention of taking their case to the Privy Council but in the face of opposition raised in Barbados and as the Legislature had passed the Act abolishing the consignee's lien in Barbados, they did not press their claim, and the Colonial Office was informed that "On the advice of council, the case before the Privy Council has been abandoned." Daniels and Company resigned themselves to the usual Chancery process.¹⁰⁵

Perhaps if Daniels and Company had pressed their claim before the Privy Council a test case might have been made and a decision obtained as to the validity of the consignee's /

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consignee's lien. No such opportunity presented itself again.

Lord Kimberley, in 1880, commenting on Sir Graham Brigg's complaint against the abuses of the West Indies Encumbered Estates Court which were followed by the Messrs. Daniels incident, expressed the need of a Commission of Inquiry into the working of the Encumbered Estates Act in the West Indies.¹⁰⁶ By the early 1880's, the finances of a number of the sugar colonies, chiefly those in which the Court had jurisdiction, were in such a confused and indebted state resulting chiefly from loans for coolie immigration and unpaid debts dating from the hurricane relief of 1843. In addition the tariff systems were a cause of vexation due to lack of uniformity of duties in the various colonies and complaints that food-stuffs were too severely taxed.¹⁰⁷ The Home Government had decided in 1882 to appoint a Royal Commission to investigate and report on these matters, and, as the recent incidents had arisen in regard to the consignee's lien, it was decided that an examination into the working of the West Indies Encumbered Estates Court could be made in conjunction with the investigation of finances and tariffs.¹⁰⁸

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The Royal Commissioners Colonel William Crossman and George Baden Powell went to the British West Indies in Dec. 1882, returning in April 1883.¹⁰⁹ Distinct from their main report and evidence on finance they issued a smaller report and summary of evidence on the Encumbered Estates Court.¹¹⁰ Briefly speaking they had little that was good to say about it.

The Royal Commissioners of 1883 first commented on the expense of the Court and stated that it belied the original intention of giving an indefeasible title to an estate at a cheap rate- for example, fees and costs were £400 in the case of estates in Nevis which sold for a total of £2,400.¹¹¹ The remuneration of the judges of the Court by a 2% commission on the gross amount of purchase price led the community to distrust the Court as having a vested interest in bringing estates to sale.¹¹² The Royal Commissioners criticised the Court for the length of time it took before a title of sale was granted - cases were kept on an average two and a half years and as many as five years in some instances before being sold.¹¹³ Above all the Royal Commissioners indicted the Court for its recognition of the priority of the consignee's lien /



lien. This was a construction of the Court, - so Crossman and Powell claimed, - based on an old decision of Lord Eldon's under an entirely different state of affairs, when advances were necessary for the upkeep of slaves.¹¹⁴ Apart from Lord Eldon's decision there was little to support the Court's decisions granting priority to the consignee's lien. In the two cases brought before the Privy Council,¹¹⁵ although the question of the consignee's lien was not threshed out, the issue of the cases not depending on that principle, still the Privy Council had not spoken in favour of the lien and apparently deliberately refrained from pronouncing on it.¹¹⁶

The Royal Commissioners admitted that a limited lien was recognized in some of the colonies as St. Lucia, Trinidad and British Guiana, but the lien was recognized on the crop only and the year of the crop was specified.¹¹⁷ There was no express law by which a person furnishing an advance for supplies had any lien on the corpus of the estate itself, and furthermore to assert that it had priority over other mortgages and claims on an estate was definitely not recognized by any law of the British West Indies.¹¹⁸

Crossman /

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the Crossman and Powell repeated the criticism that had been made by Briggs and other planters that the Court was but an instrument of the consignee merchants. As there existed but a small number of merchants trading with each colony at any one time there existed no competition at sales in the London Court,¹¹⁹ the merchants not interfering with each other's business. Many examples existed for the Royal Commissioners to draw on to illustrate their charge that the Court was creating a monopoly in the hands of the merchants. In St. Vincent, the firm of Porter and Company had acquired most of the twenty estates they owned in that colony, through the Court.¹²⁰ In Montserrat, the house of Sturge of Birmingham had acquired seven estates through the Court, and in Jamaica. Cottam Mortan and Company had added to their holdings there by purchases through the Court, and many more examples were available of companies acquiring numerous estates in Jamaica and the other colonies.¹²¹

From the evidence examined in the Colonial Office and from evidence obtained by Crossman and Powell there is no indication that the local merchant in the colonies was concerned in petitioning for the sale of estates under the / /

the consignee's lien.¹²² The merchant in the United Kingdom apparently invoked his claim of priority in all instances where it was effected.

Numerous incidents of hardship wrought by the Court on legatees, widows, children and others whose claims were passed over, were given by the Royal Commissioners. Much hardship resulted from persons, who had claims on the estates, being prevented by distance and expense from attending the London Court in person or in obtaining legal services to press their claims.¹²³

Proof of the injury to the colonies caused by the Court's decisions, was that in those colonies as British Guiana, Trinidad and Barbados, where the Court had no jurisdiction, conditions were much more prosperous and production there was increasing while in the islands where the Court obtained there was little or no improvement in conditions.¹²⁴

Finally, the report of the commissioners urged the abolition of the Encumbered Estates Court.¹²⁵

The commissioners of the West Indies Encumbered Estates Court in London were given an opportunity of replying to the criticism contained in Crossman and Powell's report /

report.

This criticism offered itself to rebuttal and the Commissioners of the Encumbered Estates Court had an easy task of picking it to pieces, which they did effectively. There had been some criticism of the manner in which evidence for the report had been gathered in the colonies, in that it was not representative of all opinion and that it was not kept distinct according to persons giving it. Letters from witnesses appeared in Jamaican papers and claimed misinterpretation of their evidence.¹²⁶ Much of this so-called misrepresentation may be attributed to the fact that the Royal Commissioners had no short-hand writer and verbal evidence by the time it was recorded no doubt was inexact. This alleged deficiency in the Royal Commissioner's report did not add to its trustworthiness.

As regards the expenses of the Court, the Commissioners denied that these were unduly high. The example given of estates in Nevis was an exceptionable instance. The total fees for the sale of twenty-four estates in 1870 only amounted to £817.¹²⁷ The length of time that estates remained in the Court before being sold was much less than formerly under Chancery. Instances were frequent /

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frequent of estates remaining in Chancery as long as forty years.¹²⁸ Considering the legal work involved in tracing out the ownership and claims on estates, the time it took for exchange of correspondence between the Colonies and the United Kingdom, the difficulty in ascertaining boundaries of estates, which in the West Indies were always vague,¹²⁹ often marked only by a stone, in view of all this, the time required to bring an estate to sale was easily understandable. There was always the certainty that the West Indies Encumbered Estates Court could grant a clear parliamentary title much appreciated by purchasers.

The statement of Crossman and Powell that the decisions of the Court were inflicting injury to persons with claims on the estate this was, so the commissioners of the Court claimed, strange ground on which to criticize the decisions of an English Court of Justice.¹³⁰ The case of Mount Pleasant estate in Grenada, where the dispossession of a Mrs. McEwen and others was alleged to have taken place, did not result from any injustice on the part of the Commissioners of the Court.¹³¹ In this instance many of the claims / ^{were} purely got up for the occasion and proved to be groundless. It was unavoidable in selling large estates, on /

on which small holders had encroached during the period of the estates abandonment, but that some of these persons should suffer hardship. ~~were correct. There was little~~

Referring to the chief criticism that the Court had established the priority of the consignee's lien, the commissioners of the Court said that Crossman and Powell had fallen into the not uncommon error of identifying the Court with the law that Court applied.¹³² The Encumbered Estates Court was bound to recognize the consignee's lien as established by legal precedent, and if the consignee's lien was not wanted in the colonies it lay within the power of the local legislatures to reform that law.¹³³

Regarding the charge that the Court's jurisdiction militated against an influx of capital the commissioners of the Court quoted merchants who stated that only because of the Court and its recognition of priority of the consignee's lien would they make advances to sugar estates.¹³⁴ The growing depression in the sugar industry resulting from increasing beet and cane sugar competition, the abolishment of the sugar duties in the United Kingdom in 1874 which had favoured the muscovado type of sugar, made it increasingly difficult to obtain advances unless such security as that given /

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given by the consignee's lien priority were granted.¹³⁵

In some respects, the statements made in the report of Crossman and Powell were correct. There was little competition at sales of West Indies estates in London (although there were exceptions as could be discerned from newspaper accounts of such sales)¹³⁶ This lack of competition was not wholly attributable to the inability of would-be local purchasers prevented from attending because of distance, nor was it wholly a result of the inability of any bidder competing on favourable terms with a consignee merchant who could play on the margin of his lien; other reasons concerned were the great fall in the price of sugar which was increasingly a deterrent to investment in sugar estates, and in addition there did seem to be a tacit understanding between merchants not to interfere with each other's business. In all the cases handled by the Court there is only one where there is evidence of one consignee's lien overriding the lien of another consignee, and in this case, that of *Chambers versus Davidson* (1866), no doubt was expressed as to the priority of the last consignee's lien, the question here depended rather on whether such a lien had really /

really been covenanted.¹³⁷

Large estates were usually sold in London where buyers with sufficient capital could be found. In the colonies legal fees were usurious and legal services inefficient compared with those obtainable in London. Many of the West Indies colonies imposed stamp duties on the conveyances and processes of the Court. These charges were not levied in the English Court.¹³⁸

On the whole the Colonial Office view was in agreement with that of the Commissioners of the Encumbered Estates Court, and much of the criticism of the Royal Commissioners, Crossman and Powell, was discounted.¹³⁹ What was revealed, however, was that the general consensus of opinion in the colonies was against the continuance of the Court. As regards the consignee's lien the Colonial Office view was that this was not a construction of the Court, but was definitely recognized before the Court began its work. Even if the Court were abolished it could scarcely be assumed that the colonial courts would not now take a different view of the consignee's lien.¹⁴⁰ There was also good reason to think that if the consignee's lien were abolished by legislation in each colony, it would /

would be difficult to replace it by any less severe system of raising money when a property was in extremis.¹⁴¹

The argument of Crossman and Powell that colonies in which the Court did not obtain were more prosperous¹⁴² did not take into account many other factors which accounted for this apparent prosperity. In British Guiana and Trinidad the consignee system never existed to the extent that it did in the other colonies and there was less need for an Encumbered Estates Court and the priority of the consignee's lien. In addition these colonies had dependable indentured labour, modern methods of manufacture, absence of heavily encumbered estates, and marketing practices in these colonies were more in accord with the needs of the time. It was erroneous to equate the absence or presence of prosperity in the colonies with the presence or absence of the Encumbered Estates Act.

As regards the statement of the Colonial Office that there was no assurance that the colonial courts would not recognize the consignee's lien this possibility was quickly removed. In 1882, as has been mentioned, the Barbados Legislature had passed an ordinance making the consignee's /

consignee's lien in that colony illegal.¹⁴³ Jamaica passed a similar act in 1885¹⁴⁴ and the same course was followed in the other colonies with slight variations, usually to the effect that a limited lien only on the crop of the estate was recognized in regard to advances of merchants.¹⁴⁵

When in 1885 the legislatures of the various colonies were invited to express their views on the West Indies Encumbered Estates Court not only had a number of the colonies passed acts against the consignee's liens, but they had all passed resolutions in favour of the abolition of the Court with one exception,¹⁴⁶ Tobago which subsequently did so.

The work of the Encumbered Estates Court was largely finished by the time the Royal Commissioners' report had been discussed and acted on, and by April 1889, all the colonies had applied for and passed Orders in Council for the abolition of the Act.¹⁴⁷ It was decided to carry on the Court in London for a further three years which it was thought might be required for the completion of pending cases already in the hands of the Commissioners.¹⁴⁸

Within a year or two of the abolition of the Court
in /

in the colonies and the nullifying of the consignee's lien, difficulties arose that might have been eased if the Act had still been in effect. The year 1884 was a year of depression in the British West Indies sugar industry. An exceptional increase of bounty to the beet sugar industry in Europe in 1883 - 4 was felt by 1884 - 5 and henceforth competition was consistent and severe.¹⁴⁹

In Barbados the independent spirit exhibited in 1880 and the claim that the sugar estates were the 'Consols of Barbados' presenting opportunities for sound investments, no longer held good under depression conditions. By 1886 a large number of estates were in the Court of Chancery in Barbados and no purchasers for these estates could be found.¹⁵⁰ Merchants connected with Barbados estates advertised that no advances would be given without first-rate security.¹⁵¹

The West Indies Committee, the organ of West Indian merchants in the United Kingdom, in 1885 petitioned the Colonial Office to authorize colonial governments to guarantee advances of money made to sugar proprietors, the limited lien in existence in some of the colonies was no longer held to be sufficient security in the face of /

of falling sugar prices.¹⁵² The Governor of Barbados went to the extent of guaranteeing the security of the colonial finances for advances made to sugar proprietors in that island, without the sanction of the Colonial Office. The Secretary of State for Colonies reproved the Governor and said he "could not approve the pledge of the government for advances made to private individuals ... a precedent may be establishment which may be interpreted as an encouragement for still wider and more unsound schemes." The Secretary of State for Colonies only forbore from disallowing the Bill "in consideration of the great expectations which had evidently been raised" and the measure was not allowed to continue beyond one year.¹⁵³

The defects of the Chancery system in Barbados were now revealed as a result of the depression in the sugar industry.¹⁵⁴

Estates in Barbados had for generations brought such high prices that those now in the Court of Chancery still were appraised at a much higher value than the price of sugar warranted. This high appraisal was attributed by the attorney General of Barbados to the corporate opposition /

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opposition on the part of all persons in Barbados interested in sugar estates. They opposed any reduction in price lower than the estate would have brought in better times, because all those whose debts did not come within the value of the plantation at its reduced price would lose their money. Under this system a mortgagee had the power to throw an estate into Chancery but had no power to bring it to sale in the open market. In Chancery, the estate was appraised and could not be sold below this appraised value, which being too high, the estate was not sold at all.¹⁵⁵

The Master in Chancery of Barbados stated in 1897, that some plantations had been appraised as many as eight times without effecting a sale and that in two instances "the receiver got to the end of his tether and applied to the Court of Chancery to abandon the cultivation of the land and let it out into lots."^{155(a)}

This system enabled many nominal owners to live on their estates during the years of depression from 1884 onwards, because no purchasers could be found for these estates at their high appraisalment /

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appraisment.

In 1898, the Colonial Secretary of Barbados stated, as regards the Chancery system:-

"it has only so far resulted in keeping fitful life in a bankrupt estate, in keeping the owner still owner in name, and in holding out a will of the wisp fantasy to owner and mortgagees of better days to come."^{155(b)}

By 1898, the Attorney General of Barbados was urging the sale of estates in Chancery at public auction to the highest bidder, but he was opposed by the majority of planters and mortgagees. At the end of the century when the need for central factories could be postponed no longer, difficulties also arose because of the opposition of mortgagees to sugar proprietors entering into contracts for the manufacture of their cane.¹⁵⁶ This aspect will be considered in detail in a later chapter.

The West Indies Encumbered Estates Court, which was continued on in the form of the London Court for three years /

years from 1889, disposed of its last estate early in the year 1892, and on July 31st, 1892, the Court ceased to exist. The Chief Commissioner, Mr. Cust, as a reward for his long service from the passing of the original Act in 1854 to the final winding up of the Court, received a knighthood.¹⁵⁷ The records of the Court were transposed to the Public Records Office in January, 1893.¹⁵⁸

By 1893 a final summing up of the work of the West Indies Encumbered Estates Court is possible. In all, a total of 382 estates had been sold. Figures given here show the number of and total prices received for the estates sold in the various colonies.¹⁵⁹

No. of estates	Colony	Purchase money £
148	Jamaica	233,483
73	Antigua	119,540
15	St. Kitts	61,890
30	St. Vincent	59,540
29	Grenada	38,330
50	Tobago	35,630
6	Dominica	10,900
25	Montserrat	10,100
6	Nevis	6,100
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382		£575,513
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Of these 382 estates, thirty-two had been sold in the local /

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local courts.

The most noticeable feature of these sales was that they tended to concentrate estates in fewer hands than prior to the existence of the Court. In examining the records of sales we find for example, twelve estates in Jamaica sold to one petitioner and nine to another.¹⁶⁰

A few of the United Kingdom merchants who purchased Jamaican estates were - Hawthorne Shedden and Company, who already owned Goschen and Whitney estates in Jamaica and who added to these Holland and Spring Garden estates, both of large acreage.¹⁶¹ H. Sewell and Company, owners of Harmony Hall, purchased Cave Valley and Vale Royal through the Court. J. Bravo and Company; Davidsons and Company; Sliffe, Henry and Sweet; Bosanquet, Curtis and Company, also acquired a good number of estates. Many of these firms, as for example Bosanquet, Curtis and Company, already owned estates in the other colonies.

Similar amalgamations took place in the other colonies. In St. Vincent, Cavan Bros. and Porter and Company had acquired large estates through the Court. Cavan Bros. had at the same time large holdings in British Guiana, Trinidad and Barbados.¹⁶² In Tobago, we have seventeen estates /

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estates passing to the ownership of one person;¹⁶³ in Antigua the same trend¹⁶⁴ took place and likewise in the other colonies. This amalgamation of estates is more fully treated in a later section.

In evaluating the work of the Court it is evident that the benefits to the merchants in England were more immediate and direct, while benefits to the colonies in general were more prospective and indirect. Letters from merchants to the Commissioners of the Court gave in detail production figures of sugar obtained from estates they had obtained through the Court (see p. 31). By 1885, Porter and Sons were stated to have cleared a profit of £100,000 from estates purchased through the Court, in the five years ending at this date.¹⁶⁵ In Montserrat, the Sturge Bros. of Birmingham had taken to the growing of limes and reported success.¹⁶⁶ In Grenada, a number of the estates had been converted into cocoa plantations.¹⁶⁷ In St. Vincent, a large number of estates were cultivated in arrowroot and sugar. In Jamaica, the most beneficial effect of the Encumbered Estates Act was experienced. That this was so is attributable to that colony having the greatest number of abandoned estates to be catered for /

for by the Court, and when these estates were purchased they were not always brought back into sugar cultivation. Jamaica by the 1890's to a greater degree than any of the other British West Indies, had turned to other products. Sugar no longer was considered to be all-important, having dropped to third place in the list of exports.¹⁶⁸ The banana trade with the United States had grown to large proportions and abandoned sugar estates proved to be ideal for banana growing. A number of the estates purchased through the Court became cattle pens or were farmed for their logwood, the latter product finding a ready sale towards the end of the nineteenth century and the export of which was equal in value to that of sugar.¹⁶⁹

When the West Indies Royal Commission of 1897 presented its findings in 1898, the long range effect of the Encumbered Estates Court was more discernible after the lapse of a few years. There are two sides to the picture obtainable from evidence in this report. In Antigua, and St. Vincent, where more estates had been sold through the Court than in any other islands of similar size, it was found that practically all estates were unmortgaged in contrast, for example, to Barbados where the majority were heavily /

heavily encumbered.¹⁷⁰ In Jamaica, where the Court had been the most active, conditions were found to be most prosperous and this was attributed to the decreasing emphasis placed on sugar cultivation. Most of the estates sold through the Court were in prosperous cultivation of other products. In the smaller islands, as Nevis and St. Kitts, estates sold through the Court were hanging on when others had given up. A number of the planters giving evidence voiced the wish that the West Indies Encumbered Estates Act might still be in effect and spoke of the greater facility with which advances were obtained when the consignee's lien was in effect.¹⁷¹

The other side of the picture is that in Antigua and St. Vincent, notably the latter, merchants who acquired a large number of estates at a small price, through the Court, now that an over-all depression existed, decided to reduce expenditure by limiting and finally ceasing cultivation. Some of these firms could afford to do this. Their estates had been acquired cheaply and the muscovado system had been profitable without installing expensive improvements, apart from centrifugals. These firms having sufficient capital and other interests, could /

could bide their time and wait for a rise in price, whereas resident proprietors would perhaps have continued to cultivate. The result of this state of affairs was depressed labour conditions and hardship in these islands, more so aggravated because of a land monopoly which these firms had maintained to assure themselves of sufficient landless labour when they so desired it. The Colonial Office was aware of conditions existing in these Colonies and especially singled out Porter and Sons in St. Vincent and encouraged the Colonial Legislature there to levy a tax on uncultivated land, thus posing the issue of either cultivating or relinquishing land for non-payment of taxes.¹⁷²

The British West Indies had to pass through a period of adjustment if their sugar industry was to survive in the latter half of the nineteenth century. In Trinidad and British Guiana painful adjustment was largely avoided due to the historical circumstances of those colonies in that they had not the traditional antiquated habits to break away from and to a considerable extent had gone abruptly into modern methods of sugar technique as soon as these were available after the abolition of slavery.

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In the sugar colonies where the West Indies Encumbered Estates Court operated, the period of transition was hastened by the work of the Court in bringing estates under solvent ownership. It was difficult while facilitating this transition, to avoid exacerbating the feelings of many of the planting community. There was no easy solution to their difficulties and some measures such as the West Indies Encumbered Estates Act introduced were necessary.

1. P.P. 1847 - 8. vol. 23. Part I. QQ.4929 - 36; 6904 - 6; 12964 - 82.
2. Pares, R. A. West Indian Fortune. London 1950. pp. 249, 316.
3. P.P. 1850. vol. 36. Annual Report. St. Lucia, 1849.
4. Ibid. pp. 186 - 8.
5. Hansard. 1848. vol. 134. pp. 488 - 92.
6. Cust, R. J. The West Indies Encumbered Estates Act. London 1859. p. 12.
7. Ibid. p. 12.
8. Hansard. 1848. vol. 134. p. 492.
Cust. Op. cit. p. 7.
Under the influence of the Irish Encumbered Estates Act upwards of three million pounds in nine years was introduced into Ireland and twenty million pounds of Irish capital was invested in the purchase of land. The total number of purchasers was 8,600.
9. Cust. Op. cit. see preface.
- 9a Cust, Suppt. 1874; C.O. 71/134. Mar. 13, 1867;
10. P.P. 1884. vol. 55. Cmd. 4234. p. 837. (Aug. 13, 1869. C.O. 318/257)
11. Cust. Op. cit. p. 48.
12. Statutes at Large. 1854 - 5. 17-18-19. Vict. c117.
13. Ibid. Amendment Act. 21 - 22. Vict. Chapt. 96. See C.O. 318/263. No. 8864. Sept. 2. 1872.
14. C.O. 318/231. No. 6472. July 19. 1861.
15. Cust. Op. cit. p. 31.
16. Ibid. p. 144.
17. Weekly Reporter. vol. III. London. March 29. 1860. p. 376.

- 18. St. Vincent Gazette. St. Vincent. May 29. 1858.
- 19. P.P. 1862. vol. 148. p. 2.
C.O. 441/3 - 12. No. 1. Dec. 28. 1869.
- 20. C.O. 318/231. No. 6929. Aug. 1st. 1861.
Mr. Hossack placed a high value on these 231 estates - approx. £1,600,140: 0: 0.
- 21. Loc. cit.
- 22. Jamaica Guardian. Aug. 22. 1863.
There were numerous complaints that owners before abandoning estates would strip them of and sell all moveable machinery.
- 23. C.O. 441/3-12. Jan. 1867. Memo. on Commissioners' Report.
- 24. C.O. 441/3-12. Dec. 28. 1869. Commissioners' Report.
- 25. C.O. 441/3-12. Jan. 1867. Memo on Commissioners' Report.
- 26. C.O. 318/263. No. 8864. Sept. 2. 1872.
- 27. Jamaica Guardian. August 22. 1863. January 13. 14. 1864.
A number of these estates were coffee estates. A few also were cattle "penns".
- 28. P.P. 1884. vol.55. Cmd. 3982. p. 837.
- 29. See appendix to Commissioners' Return. C.O. 443/3-12. January 1867. Petitioners were all in this capacity. Most of these heavy charges as seen from these instances in this appendix, were placed on estates in the period approx. 1770 - 1820.
- 30. C.O. 441/3-12. January 1867. Commissioners' returns.
- 31. Cust. Op. cit. Supplement. 1874. see for example Grove Estate in Antigua. Messrs. Shanley were mortgagees of a legacy of £500 on this estate.

32. See C.O. 441/3-12. January. 1867. Commissioners' returns.
33. P.P. 1862. vol. 148. Returns of West Indies Encumbered Estates Court.
34. P.P. 1884. vol. 55. Cmd. 3982. pp. 837-859-861.
35. C.O. 28/221. No. 128. Aug. 9. 1886.
C.O. 28/250. No. 192. Aug. 28. 1899.
36. P.P. 1884. vol. 55. Cmd. 3982. see letters of Oct. 29, 30. 1860.
37. C.O. 295/308. 8 Dec. 1885.
38. C.O. 295/308. 8 Dec. 1885;
P.P. 1884. vol. 55. Cmd. 3982. p. 859.
- 38a. Powell, J.J. Treatise on Mortgages, London, 1822. pp. 453; 556-9; 561.
39. Times. Sept. 17. 1883. p. 10. Letter from H. R. Droop. Lincoln's Inn.
Burge's Colonial Laws. London. 1838. vol. III. p. 287. "The registry acts of the West India colonies, exclude the doctrine of tacking."
- 39a. Burge, vol. III. p. 287.
- 39b. Burge, vol. II. p. 829.
40. Unless the consignee merchant cultivated it or the Receiver in Chancery did so, as in Barbados, see pp. 8, 25.
- 40a. Howard, J. H. Laws of the British Colonies, vol. II. London, 1827. p.
- 40b. Burge, vol. II. p. 650.
- 40c. Ibid. p. 645.
- 40d. Ibid. p. 650.

- 40e. Ibid. p. 653.
- 40f. P.P. 1898. vol. 50. Appendix c. Part III. P. 170.
- 40g. Loc. cit.
- 41. P.P. 1866. vol. 49. Annual Report for the Virgin Islands.
- 42. C.O. 318/274. No. 12618. 28 June. 1884.
- 43. C.O. 7/130. No. 113, 1867.
- 44. Loc. cit.
- 45. C.O. 7/137. No. 76. Oct. 14. 1868.
- 46. C.O. 318/263. No. 716. July 18. 1871. C.O. 441/3-12. Dec. 28. 1869. C.O. 71/137. No. 76. Oct. 14. 1868.
- 47. C.O. 137/464. No. 165. Oct. 8. 1868.

C.O. 441/3-12. Dec. 28. 1869. Annual Report.

Loc. cit.

C.O. 318/267. No. I. Dec. 28. 1869.

C.O. 318/266. No. 2803. Sept. 4. 1869.

C.O. 318/266. No. 8165. July 18. 1871.

C.O. 138/177. Feb. 9. 1867.

C.O. 28/221. No. 126. Aug. 2. 1868.

Burge. Op. cit. p. 279.

Burge. Op. cit. p. 279.

Burge. Op. cit. p. 281-2. pp. 1869. vol. 50. Cmd. 3662. p. 1.

Burge. Op. cit. p. 354-6. pp. 1869. vol. 50. Cmd. 3662. p. 1.2.

Cust. Op. cit. p. 172.

48. C.O. 441/3-12. Dec. 28. 1869.
49. Loc. cit.
50. Loc. cit.
51. Loc. cit.
52. C.O. 175/18. No. 177. Oct. 17. 1868.
C.O. 7/135. Letter of H. Liggin to Sec. of State.
1878.
53. C.O. 441/3-12. No. 2. Dec. 28/1869.
54. C.O. 7/131. No. 9. 1867. Commissioners' Letter.
55. C.O. 318/260. No. 7. Dec. 29. 1870.
C.O. 441/3-12. No. 1. Dec. 28. 1869.
C.O. 441/3-12. Jan. 1867.
56. C.O. 7/131. No. 9. 1867. Commissioners' Letter.
57. C.O. 441/3-12. Dec. 28. 1869. Commissioners'
Report.
58. Loc. cit.
59. C.O. 318/257. No. I. Dec. 28. 1869.
C.O. 318/260. No. 2602. Sept. 8. 1870.
60. C.O. 318/260. No. 8185. July 28. 1870.
61. C.O. 138/177. Feb. 9. 1867.
62. C.O. 28/221. No. 128. Aug. 9. 1886.
63. Burge. Op. cit. p. 279.
64. Burge. Op. cit. p. 279.
65. Burge. Op. cit. p. 281-2, pp. 1884. vol. 53.
Cmd. 3982. p. 1.
66. Burge. Op. cit. p. 354-5, pp. 1884. vol. 53.
Cmd. 3982. p. 1.2.
Cust. Op. cit. p. 172.

- 67. Burge. Op. cit. p. 281.
- 68. Cust. Op. cit. p. 175.
- 69. Burge. Op. cit. pp. 353 - 4.
- 70. P.P. 1884. vol. 55. Cmd. 3982. p. 839.
- 71. C.O. 318/273. No. 3781, April 5, 1875. See here for/brief discussion of this principle of maritime law. See also, P.P. 1884. Part III. p. 157.
- 72. Loc. cit.
- 73. Cust. Op. cit. p. 172.
- 74. P.P. 1884. vol. 55. p. 840.
- 75. Loc. cit.
Weekly Reporter. vol. 111. London. Mar. 29. 1860.
p. 376.
- 76. P.P. 1884. vol. 55. Cmd. 4234. p. 4.
C.O. 318/273. No. 3781. April 5. 1875.
- 77. P.P. 1884. vol. 55. p. 841.
- 78. Cust. Op. cit. Supplement. 1874. p. 3.
- 79. C.O. 441/2-11. List of petitions for sales.
- 80. Loc. cit.
- 81. Loc. cit.
- 82. Ibid. See list of estates and acreage.
- 83. C.O. 318/274. No. 9411. June 24. 1880.
- 84. C.O. 441/2-14. No. 9. 1883.
- 85. C.O. 318/273. No. 1258. Jan. 25. 1879.
- 86. C.O. 318/275. No. 3781. April. 1875.

- 87. C.O. 318/274. June 24. 1880.
- 88. C.O. 318/273. No. 3781. April 5. 1875.
C.O. 318/274. No. 9411. June 24. 1880.
- 89. Loc. cit.
- 90. C.O. 318/274. No. 9411. June 24. 1880. The Under
Sec. of State for Colonies remarked "I confess
it seems to me utterly wrong that even the pay-
ment of £250 should have been allowed to be re-
ceived."
- 91. Loc. cit.
Times. Sept. 1/1883. p. 8.
- 92. Barbados Herald. May 5. 1879.
- 93. Barbados Globe. Feb. 15. 1866.
- 94. C.O. 321/26. No. 67. 1879.
- 95. C.O. 321/33. No. 8657. May 9. 1879.
- 96. C.O. 321/26. No. 67. May 9. 1879.
- 97. C.O. 321/26. No. 67. May 9. 1879.
- 98. C.O. 321/26. No. 67. May 9. 1879.
Barbados Globe. May 1st 1879.
- 99. C.O. 321/33. No. 8657. May 9. 1879.
- 100. C.O. 318/274. No. 9411. June 24. 1880.
- 101. C.O. 321/26. No. 67. May 9. 1879.
- 102. Loc. cit.
- 103. C.O. 318/274. No. 12618. June 28. 1880.
- 104. C.O. 321/51. Mar. 1st. 1882.
- 105. C.O. 321/51. No. 7607. April 5. 1882.

- 106. C.O. 321/274. No. 9411. June 24. 1880.
- 107. P.P. 1884. vol. 55. Part IV. Supplementary Remarks.
- 108. Ibid. Cmd. 3982. p. 837.
- 109. P.P. 1884. vol. 55. Part III. p. 3.
- 110. Ibid. separate reports. Cmd. 3982. Cmd. 4234.
- 111. Ibid. Cmd. 3982. p. 838.
- 112. P.P. 1884. vol. 55. Cmd. 3982. p. 838.
- 113. P.P. 1884. vol. 55. Cmd. 3982. p. 838.
- 114. Loc. cit.
- 115. Loc. cit.
- 116. Ibid. Cmd. 4234. No. 1884. p. 4.
- 117. Burge. Op. cit. pp. 359 - 67.
 P.P. 1884. vol. 55. p. 550.
 P.P. 1884. vol. 55. Cmd. 4234. p. 11.
- 118. P.P. 1884. vol. 53. Cmd. 3982. p. 1.
 P.P. 1884. vol. 55. Part II. p. 86.
- 119. P.P. 1884. vol. 55. Cmd. 3982. pp. 838 - 40.
- 120. C.O. 321/102. No. 28. March 1. 1888.
- 121. C.O. 318/278. Nov. 5. 1886.
- 122. See Pares. Op. cit. p. 241. Local merchants were unimportant figures as regards the financing of estates. This was also true in the second half of the nineteenth century.
- 123. C.O. 137/496. Jamaica. 1884. No. 172.
- 124. P.P. 1884. vol. 55. Cmd. 4234. p. 12.
- 125. P.P. 1884. vol. 55. Cmd. 3982. p. 840.

126. C.O. 137/496. Jamaica. 1884. No. 172.
127. C.O. 318/260. No. 7. Dec. 29. 1870.
128. P.P. 1866. vol. 49. Annual Report. Virgin Islands.
129. P.P. 1884. vol. 55. Cmd. 3982. p. 838.
130. P.P. 1884. vol. 55. Cmd. 4234. p. 18.
131. P.P. 1884. vol. 55. Cmd. 4234. p. 16.
132. Ibid. p. 8.
133. P.P. 1884. vol. 55. Cmd. 4234. pp. 8 - 9.
134. Times. Sept. 4. 1883.
135. P.P. 1884. vol. Cmd. 4234. passim. see also Commissioners' Reports of 1867, 1869.
136. Times. Jan. 24. 1884. p. 11.
137. Cust. Op. cit. Supplement. 1874. p. 12.
138. P.P. 1884. vol. 55. Cmd. 4234. p. 13.
P.P. 1884. vol. 55. Cmd. 3982. p. 838.
139. C.O. 318/274. No. 12618. June 28, 1883.
C.O. 441/3-13. Letter of Oct. 23. 1884. Mt.
Pleasant estate in Grenada was one of the nine estates left by Mr. Shears who died in 1879. In some of these estates he had a moiety, in others a third. The Royal Commissioners, Crossman and Powell, maintained that by this sale, a number of persons were deprived of their incomes unjustly.
140. C.O. 318/274. June 28. 1884.
141. Loc. cit.
142. P.P. 1884. vol. 55. Cmd. 3982. p. 838.

- 143. C.O. 321/51. March 1st. 1882.
- 144. C.O. 295/306. No. 138. May 26. 1885.
- 145. C.O. 152/172. No. 253. Aug. 17. 1888.
C.O. 28/221. Aug. 9/1886.
C.O. 152/172. No. 281. Sept. 28. 1888.
- 146. C.O. 321/98. No. 28. March 3. 1886.
- 147. C.O. 321/102. No. 58. May 14. 1887. St. Vincent.
C.O. 318/278. No. 7870. May 1886.
C.O. 321/100. No. 137. Nov. 13. 1887. Windward
Islands.
C.O. 137/600. No. 215. May 28. 1889. Jamaica.
C.O. 318/280. No. 7323. April. 1889.
C.O. 152/168. 1887. Act to abolish the W. I. En. E. Act.
Leewards.
C.O. 152/172. No. 281. Sept. 28, 1888. Antigua.
- 148. C.O. 318/280. No. 7323. April, 11. 1889.
- 149. P.P. 1886. vol. 23. pp. 241 - 2.
- 150. C.O. 28/221. No. 128. Aug. 9. 1886.
- 151. Loc. cit. Agents of merchants notified the planter
that they would give no more advances as they
would be only open-account creditors.
- 152. C.O. 318/277. No. 8741. May 14. 1885.
- 153. C.O. 28/221. No. 128. Aug. 9. 1886.
- 154. W. Indies Committee Circular. No. 44. Sept. 30. 1889.
- 155. C.O. 28/221. No. 128. Aug. 9. 1886.
- 156. C.O. 28/245. Jan. 7 - 1898; March 12. 1898;
April 1. 1898.
- 157. C.O. 318/278. No. 7870. May. 1886.
- 158. E.E. Loc. cit.

- 159. C.O. 318/282. No. 1403. Jan. 26. 1893.
- 160. C.O. 318/278. No. 5. 1886.
- 161. Mirlees Watson Engineers, Glasgow. Mill book -
record of sales - gives owners of estates.
See also C.O. 441/2-11 - list of sales.
- 162. C.O. 318/282. Jan. 26. 1893.
P.P. 1884. vol. 55. St. Vincent. p. 349.
Mirlees Watson. Op. cit.
- 163. C.O. 441/2-11 - List of sales - note Leith of
Tobago, owner of nine estates.
- 164. C.O. 441/2-11. List of estates sold in Antigua.
- 165. P.P. 1897. vol. 51. St. Vincent. p. 100.
- 166. C.O. 175/18. No. 56. Aug. 4. 1868.
- 167. P.P. 1897. vol. 51. Grenada. pp. 22 - 23.
- 168. P.P. 1897. vol. 50. Part II. p. 59. Jamaica.
Ibid. Appendix B. No. 159.
- 169. P.P. 1897. vol. 51. Jamaica. pp. 271 - 296 passim.
- 170. Cust. Op. cit. p. 43.
P.P. 1897. vol. 51. Antigua. p. 204.
C.O. 441/2-11. 1889. Antigua. List of sales.
- 171. P.P. 1898. vol. 51. Jamaica. p. 403. passim.
- 172. C.O. 321/167. 1896. St. Vincent.

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PERIOD OF PROSPERITY, 1865 - 1874,
AND THE BOUNTY SYSTEM, 1875 - 1884.

The moderate prosperity in the British West Indies Sugar industry (excepting Jamaica), at the year 1865, as described in the introductory survey, continued for the next decade with slight interruption.

The American Civil War, 1861 - 65, had affected all the sugar colonies to some extent, chiefly in the matter of increased price of foodstuffs and timber products, for which the West Indies were increasingly dependent on North America.¹ Trinidad and Barbados, both centres of distribution for foodstuffs, shooks, staves and other products, appear to have been most seriously affected, and in 1862, the Governor of Trinidad remarked on the "checked state of expansion" in that colony because of the Civil War.² By 1865, the minutes of the Council of Barbados state,

"the prospect of the termination of the long and deplorable struggle on the North American continent induces a hope that our commerce with the ports of the United States may return to the wonted channels with restored vigour."³

Benefit /

Benefit from the Civil War appears to have been enjoyed chiefly by the Bahamas - Nassau becoming an entrepot for supplies to the Confederate States.⁴ A number of estates in Jamaica, St. Lucia, and Nevis had been turned to the growing of cotton during the War. This development was however but temporary and the cotton cultivation was abandoned at the end of the War, when American cotton came back in greater supply than before.⁵

The sugar industry of the British West Indies was not seriously affected by the Civil War. At this period only a small (but increasing) portion of sugar, 4,652 tons in 1859 - 61, went to North America, (by 1882, 78,604 tons went to that market)⁶. Most of the American ships bringing down foodstuffs in the late 1850's had returned with very little sugar. The United Kingdom with a scale of duties favouring muscovado sugar as was generally produced, was the chief market for the sugar colonies at this period. In 1858, of a total of 800 vessels clearing the island of Trinidad, 108 were American, and of this number, 67 were in ballast.⁷

Following the cessation of the Civil War, commerce was again /

again re-established with the United States. In the sugar industry there is evidence from all the colonies, Jamaica excepted, to show that producing muscovado was profitable and that producing vacuum pan sugar might be termed lucrative.

By 1871, as regards British Guiana, it was reported

"All the estates in the colony, whose proprietors can muster or borrow money are, since the last modification of the sugar duties in England fast ordering out vacuum pans".⁸

Many estates in British Guiana owned by mercantile firms and persons of wealth, who had acquired them cheaply in the years following Emancipation, and during the financial crisis of 1847 - 8, were now returning good profits. Those estates on which the vacuum pan had been introduced were the leaders both in quality and quantity of sugar produced. Haarlem estate in 1865 was turning out an average of twelve tons of sugar per day (for a period of 100 days) "all sugar being of the best quality bringing 52s. per cwt. in the United Kingdom". The manager of Haarlem in the five years ending at this date drew a commission of six per cent on a total of /

of £50,000 profit - a salary of £600 per year.⁹ Plantation Vergenoegen, in 1868, cleared a net profit of £15,000,¹⁰ and Schoon Ord, in 1870, netted what was termed an "Earl's income" - 17,000.¹¹ By 1871 it was stated that a planter's revenue could be increased by £2,000 a year in British Guiana if cultivation were extended by an additional 200 acres.¹² The annual report of British Guiana for 1867, states that the bonds of that colony were much sought after in the United Kingdom, and "notes of planters are on the whole paid with great punctuality, and legal proceedings are seldom necessary."¹³

In the neighbouring colony of Trinidad the vacuum pan had also been introduced and, as in British Guiana, coolie immigration had helped to ease labour difficulties. Profits were also being made. Large estates making vacuum pan sugar were increasingly profitable with reduction of duties on that class of sugar in the United Kingdom. As in British Guiana, a tendency to amalgamate estates was evident, and we have planters as N. Lamont, adopting what he termed a "policy of agglomeration", paying in one instance £10,000 for 250 acres to tack on to his already large holdings.¹⁴

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In the other colonies, where muscovado sugar constituted practically the only kind of sugar made, profits were also evident. Governor Rawson of the Leewards, in 1869, after a tour of inspection of the islands, spoke of the busy scene in Kingstown harbour, St. Vincent, with ships loading sugar.¹⁵ Sugar exports from St. Vincent had increased by 5,000 hogsheads in the period 1861 - 1871. (This increase was probably attributable to the introduction of 1,800 immigrants in the intervening decade). In St. Kitts, Mr. Berkely, of plantation Peters Hall, stated that the plantations, in that colony, by 1872, were in "the zenith" of their prosperity and "were never so successfully cultivated as at the present time".¹⁷ H. Pringle, a West Indian planter, writing in 1869, speaks of Barbados being pre-eminently the most prosperous of the sugar colonies.¹⁸ None of the 508 estates in that colony were abandoned, labour was plentiful and muscovado sugar which cost only £9 a hogshead to produce in Barbados, sold in the United Kingdom as high as £25 and never lower than £15 per hogshead.¹⁹ In giving evidence in 1897 the son of a planter in Barbados referring to this period stated, "My father brought up his eight children and sent me to Oxford /

Oxford on an estate of only 100 acres".²⁰ In the 1860's a number of Barbadian planters had settled in Nevis introducing their art of garden-like cultivation and were also prospering.²¹ Sir Graham Briggs, who opposed the West Indian Encumbered Estates Court, was one of these Barbadian planters who acquired property in Nevis at this period.²²

In contrast to what appears to be a rather rosy picture of the sugar industry in most of the colonies, that of Jamaica showed an industry decreasing in importance in comparison to other products. In 1865 sugar comprised only 41.5 per cent of that colony's total exports.²³ In Jamaica the abandonment of sugar estates was continuing, by 1866 there being but 300 remaining, "the best of upwards of 600 at the time of Emancipation".²⁴ Many of these estates abandoned consisted of land that ought never to have been cultivated, and, in a sense, the progressive decrease was but a concentration on the better estates where there still remained hope of profits.^{24a} The sugar industry in Jamaica tended to shift more and more to the western portion of the island. This movement to the West was explained on the ground that the eastern parishes as Portland, St. Mary and St. Thomas, were the / ion /

the wettest and hence the cost of working the land was greater here. In these parishes cane juice was also said to be more watery than in the drier parishes as Westmoreland and Hanover in the western section of the colony.²⁵

Much of the decreasing importance of sugar in Jamaica arose from scarcity of labour for the sugar estates. The exodus of labourers to the hills and abandoned estates which had begun after Emancipation had never ceased. Mr. Hossack, Attorney General of Jamaica, attributed labour difficulties entirely to the ease with which land and a living could be obtained in Jamaica.²⁶ In view of the fact that over half of the sugar estates had been abandoned since Emancipation and that the population of Jamaica was annually increasing, it is evident that there was an over-all adequate supply of labour, if such labour could be induced to work. There was never however sufficient labour obtainable at those centres where most required. Planters in Jamaica continued throughout the second half of the nineteenth century to request Coolie labour; this subject is considered more fully in a later section.

Jamaica also seems to have suffered from the superior attraction /

attraction of Cuba and Porto Rico, as fields of investment during the second half of the century. At the same time that some Jamaican sugar estates were being dismantled and their machinery sold to sugar estates in Cuba, Cuban sugar estates were returning dividends of 17 per cent on capital invested.²⁷ Strangely enough several Cubans purchased Jamaican sugar estates in this period and, in 1872, one Cuban planter installed £4,000 of machinery on the Jamaican estate he had purchased.²⁸ Some of the better favoured estates in the northwest portion of the colony continued to make profits by specializing in high grade rums, but, on the whole, the sugar industry in Jamaica continued to decline. Other products more than compensated for this decline in sugar. Many of the abandoned estates were converted into cattle pens and logwood plantations, the logwood industry in Jamaica receiving an impetus in 1869 when a rising in Haiti checked the logwood industry there.²⁹ Thus while sugar exports dropped, the exports of other products increased. By 1870 the export of bananas was substantial and the revenue from total exports of Jamaica was higher than ever.³⁰

Much of the prosperity of the British West Indies sugar industry /

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industry as was manifested during the late 1860's and early 1870's is attributable to the scale of sugar duties as was maintained in the United Kingdom.³¹

The gradual equalization of the sugar duties in the United Kingdom had been provided for by the Sugar Duties Act of 1846 and a successive reduction was to take place until 1854. In this year British West Indies sugar and foreign sugar were made subject to the same duty on entry into the United Kingdom.³²

The duty as remained after 1854 was based on a graduated scale, duties successively increasing as the quality of the sugar ranged upwards. After some adjustment during the Crimean war, the following classification and rates of duties were in effect by 1864, - refined sugar, 12/10d. per cwt.; equal to white clayed, 11/8d.; not equal to white clayed, 10/6d.; equal to brown muscovado, 9/4d.; and not equal to brown muscovado, 8/2d.³³ Successive reductions were made until 1874 when sugar duties were completely removed³⁴ in the United Kingdom, but up to this year, both vacuum pan sugar, which came in under the 10/6d. duty, and yellow crystals and muscovado which came in at the lower duties /

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duties had an advantage over the white clayed and partially refined sugars of Cuba, Brazil and Mauritius. These latter sugar colonies had experienced a large development of their sugar industries by the mid-nineteenth century, but, unlike the British West Indies (British Guiana and Trinidad excepted), had installed modern equipment for the expansion of their industry.³⁵

The scale of sugar duties in the United Kingdom was of such benefit to the British West Indies that an old charge against them was that they deliberately lowered the quality of their sugar to bring it under the lower scale of duties - even to the extent of using "good agricultural mould" for this purpose.³⁶ In British Guiana, where vacuum sugar was increasingly made, it was stated by Governor Barkly

"the spoiling of sugar when it seems likely to pass the lowest standard is not of unfrequent occurrence on estates where the vacuum pan is used."³⁷

In 1862, in evidence given before a Royal Commission on Sugar Duties, it was stated,

"the removal of the 16s. duty on higher quality of sugar /

sugar would entirely destroy many of the small West Indian estates."³⁸

When a further slight reduction of sugar duties took place in 1869 a memorial from sugar proprietors in Montserrat claimed that one half of the muscovado estates had been abandoned because of this reduction and, in the same year, Dominican sugar planters stated that the reduction in duty had hurt their low quality sugar.³⁹ But as both these colonies were notoriously backward, even as muscovado producers, these complaints were no indication that muscovado producers in the other colonies, at this date, were suffering from depression.

The method of testing sugar on entry into the United Kingdom for duty purposes by the somewhat rough-and-ready process of terming sugars as white clayed, not equal to white clayed, brown muscovado etc., was by the 1860's unmeaning and deceptive. Vacuum pan dark grey crystals, open steam pan yellow crystals, and various forms of sugar as 'melado', and 'concrete', were now being made.⁴⁰

In 1867, the United Kingdom adopted a classification of sugars /

sugars similar to that known as the Dutch system and which permitted of finer distinctions in the scale of duties than that hitherto used.⁴¹

The old Dutch sugar merchants had used a series of glass jars containing sands of different and accepted shades of colour. The darkest colour was number 1, whence they graded upwards to the lightest, usually number 18. The shade of the 16th jar in the scale was the limit of raw or muscovado sugar. Thus 16. d. s. was the dividing line between sugar for refining purposes and sugar for direct consumption.⁴²

As the result of a chemical analysis carried out at Cologne in 1866, a certain percentage of sucrose was assigned to the various classes in the Dutch Standard. This scale was adopted by England, France, Belgium and the Netherlands in 1867.⁴³ The chief defect of the Dutch Standard, despite the Cologne experiments was that, being based on colour, it permitted manipulation or doctoring of sugar crystals.

The classification of duties adopted in 1867 was not much improvement on the old and the West Indies muscovado producer still enjoyed an advantage until sugar duties were finally /

finally abolished in 1874.

The complete removal of sugar duties in 1874 was a jolt to the British West Indies muscovado sugar producer despite the gradual reduction in duties that had taken place over a period of years.

For the remainder of the nineteenth century the United Kingdom was committed to Free Trade principles and after 1874 all classes of sugar entered the United Kingdom on equal terms. The immediate effect of the abolition of sugar duties was not so much a drop in the price of muscovado as a drop in the price of higher classes of sugar and hence a greatly increased consumption of these sugars.⁴⁴ Consumption of sugar in the United Kingdom had been increasing ever since the Sugar Duties Act, 1846, and had paralleled the successive reductions of sugar-duties since that date. The figures of sugar consumption in the United Kingdom per head, for the period 1840 - 80,⁴⁵ are:-

1840	15.20 lbs.
1850	24.79 "
1860	34.14 "
1870	47.23 "
1880	63.68 "

Over-all /

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Over-all consumption of sugar in the United Kingdom rose from 650,000 tons in 1870 to 930,000 tons in 1880. The British West Indies sugar producers, although maintaining exports to the United Kingdom (a yearly average of 188,746 tons for the period 1870 - 4, compared to 208,173 tons for the period 1875 - 9), felt that they did not share in this increased consumption. The loss in value of muscovado, which had averaged 24/7d. per cwt. for the period 1870 - 4, compared to 21/8d. per cwt. for the period 1875 - 9, (the final figure would have been much lower but for a high price in 1877 caused by the failure of the European beet crop)⁴⁶ also was a cause of grievance to the British West Indian sugar producer.

To add to the difficulties of the West Indies sugar producer the threat from bounty-fed beet sugar took a serious form within a year or two of the removal of the sugar duties.

The history of sugar bounties is an involved one and covers practically the second half of the nineteenth century. In this thesis the bounty question is considered briefly and only in so far as it directly affected the British West Indies sugar industry.

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The cultivation of the beetroot in Europe was first encouraged by Napoleon I, as one of his plans to injure the commerce of England and to make France independent of imported sugar. After the Napoleonic War, the production of beet sugar in France increased annually. Previous to 1838, this beet sugar was exempt from all taxation by the French government in contrast to French colonial sugar which paid a duty on entry into France. In order to satisfy colonial and maritime interests the French government imposed a tax on beet sugar in 1838 and in 1847, the duties on French colonial and home-produced sugars were equalized.⁴⁷

Bounties had their inception with the placing of this tax on beet sugar and the manner in which they arose is as follows:-

If raw beet sugar gave a yield, for example, of 90 per cent of refined sugar, and if the refiner was debited with duty on this raw sugar on the supposition that it produced only 80 per cent, he had therefore 10 per cent of refined sugar left in his hands free of duty paid but for which he would receive a drawback when exported.⁴⁸

This defective analysis of raw sugar was attributable to / There /

to the Dutch standard by which sugar was graded for duty purposes according to colour. This scale with its eighteen different shades of colour gave no true indication of sucrose content and, as it was remarked, "to standarize sugars on this basis would demand the use of standard eyes".⁴⁹ Refining in bond would have been the solution to this inaccuracy in estimation, and this was later urged by the English government but opposed by France.

Bounties were not in their origin formally given as bounties but in a decade or two, the fact of their existing was fully acknowledged and before the end of the century laws were passed in European countries with the full knowledge that bounties would arise and with the intention that they should be given.

The effect of imports of bounty-fed sugar on the English market was at first imperceptible. Czarnikow and Company, a large firm of sugar brokers of Mincing Lane, London, speak of receiving these sugars for the first time in 1858.⁵⁰ By 1865, 80,027 tons of sugar out of a total import of 503,187 tons into the United Kingdom was beet sugar, chiefly coming from France in the form of refined loaf sugar.^{50a}

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There were two branches in the sugar⁵¹ refining industry in the United Kingdom - the moist sugar refiners of "pieces", chiefly located in Liverpool and on the Clyde, who used both foreign and colonial sugar cane for refining - the other branch consisted of the loaf sugar refiners, centred chiefly in London and Bristol.⁵² The loaf sugar refiners also used cane sugar but preferred foreign, fine Java, Havana or Mauritius sugars to West India muscovado, maintaining that "100 pounds of loaf sugar could be obtained from one cwt. of these, while only about 76 pounds of loaf sugar could be obtained from one cwt. of West Indian muscovado."⁵³

The loaf sugar refiners in the United Kingdom were those principally affected by bounties prior to 1875, and from these refiners came the growing opposition to bounties in the first years after they appeared.

The loaf sugar refining industry in the United Kingdom (a much smaller branch than the moist sugar refining industry) used but a comparatively small amount of British West Indian sugar.⁵⁴ Much of the sugar from the sugar colonies went to the refiners of moist sugar prices, and some of it also went into direct consumption; (by 1862, one half of the Barbados crop /

crop was directly consumed as raw sugar in the United Kingdom as also were Demerara yellow crystals).⁵⁵ Thus the producers of sugar in the British West Indies were not too concerned over bounties prior to 1875, and, in addition, the sugar duties of the United Kingdom still favoured the class of sugar commonly made in the sugar colonies.⁵⁶

In 1864, the British government heeding the agitation of the loaf sugar refiners, and the French government, now aware of the inducements that led sugar to be exported, agreed to a removal of the conditions that engendered bounties.⁵⁷ A conference was held in 1864 between the two countries, attended also by Belgium and Netherland representatives, and an attempt was made to solve questions regarding drawbacks. This conference accomplished very little, as it was found that the Dutch Standard was an inadequate scale on which to base duties. Arrangement was made for a series of experiments to be held at Cologne to devise a more accurate test of the sucrose content of raw sugar.⁵⁸

The Cologne experiments reduced the number of colours of the Dutch Standard to four and by a process of chemical analysis assigned a certain percentage of supposed sucrose content /

content to each of these colours.⁵⁹ The adoption of this classification in 1867, by both France and England was of little avail in stopping bounties. Each class catered for too wide a range of sugars, and the arrangement was still defective in that it adhered to colour and led to artificial colouring or doctoring of sugar both beet and cane.⁶⁰ What was needed in the sugar industry was an instrument which would test immediately the amount of crystallizable sugar in any parcel of raw sugar, regardless of its colour. Such an instrument came later in the form of the polariscope, but by the time it became commonly used, bounties were given intentionally and directly to beet sugar exports. In the meantime despite the Cologne experiments, the continental refiner (chiefly the French refiner of loaf sugar) was permitted to receive a bounty by obtaining a larger percentage of refined sugar from raw than the legal yield.

Following the Cologne experiments the British loaf sugar refiners continued their opposition. After the Franco-Prussian War, France more than doubled her bounties⁶¹ to meet competition from Austrian (and later German) bounty-fed sugar that now appeared. The loaf sugar refiners in England /

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England strenuously urged the British government to take action and demanded that sugar should be refined in bond, so that the exact amount of refined sugar obtainable from a lot of raw sugar could be ascertained.⁶² The beet root producers in France were also indignant over the bounties the French refiners (chiefly in Paris) were enjoying and in which they had no share.⁶³ A conference was again held in 1876 between England and a number of the European countries but also proved to be of little value.⁶⁴ The Paris refiner's influence was too strong and France only tentatively agreed to the principle of refining in bond - postponing indefinitely the date of adoption.⁶⁵ As Austria and Germany were now potential competitors, France was also chary about putting herself at a disadvantage in competing for the United Kingdom market, the largest sugar market in the world. Thus the 1876 conference ended, as many others did, with little result.⁶⁶

At this conference it was revealed that many of the loaf sugar refiners in the United Kingdom had collapsed - and by 1875 "sugar manufacturers in the Lower Hamlets had one by one succumbed".

It is from the date of the conference of 1876 that West Indian /

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Indian sugar colonies difficulties in regard to bounties begin. Up until 1875 France had been the chief exporter of bounty subsidized beet sugar, chiefly in the form of refined loaf sugar. In 1875, Austria and, a few years later, Germany came on the scene. These two countries adopted a different system of levying duty that illustrates method and foresight.⁶⁸

Germany and Austria levied the duty not directly on the raw sugar as in France but on the beet root itself. A certain quantity of sugar was estimated as extractable from a given weight of beetroot, it being calculated that 12½ cwts. of beet were required to produce one cwt. of sugar. It was proved however that in consequence of the increasing sucrose content of the beet and improved extracting processes that one cwt. of sugar could be made from 10.82 cwt. of beetroot. The result of this miscalculation was that the Austrian and German raw sugar manufacturer instead of paying 10 marks, the excise duty on one cwt. of raw sugar, really paid but 8 marks. This method of levying duty offered strong inducement for improvement in the beetroot. The result was a large increase in its sucrose content which from being 4 per cent /

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cent at the beginning of the century and 8 per cent in 1870, had risen to 11 per cent by 1884. (By 1913 it was 17 per cent.)⁷⁰

That ever growing ~~part~~ ^{was} of raw beet sugar
Neither Austria nor Germany were represented at the 1876 conference. No assurance could be given to France that if she refined in bond, she would not have to compete with these countries in the English market, and the conference came to nothing. It was however evident that no settlement of the bounty question could now be discussed without including bounties on raw as well as on refined sugar.⁷¹

West Indian producers of sugar from 1876 onwards were now faced with increasing competition from raw beet sugar which came into the United Kingdom at prices below any hitherto experienced and which quickly prejudiced the refiners of soft moist sugar in favour of beet sugar.

The consequence of the appearance of this bounty-fed raw beet sugar was that the loaf sugar refiners and British West Indian sugar interests joined hands and urged the British government to levy a countervailing duty against all imported bounty-fed sugar.⁷²

By the late 1870's complaints from the British West Indies /

Indies and resolutions against bounties by the West India Committee in London, with its able organization were frequent and loud.⁷³ That ever growing import of raw beet sugar was directly depressing the price of cane sugar appears evident when, in 1877, the European beet crop failed and the price of muscovado sugar immediately rose from 21/7½d. per cwt. to 26/4¼d. per cwt.⁷⁴ As a result of this failure of the beet crop in 1877, the Colonial Company owning large sugar estates in British Guiana and Trinidad increased its dividend from 3½ per cent to 5 per cent; however, in the following year beet sugar was back in greater amount than before and the Colonial Company again had to reduce the dividend.⁷⁵

By 1878, the price of muscovado had been depreciated by £1: 6: 0d. per ton - as a result of bounty-fed raw beet sugar - so the colonial sugar producers claimed.⁷⁶ Even in Glasgow the stronghold of the muscovado market Austrian sugar, so it was stated by 1877 "could always be placed there at 6d. per cwt. less than the current price of West Indian sugar".⁷⁷

Bounty-fed beet sugar imports into the United Kingdom rose /

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rose from 80,027 tons in 1865 to 305,000 tons in 1878, at the latter date total consumption of sugar in the United Kingdom being 826,584 tons.⁷⁸ During the same period, 1865 - 78, exports of British West Indies sugar to the United Kingdom had not seriously altered in volume, being 176,593 tons in 1865 and 191,960 tons in 1878,⁷⁹ but had not risen commensurate^{ly} with increased consumption. A decrease in price had taken place and raw beet sugar was increasingly used by the moist sugar refiners in lieu of cane sugar, thus the West India producer had a grievance and linked up with the diminishing loaf sugar refining industry. The West India Committee was very active at this stage urging the Government to levy a countervailing duty against bounty sugar, and emphasized the injury inflicted on colonial sugar interests.⁸⁰

The first result of the British loaf sugar refiner and the Colonial sugar producer joining hands was the appointment of a Select Committee in 1879 to inquire into the whole question of bounties. The Committee sat for two sessions taking much evidence from British West Indian interests and the United Kingdom refining industry. During the same period /

period, 1879 - 80, a Convention was held with French and other European representatives to consider means of removing bounties.

Despite the claims of aggrieved parties who came before the Committee of 1879 - 80, there is no substantial evidence to show that up to 1879 bounties had seriously affected sugar production in the sugar colonies. In Barbados and British Guiana in recent years there had even been an increase in the quantity of sugar produced. Evidence showed that fifty-eight estates had been abandoned in the sugar colonies since 1875 and thirty eight in 1878 were advertised for sale with no purchasers.⁸² This evidence cannot be accepted as indicating distress. Abandonment of estates was a continuing process throughout the second half of the century, and sales of estates were continually advertised by the West Indies Encumbered Estates Court for periods of six months before a sale was permitted.

The cost of production had not been reduced in the sugar colonies, being the same in 1879 as in 1865. Bounties had caused a drop in the price of sugar and it was the reduced profit that engendered much of the opposition to bounty-fed sugar /

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sugar. Witnesses^{as} N. Lubbock, director of the Colonial Company and later chairman of the West India Committee, expressed the typical sugar planter's attitude, in seeing no hope of any other product superseding sugar, and did their best to present a gloomy picture of conditions in the sugar industry. In summing up, the Report of the Committee stated-

"All witnesses agree in looking forward to the abandonment of sugar cultivation and estimate that in ten years one half of the West Indian production will be destroyed".⁸⁵

This pessimistic outlook was not realized in full and despite the active work of the West India Committee, little public or governmental sympathy could be evoked for the colonial sugar producer. By 1879, Free Trade principles in the United Kingdom were adopted, in some sections of the government, with the full fervour of a religion, let alone a policy. The Board of Trade, looking to consumer interests, contained the chief protagonist of Free Trade in the person of Lord Farrar, Secretary of the Board, and he and Cobdenites rebutted all claims of the West India Committee as to injury to colonial interests, emphasizing that the great boon of bounty /

bounty-fed sugar to the consuming public far out-weighed any disadvantage caused to a minor interest supplying but 178,376 tons of the total 931,168 tons consumed in the United Kingdom (1880).⁸⁵

In answer to the claim of the West India Committee that countervailing duties be imposed, the Board of Trade had stated in 1881, "The general principle which governs the financial policy of this country is that the Government shall not interfere with the course of trade, either by giving bounties or by imposing duties ... To impose countervailing duties in order to neutralize the indirect sugar bounties would therefore be to take the first step in reversing that free-trade policy which was adopted on the clearest grounds of argument, and has conferred immense advantages on the industrial classes of this country."⁸⁶

In addition to this statement of view, there was the practical difficulty of estimating the exact amount of bounties given in any country and at any one time, the sucrose content of the beet root was continually increasing, and, in addition, subsidies were being given by differential railway rates (and later by steamship subsidies). The United Kingdom /

Kingdom government, although opposing the levying of countervailing duties, was willing "to take any steps to induce foreign governments to give up bounties" because of the "general benefits to be derived from such governments adopting a Free Trade policy".⁸⁷

It was this lukewarm attitude and the definite feeling, now prevailing, that the British Government would not strenuously oppose bounties that partially accounts for failure of numerous conferences and the protracted discussion for the removal of bounties, that lasted for the rest of the century. Already in 1876, Lord Derby, Secretary of State for Colonies, spoke to the effect that if Germany, Austria, and France were taxed to give the British consumer sugar at a cheap price - why complain! and, "the natural market of the West Indies was America not Europe."⁸⁸

The 1879 - 80 Convention broke down because Britain and France would not agree to the principle of countervailing duties. It was already evident by this date that unless there was some indication of the imposition of countervailing duties, there was little likelihood of the removal of bounties. No real evidence had been forthcoming before the Select Committee /

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Committee of 1879 - 80 to show that distress in the sugar colonies was genuine. However there was little doubt but that the British loaf sugar refiner had been seriously affected by bounties. The loaf sugar refining industry was practically extinct by 1880. At this date, of the thirty loaf sugar refiners in the United Kingdom in 1864, who refined 200,000 tons of raw sugar yearly, there were but two remaining. These were Martineau of London, and Finzell of Bristol, the latter going into liquidation in 1881.⁸⁹ At first sight this would indicate a considerable diminution of the refining industry, but what had really taken place was a transfer of capital to the other branch of the refining industry, that of producing soft moist refined sugar. An example of this change-over was Duncan's refinery which transferred to this branch in 1875, but at the cost of introducing new machinery and undergoing inconvenience.⁹⁰ Both on the Clyde and at Liverpool there was increased moist sugar refining at this period, many of the refiners using both cane sugar and bounty-fed beet sugar. Great improvements had been made in the refining industry with the introduction of the centrifugal and vacuum pan and in the process of / rrvalling /

of decolourizing sugar. The use of the white of eggs and bullocks' blood for decolourization was superseded by filtration through charcoal, at first in very shallow and, later, very deep cisterns. The drying of sugar by draining through earthen moulds, which took from one to six weeks, was replaced by centrifugalling which gave a much drier sugar in a few hours.

In 1862, it took refiners about three weeks to convert raw sugar into refined, but by 1879 it was done in as little as two days.⁹² The cheapening in the refining process plus the boon of bounty-fed sugar both brought down the price of sugar and encouraged consumption, which by 1883, had risen to 931,168 tons, (71.74 lbs. per head compared to 31.14 lbs. in 1860.⁹³

By 1880, the West India Committee was practically alone in carrying on opposition to bounties. The refiners of soft moist "prices" were not, as yet, concerned about bounties which gave them raw material at a low price. The confectionery industry, given the impetus of cheap sugar - the Scottish confectionery industry had expanded four-fold in the twenty years ending in 1884 - was definitely opposed to any countervailing /

countervailing duty on bounty sugar.⁹⁴

By 1882, England and France had a 'most favoured nation' clause in their commercial treaty and, according to the law officers of the Foreign Office, to impose countervailing duties "would be contrary to the most favoured nation clause".⁹⁵ France in turn had a favoured nation clause in a treaty with Austria and would not agree to the principle of countervailing duties, and thus the possibility of their imposition was less than ever by 1882.⁹⁶

During the three years that followed the Select Committee of 1879 - 80 sugar imports into the United Kingdom fell off by one-fourth, but production of the sugar colonies as a whole did not decrease. Sugar was increasingly being sent to the United States, where dark grey refining crystals from British Guiana especially were in demand. By 1883, 104,642 tons of sugar were sent to the United States market out of the total British West Indies production of 244,450 tons.⁹⁷

During the three years 1880 - 2, the abandonment of poorer estates continued and was even accelerated with the need to economize. In Demerara, where hitherto little effect of bounties had been registered, six of the less favoured /

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favoured estates were abandoned in the latter half of 1880. In Jamaica, twenty-six additional estates were set up for sale in this period,⁹⁹ and increased abandonment was reported, but did not always signify a very great drop in production. For example the abandonment of 7,000 acres in the parish of Trelawny meant a loss of only 266½ hogsheads of sugar.¹⁰⁰

Increased pressure on the sugar industry of the sugar colonies is also reflected in reduced machinery imports, small though these usually were, in most of the colonies. In British Guiana imports of machinery dropped in value from £126,436 in 1879 to less than half that figure in the next two years.¹⁰¹ In Glasgow and Liverpool sugar engineering firms reported a falling off in orders for machinery.¹⁰²

On the whole by 1882, there is still no real evidence of serious distress in the British West Indies sugar industry. Profits had been reduced but were still being made. Muscovado sugar in the United Kingdom market brought £22 per ton in 1882, and the cost of production was always below this figure, being as nearly as can be ascertained, as low as £10 on some estates and as high as £16 on others. Barbados was in /

in a class by itself, producing sugar as low as £9 per ton.¹⁰³ Concentration on the better estates, and a few installations of centrifugals were the chief economizing measures of muscovado producers. In British Guiana and Trinidad, the conversion to vacuum pan manufacture continued to take place and helped to meet sugar beet competition.

If conditions had remained as they were during the three years following the Committee of 1879 - 80, West Indian muscovado producers might still have maintained a satisfactory margin of profit, without having to radically adjust their position and reduce the cost of production.¹⁰⁴ Conditions did not however remain the same, and a rude awakening came in 1884.

Up to 1882, Austria had been the chief exporter of bounty-fed raw beet sugar to the United Kingdom, most of which sugar came via Germany.¹⁰⁵

In 1876, after it was found out that the amount paid in drawbacks was far more than had been received as excise due,¹⁰⁶ the Austrian government had made adjustments,¹⁰⁷ which, although not stopping bounties, had prevented any sensible increase by 1882.

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In the early 1880's Germany made her appearance as the greatest beet sugar producer in Europe. The volume of sugar from this country quickly increased and, when in 1883 - 4 Germany doubled bounties on export, the effect was immediate¹⁰⁸ as revealed by production figures of beet sugar in that country. - 109

1880	594,360 tons
1881	644,780
1882	848,124
1883	986,403
1884	1,154,816

France in 1884, realizing that the German system of assessing duties was inducing great yields of sugar from the beet root, adopted the German method with immediate results, the sucrose content increasing by two per cent within a year, (by 1897 it was 11.4 per cent, compared with Germany's 12.79 per cent)¹¹⁰

The dumping of beet sugar in the United Kingdom began in earnest in 1884; the following figures illustrate the volume of beet sugar imported.¹¹¹

Average of the three years	1880 - 2	376,909 tons
" " " " "	1883 - 5	514,318 "
" " " " "	1886 - 8	611,590 "

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These increased imports of beet sugar came principally from Germany where a prohibition tax on sugar kept down internal consumption.

The immediate effect of this great increase in beet sugar production was fall in price. Demerara sugar fell from 26s. to 15s. within the year 1884. Muscovado sugar fell from 20s. per cwt. at the beginning of 1884 to 13s. per cwt. at the end of the year.¹¹²

By the end of 1884, distress in the British West Indies was genuine, the price of sugar remaining at 13s. per cwt. (£14: 6: Od. per ton) which was equivalent to, or less than, the cost of production on many West Indian estates. As in the crises of the 1830's and late 1840's a number of West Indian firms collapsed, principally those financing muscovado estates in the smaller islands, although a number in British Guiana and Trinidad also went under.¹¹³ George Little and Company, Cotton, Morton and Company, A. W. Perot and Company, and A. W. Gillespie and Company, were^a few of these firms which collapsed as a result of losses incurred in finding money for carrying on sugar estates.¹¹⁴ Gillespie and Company had in their hands, either in the capacity of owner or /

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or as consignee merchant, the majority of the estates in Tobago and the failure of this firm resulted in their abandonment and neglect for the remainder of the century.¹¹⁵

Grenada's production dropped from 10,000 to 4,000 hogsheads within the year and a half ending 1884.¹¹⁶ By 1886 two-thirds of the sugar cultivation in St. Vincent was abandoned.¹¹⁷ In Jamaica the drop in price of sugar coincided with the exodus of labourers to work on the Panama Canal and aggravated the difficulties of the sugar planters who were attempting to economize by reducing wages (already very low). The logwood industry in Jamaica was also now depressed. Haiti was back in the market and in 1885 it was stated, "logwood is a drug on the market and will not pay for exportation".¹¹⁸

As in former periods of depression, a spate of resolutions and complaints were forthcoming from the various colonies testifying to the difficulties in the sugar industry as a result of the drop in the price of sugar occasioned, so they claimed, solely by the unfair competition of bounty-fed sugar.¹¹⁹

West Indian anxiety was further deepened when it was reported that at a meeting of sugar fabricants at Halberstadt, in /

in Germany on August 30th 1884 it was stated that the object of beetroot manufacturers was not to give the United Kingdom cheap sugar, but to ruin the colonial sugar industry and thus obtain a monopoly and raise the price of sugar at their own will.¹²⁰ That this was the object of Germany's beet sugar industry does not seem likely, considering the small proportion of West Indian sugar consumed in the United Kingdom. There is little to indicate that the history of bounties in the second half of the nineteenth century is other than that of competition between European powers, especially between Germany and France.

That the British West Indies sugar industry's difficulties were merely incidental to the bigger game between European governments did not make them any the less real. The close of 1884 saw the beginning of commercial depression in the sugar colonies, some colonies being affected more than others, depending generally, but not solely on the degree to which they had failed to break away from the old muscovado process. The first reaction of the sugar planter, with the drop of price in 1884, was to reduce wages and this generally proved to be the most unwise measure. There were other ways in /

in which economy might be effected in the sugar industry. A consideration of the sugar industry in the British West Indies in all its practical aspects is the subject of the next section.

V. 40. A.R. 1867. *Trinidad*,
P.P. 1867. V. 48. A.R. 1867. *Trinidad*.

3. P.P. 1870. V. 49. A.R. 1869. *Trinidad*.

4. P.P. 1864. V. 74. *Sugar Industries* p. 8.

7. P.P. 1860. V. 44. A.R. 1859. *Trinidad*.

8. P.P. 1871. V. 20. C. 303, p. 73.

9. C.O. 28/216. June 12, 1871.
Managers of sugar estates in B. W. always received higher salaries than those in the other sugar colonies. On some estates managers received as high as £2000 a year, compared to the usual £200 - £300 in the other colonies. However in the depression of the mid 1890's managers' salaries in B. W. were as low as £250 per annum. P.P. 1898. V. 51. P. 41, p. 42.

10. P.P. 1871. V. 20. Appendix II. p. 41.

11. Jenkins. *The Coolies*. London, 1871. p. 13.

12. *Ibid.*

13. P.P. 1869-9. V. 43. A.R. 1867. *British Guiana*.

14. Lament, W. *Problems of Trinidad*. p. 224.

15. C.O. 28/208. Aug. 9, 1869. St. Vincent provided a contrast to Grenada, where Bowson found the market "deserted and depressed". Grenada's sugar industry was extinct by the end of the century and estates here had gone over almost entirely to cocoa.

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in which economy might be effected in the sugar industry. A consideration of the sugar industry in the British West Indies in all its practical aspects is the subject of the next section.

1. P.P. 1864. V. 40. A.R. 1862. Jamaica.
2. P.P. 1865. V. 37. A.R. 1863. Trinidad.
3. C.O. 318/203. July 7. 1865.
4. P.P. 1864. V. 40. A.R. 1862. Bahamas.
P.P. 1867. V. 48. A.R. 1865. Bahamas.
5. P.P. 1870. V. 49. A.R. 1868. Nevis.
6. P.P. 1884. V. 74. Sugar Industries. p. 8.
7. P.P. 1860. V. 44. A.R. 1858. Trinidad.
8. P.P. 1871. V. 20. C. 393, p. 78.
9. C.O. 28/214. June 12, 1871.
Managers of sugar estates in B. G. always received higher salaries than those in the other sugar colonies. On some estates managers received as high as £1,000 a year, compared to the usual £200 - 300 in the other colonies. However in the depression of the mid 1890's managers' salaries in B. G. were as low as £250 per annum. P.P. 1898. V. 51. B.G. p. 62.
10. P.P. 1871. V. 20. Appendix II. p. 44.
11. Jenkins. The Coolie. London, 1871. p. 55.
12. Loc. cit.
13. P.P. 1868-9. V. 43. A.R. 1867. British Guiana.
14. Lamont, N. Problems of Trinidad. p. 224.
15. C.O. 28/208. Aug. 9, 1869. St. Vincent provided a contrast to Grenada, where Rowson found the harbour "deserted and depressed". Grenada's sugar industry was extinct by the end of the century and estates here had gone over almost entirely to cocoa.

16. P.P. 1873. V. 48. A.R. Barbados.
17. C.O. 318/274. July 25, 1872.
18. Pringle, H. The Fall of the Sugar Planters,
London, 1869. p. 44.
19. P.P. 1866. V. 48. A.R. 1865. Barbados.
20. P.P. 1898. V. 59. A.R. 1897. Barbados.
21. P.P. 1864. V. 40. A.R. 1862. Nevis.
22. See Chapter p.
23. P.P. 1884-5. V. 53. Part I. Appendix, p. 240.
24. Pringle, op. cit. p. 50.
- 24a. P.P. 1868-9. V. 43. A.R. 1867. Jamaica. - Governor's
report states "I have often enquired and have been
unable to hear of one resident planter, in any part
of Jamaica, at present of recognized skill in his
business and possessed of sufficient capital for
proper management who is not making a fair profit
out of his property."
25. P.P. 1898. V. 51. Jamaica. p. 332.
Olivier, op. cit. p. 44.
26. P.P. 1866. V. 51. p. 10.
See also introductory survey. p. 17.
27. P.P. 1866. V. 51. p. 69.
28. P.P. 1874. V. 44. A.R. 1872. Jamaica.
29. P.P. 1873. V. 48. A.R. 1871. Jamaica.
30. P.P. 1872. V. 42. A.R. 1870. Jamaica. Exports
of bananas in 1870 amounted in value to £30,000;
five years earlier their value as exports was
negligible.

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31. Hansard. 1865. V. 184. pp. 476-478.
 32. P.P. 1862. V. 13. p.
 33. Hansard. 1900. V. 92. p. 631. Survey of history of sugar duties.
 34. Loc. cit.
 35. See introductory survey. pp. 25-27.
 36. Hansard. 1865. V. 184. p. 476.
P.P. 1862. V. 13. pp. 114-5.
 37. P.P. 1862. V. 13. p. 114
 38. Loc. cit.
 39. C.O. 7/138. Dec. 1st, 1869.
P.P. 1871. V. 74. A.R. 1869. Dominica.
 40. P.P. 1862. V. 13. pp. 3-4.
 41. P.P.
 42. C.O. 111/465. Nov. 21, 1892.
Times, London. May 24, 1910. Imperial Supplement.
West Indies.
 43. P.P. 1880. V. 12. Sugar Industries. p. III.
 44. P.P. 1878-9. V. 13. Appendix. No. 12. There was a drop of 3/2d. per cwt. refined, and of 1/3d. per cwt, Muscovado sugar by 1875.
See also P.P. 1880. V. 12. Sugar Industries.
Appendix I. pp. 68-9.
See also P.P. 1884. V. 74. Sugar Industries. p. 49.
 45. P.P. 1884. V. 74. Sugar Industries. p. 9.
 46. P.P. 1878-9. V. 13. Sugar Industries. pp. 401-2.
P.P. 1889. V. 13. Returns of Sugar prod. p. 8.

47. Newton, A. P. Staple Trades, London, 1910. p. 35.

48. Hansard. 1875. V. 225. p. 1801.

49. Deerr, N. The History of Sugar, London 1950. p. 505.

50. P.P. 1898. V. 50. Appendix C. Part I. p. 159.

50a. P.P. 1884. V. 74. Sugar Trade. pp. 33.
 P.P. 1886. V. 23. Depression in Trade, p. 24.

51. P.P. 1884. V. 74. Sugar Trade. pp. 50-3.

52. P.P. 1880. V. 12. Sugar Industries. p. xxxv.

53. P.P. 1862. V. 13. p. 190.

54. P.P. 1878-9. V. 13. pp. 102-4.

55. P.P. 1862. V. 13. p. 90.

56. There is very little evidence of comment in the colonies regarding bounties on beet sugar prior to 1875.

57. Hansard. 1865. V. 184. p. 478.

58. Hansard. 1873. V. 215. p. 347.

59. P.P. 1880. V. 12. Sugar Industries. p. III.

60. Ibid. p. iv.

61. Ibid. p. v.

62. Loc. cit.

63. P.P. 1878-9. V. 13. p. 3.

64. P.P. 1880. V. 12. Sugar Industries. p. vii.

65. P.P. 1878-9. V. 13. Sugar Industries. p. 328.

- 66. A total of eighteen conferences were held prior to the abolishment of bounties in 1903.
- 67. Hansard. 1875. V. 226. p. 278.
- 68. P.P. 1880. V. 12. Sugar Industries. p. vii.
- 69. P.P. 1878-9. V. 13. p. 359.
- 70. Newton, op. cit. p. 35.
Martineau, G. A Short History of Sugar, London 1917. p. 26.
- 71. Both processes of extraction and refining would have had to be in bond in view of the nature of the Austrian and German method of levying the duty on the roots.
- 72. Loaf sugar refiners, if they had used this raw beet sugar, would still not have been able to compete with French bounty fed loaf sugar, such was the extent of French bounties.
- 73. C.O. 321/26. June 6, 1879; P.P. 1877. V. 84. pp. 1-2.
C.O. 318/273. April 4, 1879; Hansard. V. 221. July 23, 1874.
- 74. P.P. 1878-9. V. 13. p. 402. West India muscovado rose from 21/7½d. in 1876 to 26/4½d. in 1877, falling to 20/5½d. in 1878.
- 75. P.P. 1878-9. V. 13. pp. 135, 141, 171.
- 76. Ibid. p. 402.
- 77. C.O. 318/273. April 18, 1879.
- 78. P.P. 1884. V. 74. Sugar Trade. p. 33.
- 79. P.P. 1878-9. V. 13. p. 401.
- 80. Hansard. 1878. V. 238. p. 154.

- 81. Evidence taken was chiefly from British refiners, confectioners and West India Committee. Little information was obtained as to the position of foreign sugar cane colonies in regard to bounty-fed sugar.
- 82. P.P. 1889. V. 72. Returns of Sugar prod. p. 33.
- 83. C.O. 318/273. Oct. 1879. Claims of abandonment of estates in British Guiana.
- 84. This statement is not true of British Guiana. The subject of cost of production is considered in a later section.
- 85. P.P. 1884. V. 74. Sugar Trade. p. 29.
P.P. 1889. V. 12. Returns of Sugar prod. p. 52.
- 86. P.P. 1884. V. 74. Sugar Trade. p. 145.
- 87. Ibid. p. 178.
- 88. C.O. 321/74. July 8, 1884. Eaves, C. W., West Indies London, 1897. p. 146.
- 89. P.P. 1878-9. V. 13. pp. 1, 70.
- 90. Ibid. p. 58.
- 91. Hutcheson, J. M. Notes on the Sugar Industry. Greenock 1901.
- 92. Ibid. p. 259.
- 93. P.P. 1889. V. 72. Return of Sugar prod. p. 16.
- 94. P.P. 1884. V. 74. p. 184.
Mathieson, G. The Sugar Convention from a Confectioner's Standpoint, London 1889. p. 5.
- 95. P.P. 1884. V. 74. p. 184.

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96. Ibid. p. 147.
 97. Ibid. p. 42.
P.P. 1889. V. 72. Return of Sugar prod. p. 33.
 98. P.P. 1878-9. V. 13. p. 175.
 99. Loc. cit.
 100. C.O. 140/181. Jamaican Governor's Report for 1878-9.
 101. P.P. 1898. V. 51. B. Guiana. p.
 102. P.P. 1883. V. 23. p. 238.
 103. P.P. 1866. V. 48. A.R. 1865. Barbados and St. Kitts.
 104. There is little evidence of any reduction in the cost of producing muscovado. See chapter 4 p. 175-6 and reference to cost of production in, P.P. 1898. V. 51. B. Guiana. p. 9; P.P. 1889. V. 52. A.R. 1883-4. St. Vincent; Hansard. V. 63. p. 899.
 105. P.P. 1878-9. V. 13. p. 338.
 106. Ibid. 339-40.
 107. P.P. 1880. V. 12. p. xxxii.
 108. P.P. 1884. V. 74.
 109. P.P. 1889. V. 72. Return of Sugar prod. p. 37.
 110. Martineau, op. cit. p. 26.
Newton, op. cit. p. 36.
 111. Loc. cit.
 112. P.P. 1886. V. 23. p. 232.
P.P. 1889. V. 72. pp. 50-2.
 113. C.O. 111/494. June 23. 1897.

REPORT OF THE COMMISSIONER OF THE
IN THE BRITISH WEST INDIES

- 114. P.P. 1898. V. 50. Appendix C. Part I. p. 24.
- 115. Ottley, C. R. Complete History of Tobago, Trinidad,
1946.
- 116. 'Times', London. Oct. 17, 1884.
- 117. P.P. 1887. V. 57. A.R. 1886. St. Vincent.
- 118. P.P. 1884-5. V. 52. A.R. 1883-4. St. Lucia.
- 119. C.O. 321/76. July 1st, 1884.
- 120. P.P. 1886. V. 23. Depression in Trade. pp. 233-4,
240.

cent reduction in wages would be well, but...
 planters were forced to raise wages, not only...
 but 2 s. in arrears of it.³ The necessity of...
 plantations of land in Trinidad, on which...
 made several attempts to reduce wages in...
 avail.⁴ As has been stated the reduction in wages...
 Jamaica coincided with heavy emigration to...
 addition, Port Spain railway works and...
 also, noticed many labourers leave Jamaica...
 wages was more successful in a number of the...
 at Barbados, and St. Vincent, where there was...
 native but to submit to wage reductions.
 Considering the low rate of wages paid in the...
 colonies /

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METHOD OF SUGAR MANUFACTURE
IN THE BRITISH WEST INDIES.

The first reaction of the sugar planters when faced with the drop in price of sugar in 1884, was to reduce wages. In British Guiana, where the industry was already receiving a large contribution from the general revenue, for immigration (estimated at £2 per ton)¹, nevertheless, the Colonial Company immediately reduced wages.² Attempts to reduce wages in Trinidad were not so successful. At a meeting of Trinidad sugar planters in 1884, it was agreed that a 20 per cent reduction in wages would be made, but within a few weeks planters were forced to raise wages, not only to the old rate, but 5 c. in advance of it.³ The scarcity of labour and the plentitude of land in Trinidad, on which labour could settle, made several attempts to reduce wages in that colony of little avail.⁴ As has been stated the reduction of wages in Jamaica coincided with heavy emigration to Panama and in addition, Port Rican railway works and banana plantations, also, enticed many labourers from Jamaica. Reduction of wages was more successful in a number of the smaller islands, as Barbados, and St. Vincent, where there was little alternative but to submit to wage reductions.

Considering the low rate of wages paid in the sugar colonies /

colonies varying from 10d. to 1s. for a nine hour day in Jamaica⁵, to a high of 1s 3d. per task in Trinidad (where it was possible to perform three tasks per day), it would seem that the labour factor offered little field for economy. Where labour comprised, as was estimated, approximately one-third of the cost of producing sugar⁶, there were other economies possible, but only in some colonies were they effected.

Most muscovado estates, by 1884, were still employing the open-pan system described a century and a half earlier by the Dominican, Pere Labat.⁷ The advice he gave then might well have been followed by the sugar planter of the mid-nineteenth century - so little advance had been made.

The most prominent characteristics of the West Indies muscovado sugar industry were wastefulness and slovenliness.

The first process - extraction of the cane juice - offered the greatest and easiest opportunity for preventing losses. The sugar cane contains about 87 per cent of its weight in cane juice, but the ordinary mills on muscovado estates extracted but 50 - 60 per cent of this juice, the over-all losses of juice were therefore enormous.⁸ As late as /

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as 1897, an agricultural chemist, Professor Albuguerque, out of 100 lbs. of crushed megass taken from the usual type of mill, recovered an additional 17 lbs. of juice, by improved extraction.⁹ That the crushing was imperfect was evident, without such tests as this, by the very fact that the megass had to be dried before it could be used as fuel on practically every muscovado estate.

Many of the sugar planters (Barbadians especially) maintained that the unextracted juice was less rich in sucrose and thus no loss was entailed as the superior quality of the rich juice obtained more than compensated for the juice lost. This was a fallacious argument as was demonstrated by Frances Watts, Antiguan Agricultural chemist after his appointment in the 1880's.¹⁰

Defective crushing was attributable to the poor type of mill in use - usually the single mill type, composed of three rollers, with the roller on top pressing on the two beneath.¹¹ In these mills the rollers were hollow and were kept almost inflexible in one position, and if either cane or some foreign body was forced into the mill so that it could not pass between the rollers, either the mill choked and /

and stopped, or something had to break. The Bourbon or Otoheite cane in general use throughout the West Indies had a dense bagasse and if slightly over-mature (as was often the case) became quite hard and numerous mill breakages resulted causing loss of time and sugar.¹² For example, on Sheldon estate in Berbice substantial losses and breakages were reported, the old mill "either choking or going around without crushing."¹³

The few variations of the horizontal single mill were no improvement. The vertical mills, as used on some estates, with rollers placed vertically and usually operated by cattle power, had the same defects as the horizontal single mill, and, in addition, the difficulty here was uneven distribution along the rollers, the cane tending to pass between the lower portion of the rollers.

Loss by bad crushing was avoidable by using other than single crushing, by having heavier mills without through bolts that made them inflexible, and by having solid rollers, smoothed and with regular feeding.

Apart from British Guiana and Trinidad only in rare instances were better types of mill introduced in the other colonies /

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colonies. Mr. Levy, owner of a number of estates in Jamaica, introduced an improved mill in 1896 and was agreeably surprised at the 70 - 75 per cent extraction obtained, when 65 per cent extraction was considered to be very good on most other muscovado estates.¹⁴ At the same time, extraction on a vacuum pan estate in Antigua was only 54 per cent and losses of 25 - 30 per cent of the juice in Barbados were reported.¹⁵ By 1885, in British Guiana, four roller mills made by Mirlees of Glasgow, giving three crushings, were being installed on large estates. By the late 1890's almost all estates in British Guiana had double or even triple crushing.¹⁶ On Windsor Forest, by 1894, over three times as much sugar was made as in 1865 and it was to improved mills that much of this gain was attributed. Similar gains were reported by Diamond and other large estates.¹⁷ Instead of the old inflexible rollers these new mills had hydraulic attachments giving equal compression to large or small feeds.¹⁸ With these mills 75 - 80 per cent of the juice could be extracted¹⁹ and this figure could be increased to almost perfect extraction by the maceration and diffusion process, introduced into British Guiana in 1878, by William Russel /

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Russel (The Sugar King) at La Bonne Intention estate. With this process the megasse was shredded into small pieces, steam was then blown into the megasse or it was soaked in warm water to dissolve out all sucrose.²⁰ Short-comings of the diffusion process were, that a great quantity of fuel was required to evaporate the excess water, knives needed constant sharpening,²¹ the megasse took much longer to dry and was often unfit for fuel, the small pieces clogging up the grates of the boilers and presenting draught.²² The diffusion battery also produced juice more quickly than the vacuum pan could take it away, "the boiling house was always behindhand and the syrup always stale."²³ The diffusion process was only installed on a few of the large estates as Providence and Anna Regina in British Guiana and the Cul de Sac factory in St. Lucia.²⁴ The fuel problem was probably the greatest objection to its wider adoption and the view also, as expressed by Mr. Lubbock, chairman of the Colonial Company, that there was little value in the diffusion process where a satisfactory double crushing plant already existed.²⁵

Motive power for mills took various forms. Steam power, despite the development of multitubular boilers in the late 1850's /

1850's, which had eased fuel difficulties, was still the exception on muscovado estates, as late as 1884. Mr. Lloyd, a Montserrat planter in giving evidence before a Royal Commission stated:-

"We have no steam engines or any of that botheration here."²⁶

In Barbados in 1862, out of 500 estates there were but thirty with steam mills, and by 1897, this number had risen to only ninety.²⁷ In Jamaica steam engines were also in a small proportion as the low value of machinery imports indicated. £4,738 for steam engines in 1870, could not have meant the introduction of, at the most, more than four steam engines.²⁸

Apart from the capital outlay for steam engines other factors retarded their introduction. The scarcity of fuel was always a problem only partially alleviated by multi-tubular boilers. In British Guiana with all the latest appliances sugar exports were seriously affected by a shortage of coal in 1881.²⁹ In a number of the colonies as Antigua and Trinidad scarcity of fresh water also was a deterrent /

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deterrent to steam power. In Antigua, by 1882, the invoking of old water ordinances of slave days, that had compelled planters to maintain reservoirs (called 'body ponds'), helped to alleviate water shortage in that colony.³⁰

The installation of a steam engine on an old-fashioned muscovado estate, did not fit in with the existing appliances. Some of the steam engines were not governed properly and the mill rollers travelled much too fast causing re-absorption of part of the cane juice by the squeezed but spongy megasse - in some cases as much as 20 per cent.³¹ Until existing mills were improved there was little purpose in installing steam engines both because of the steam engine being too powerful for the mill and causing breakages and because half-squeezed megasse could not be used as fuel in the steam engine. In some instances in Barbados, steam engines superseding windmills were not sufficiently powerful for the mills, although more reliable than the windmill.³² Windmills in Barbados provided a cheap but undependable power, as when in March 1892, there was "a terrible calm during crop season and some mills made no more than three and four hogsheads per week".³³ In a number of the islands, St. Vincent and Jamaica /

Jamaica especially, water power was found to be very satisfactory when available, but droughts were frequent and a failure of water power during crop time was a serious consideration. Many of the estates sold through the Encumbered Estates Court, listed as their assets motive power derived from water wheels. Some of the best estates depended on water power, such as Worthy Park in Jamaica, Belvidere in Antigua and Castle Bruce in Dominica. These water wheels of great diameter, (twenty-five to forty feet being common), five feet or more in width, built of iron, and with large wooden buckets, gave a massive crushing force where water supply was dependable.³⁴

On the whole the loss in extraction of cane juice was more attributable to defective mills than to the form of motive power in use on muscovado estates. The loss of sugar entailed in faulty extraction, did not stop at this point but continued on through the process of sugar manufacturing.

In most muscovado factories, following extraction, the cane juice flowed from the mill bed along a gutter fitted with a strainer. A child or aged person, armed with a long stick, was usually employed to keep the gutter and strainer from /

from being clogged by fragments of megass. The strainer, stick and gutter were rarely changed and became saturated with liquor hastening fermentation in the passing juice which was conveyed to the 'clarifiers', 'racking copper' or simmers, as they were variously called. Here the juice was raised to a high temperature (about 140°C.) and milk of lime was added to coagulate impurities which formed a scum on the top. When this scum 'cracked' the liquid was withdrawn by a cock, the scum being left in the clarifier. After being usually twice filled and emptied the 'mud' was cleared out and used in setting up distillery ferment in the making of rum.³⁵

Upon the accuracy of tempering with lime, during the process of clarification, depended the success of the whole operation. If not sufficiently tempered the juice refused to crystallize or formed a doughy, moist sugar with a small grain, (very common in the small backward islands as Grenada and Dominica). If over-tempered the liquor turned a green colour from particles of chlorophyll being dissolved by excess of lime and, as it approached concentration, it formed a dark sugar with much molasses and had an unpleasant smell when in the hogshead.³⁶ There were various opinions in the colonies //

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colonies as to whether the lime should be added hot or cold. Jamaican planters said hot, because if added cold the temporary drop in temperature halted coagulation. Irregularity in the use of lime was the most serious defect in clarification. A means of determining the correct amount of lime to be used had been devised by Doctor John Shier in British Guiana (see Introductory Survey, page 31) who introduced the litmus test,³⁷ later improved on by Francis Watts, agricultural chemist in Antigua. Watts found after experimenting, that phenolphthalein when added to the clarifiers gave a strong pink to red colour if too much lime had been added and if too little there would be no change in colour. If the amount of colouring were correct, a faint pink colouring would show.³⁸ By 1870, the phosphoric acid test could be used in the liming process, this enabled the use of a large quantity of lime which destroyed impurities in the juice, but at the same time to precipitate the excess lime in the form of phosphate of lime.³⁹ These tests were not used on many estates and Watts, writing in 1892, criticised the common method of guess work in the use of lime, and commented on the lethargy of muscovado planters in not using simple tests available /

available.⁴⁰

Following clarification there took place evaporation and concentration of the cane juice in a range of copper boilers, placed over the same fire, the heat from which was to a large extent absorbed by the mass of brickwork built around the copper boilers. These 'coppers' were usually five or six in number, the smallest, the tayche, of this range being immediately over the furnace, the flame of which afterwards acted upon the others in passing to the flue.⁴¹ The size of the coppers was progressively increased as they receded towards the flue, the last being the largest and was often capable of holding as much as the clarifier (usually 500 gallons). The clarified liquid ran first into this last large copper, and as evaporation proceeded it was ladled into the others, progressively until it arrived at the 'tayche' where the concentration was completed. Further scum was gathered off the liquor in the coppers, being removed by a person stationed at each copper, wielding a 'skimmer'. The scum was brushed back from each copper until gathered in the last and removed. This scum too was usually used in the distillery in making rum.

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One of the most careful points for the planter was the skimming of this scum.

"The liquor was not considered to have been thoroughly cleaned until every boiler had his shirt sticking to his back with perspiration".⁴²

As this was the final cleansing process and as it was often imperfectly done, it was the one cause operating more than any other in producing the bad name which some of the sugar brokers in the United Kingdom gave to British West Indies sugars as revealed in evidence given to the Commission on Sugar Duties in 1862, and the Commission on Sugar Industries 1878 - 9. Confectioners in the United Kingdom, in the late 1880's stated that this unclean sugar was one of the reasons for their preferring beet sugar.⁴³ Jamaican sugar estates, especially had a name for turning out dirty sugars, probably attributable to the chronic labour shortage in that colony.⁴⁴ Sugar proprietors found that the smaller the tayche, all other things being equal, the better was the quality of the sugar. This was because a smaller tayche permitted quicker boiling at a higher temperature; this was done however at the expense of /

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of quantity.⁴⁵

The chief defect in the process of evaporation was that to boil the syrup required a very high temperature and inversion usually followed with great rapidity producing much glucose.⁴⁶ Much of the question of profit and loss on muscovado estates depended on this factor of inversion - the change of sugar to glucose. The art of the sugar manufacturer was, and is, to extract the sugar from the juice with as little inversion as possible. The large quantity of molasses produced on muscovado estates resulted from the inability to prevent inversion. If molasses were to be kept down there were two points to be attended to - care in tempering and brisk boiling, long continued boiling especially being one of the greatest producers of molasses.⁴⁷

In addition to the difficulty of preventing inversion much of the cane juice was burned on the copper wall, and in some of the most backward colonies as Tobago and Grenada, the loss incurred in this manner was considerable.⁴⁸ Most muscovado plants had no thermometer by which the correct temperature for boiling could be ascertained and in addition the type of furnace permitted of no control over the heat applied.⁴⁹

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What was needed in lieu of the copper wall was an appliance which would permit rapid boiling at a lower temperature and thus avoid the inversion and burning so common with the open pan system. The solution to this difficulty involved perhaps the greatest advance made in sugar manufacturing.

As the temperature at which a liquid boils depends entirely on the pressure to which it is subjected it follows that any means whereby pressure can be reduced will lower the temperature at which boiling takes place (thereby preventing inversion and enabling more speedy evaporation). The vacuum pan, which was the means whereby pressure was reduced, had been invented in 1813, and had been erected on Vreed en Hoop (John Gladstone's estate) in Demerara in 1832, and, by 1850, had been installed on other large estates, such as Richmond, and Land of Plenty in British Guiana.⁵⁰ The scale of duties in the United Kingdom, although retarding adoption of the vacuum pan, had not prevented the gradual conversion of all estates in British Guiana to this type of manufacture. The removal of sugar duties in 1874 gave a further impetus to the use of the vacuum pan sugar.⁵¹ From the superior quality /

quality of sugar made in these early installations came the term 'Demerara crystals'. In Trinidad a similar conversion to the vacuum pan took place on the several large estates in that colony.⁵²

The vacuum pan was not introduced into any of the other colonies except in rare instances. The chief obstacle was the great amount of capital involved in setting up a complete vacuum pan manufactory. In 1878, it was calculated that to equip a sugar estate manufacturing 1,000 hogsheads of vacuum pan sugar involved an outlay of from £40,000 - £50,000.⁵³

On most of the small muscovado estates this would have been a prohibitive undertaking. Considering that of the 500 estates in Barbados by 1897, 325 were of less than 300 acres, making never more than 4 - 500 hogsheads each, it is understandable why there were only nine vacuum pans in that colony.⁵⁴

In 1872, there was only one vacuum pan in use in Jamaica at Abbion estate.⁵⁵ The other islands had still less adopted it, there being but one vacuum pan in St. Kitts-Nevis at the end of the century. In a number of the smaller estates, where steam power was used, clarifiers and boilers were heated by utilizing the steam from the steam engine, this development was /

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was limited and lacked the fuel economizing and complete crystallization features of the vacuum pan. Most of these steam clarifiers and boilers were found in Jamaica and Antigua, both colonies in which steam engines were most common - Angigua for example having 54 steam engines out of a total of 71 estates by 1894.⁵⁶

By boiling in vacuo at a low temperature, a great saving in fuel was effected and with improved extraction no other fuel was required than megass. Crystallization was obtained by the vacuum although skill was required in its operation, it sometimes happening "from bad manipulation that the whole of the mass became cloudy from the formation of minute crystals. This condition of things was known as "false grain" and led to a considerable loss as the massecuite would not part with its molasses and a sticky unsaleable produce resulted. It was quickly found that it was best to discharge only a portion of the massecuite from the pan and to take fresh syrup upon the remainder, this was known as "doubling". By working in this manner, the size of the grain was increased and time was saved.⁵⁷ Already by 1862, as a result of the use of vacuum pans, Demerara sugar had established a reputation for having the best grain.⁵⁸

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The acme of the vacuum pan came in the late 1880's when the "triple effect" was developed. This was a form of the vacuum pan, but with three pans instead of one. The vapour from the first pan, as on the principle of a compound engine, was conducted into the second and from there to the third pan. Vacuum pumps were attached so that under reduced air pressure the boiling point was reached at successively lower temperatures in the second and third pans. Finally in the complete vacuum the sugar was boiled till granulation set in.⁵⁹ The advantage of the triple effect was that the steam from the boiling juice of the first pan could be used to heat the juice in the second pan because the temperature here was lower than in the first, and similarly with the third pan in relation to the second. With complete control in the triple (and later multiple) effect, crystals could be built up to any size. Considering the great quantity of sugar that was manufactured by these appliances, a saving in fuel was effected although the megasse was not always sufficient. The working of the vacuum pumps required extra steam power, and thus coal was required in addition to the megasse. The great cost of multiple effects and their large capacity made them feasible /

feasible on only the largest estates and here they were installed in British Guiana, as at Uryheid's Lust, Hampton Court, and Enmore.⁶⁰

The operation following importation and concentration of the cane juice was that of 'striking'. In the open pan system the syrup called the 'strike' or 'skip', was taken from the tayche at a temperature of from 234° - 238°F. and was usually removed by ladling into a gutter and then conveyed to the coolers. Sometimes a copper vessel with a valve in the bottom was made to fit inside the tayche and lowered by a crane or other contrivance, by this means the whole of the strike could be removed at once.⁶¹ The last portion of the strike invariably left a portion adhering to the tayche in the form of caramel which increased the colour and otherwise injured the succeeding strike.

Most of the ordinary muscovado estates did not use a thermometer by which the correct point at which to strike or discharge to the coolers could have been ascertained.⁶² Much depended on the skill of the copper boiler, and skilled boilers were not always obtainable with the labour difficulties and disintegration of the apprenticeship system experienced in /

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in the latter half of the 19th century.⁶³ The importance of the boiler is evident in the wages of \$70.00 and \$30.00 per month paid to the head and second boilers on large British Guiana estates. On muscovado estates the boiler did receive slightly more than other labourers but in no sense had the prestige and remuneration as in British Guiana.⁶⁴

The striking operation completed, the strike was conveyed to the coolers, large wooden trays 12 or 14 inches deep, usually capable of containing one half to one hogs-head of sugar. "The coolers were placed in that part of the boiling house most exposed to the air and at a convenient distance from the coppers." If after being placed in the coolers the sugar did not granulate and harden rapidly it was repeatedly stirred by hand operated appliances known as "oscillators," to hasten deposition of crystals.⁶⁵ Oscillation was also said to enable sugar to part with its molasses more freely. Oscillated sugar was especially sent to Barbados for the chief reason that only in that colony was there sufficient labour to spare for this process. Oscillation usually produced a confused and irregular granulation, the sugar being prevented by the stirring from crystallizing evenly /

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evenly. The reputation that Barbados sugar had for being full of 'foots' and streaks, was largely attributable to this practice of oscillation.⁶⁶

After remaining in the coolers until sufficiently solid the sugar was dug up with cutters and shovels and carried in pails to the hogshead into which it was thrown regardless of temperature. During crop time there was usually a rush to clear the coolers to make room for another strike, thus the sugar was generally very warm when casked and much sugar which would have crystallized in cooling, was drained off with the molasses.

Veins, dark streaks, and spots were observable in the sugar produced by the different strikes in the coolers. Much of the inaccuracy and difficulty in sampling sugar for duty purposes on entry into the United Kingdom, prior to 1874, arose from the unequal quality of sugar in one hogshead. As regards British West Indies sugar it was stated,⁶⁷ -

"the contents of a cask of sugar from the West Indies varies very much. If a hogshead be allowed to remain on one side, the upper portion of it will be of a better quality than the lower ... the lower contents are brown and almost black /

black, the top side of it might be 5s. or 6s. better than the centre or bottom".

"In London they take care that the hogshead is drawn from the ship and kept up as it stood in the hold, so that the foot and molasses sink down, and the top part will be the best and thus take the sample from the middle."

Hogsheads were only partially drained when loaded and much molasses was retained in the sugar and aggravated conditions in the heat of the ship's hold. Leakage as described in the Introductory Survey also entailed large losses during the second half of the century. In 1877, sugar from Tobago was losing as much as 16 per cent from leakage at sea - equivalent to a loss of 320 tons of sugar in a crop of 2,000 tons.⁶⁸ Sugar from Barbados to New York, throughout the second half of the century, lost 5 per cent, in transit, although Barbadian planters maintained that the higher polarization of such sugar after drainage more than compensated for the loss⁶⁹ - an unsound argument.

In Barbados loss of molasses in loading muscovado sugar was sufficient to warrant the establishment of a small refinery in 1860 which obtained its material for making second sugar /

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sugar and rum from the bilge water of ships loading sugar in Carlisle Bay.⁷⁰ The molasses draining on board ship tended to crystallize on the outside of casks and hogsheads and on the 'skin' of the ship and these scrapings were always saved. The mixture of bilge water and molasses sold "usually at 2 or 3 shillings below the value of good average molasses."⁷¹

Up to the mid-nineteenth century the separation of molasses from the crystals of sugar was by natural drainage although a form of pneumatic suction drainage had been tried on Oaks and Dodson estates in Demerara in 1832, with little result.⁷² The big improvement in drainage of molasses came with the invention of the centrifugal in 1837. The centrifugal was a container which being revolved rapidly, threw off the liquid from the crystals, the syrup passing through a mesh. The centrifugal came to be used extensively, both in the refining industry in the United Kingdom⁷³ and on some sugar estates in the West Indies, where it was the most practical and easily installed improvement that could be made on a muscovado estate. Whereas under the old system, drainage took two or more weeks and was imperfectly done, the centrifugal produced a much drier sugar in the matter of / with /

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of a few hours. In Jamaica, as has been stated, a number of merchant firms, who purchased estates through the Encumbered Estates Court, installed centrifugals and by 1897, 48 of the 140 sugar estates in Jamaica were equipped with centrifugals.⁷⁴ These estates were chiefly the northside rum estates where perfect drainage of molasses was of importance.

With the centrifugal, the vacuum pan sugar could be presented to its best advantage. If a fine coloured sugar was required it was the practice to wash the crystals during their revolutions with a small quantity of water or bright syrup. Bright coloured sugar could be obtained by centrifugalling the massecuite warm.⁷⁵ The almost complete extraction of sugar by the vacuum pan and the perfect drainage by using the centrifugal resulted in vacuum pan molasses being of much less value than the old muscovado molasses, and scarcely paid for the cost of packaging, freight and other expenses, (vacuum pan molasses was selling for 3d. per gallon by the late 1890's)⁷⁶ Muscovado molasses containing more sucrose both because of imperfect boiling and drainage, had a steady market and brought a higher price (10d. per gallon in 1896).

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With the centrifugal a much drier sugar could be obtained and the old awkward hogshead dispensed with and sugar packed in bags, easily handled and costing but a few pennies each compared to the hogshead costing usually about a pound.⁷⁷

The other by-product of sugar - rum - was made from the skimmings of the coppers and the very refuse and sweepings of the establishment after going through the process of distillation with diluted molasses.⁷⁸ Most of the stills on muscovado estates were of the retort type, known as the common pot still with a capacity usually from 100 to over 1,000 gallons.⁷⁹ The value of rum depended largely on its flavour and aroma. The substances confirming the distinctive character of rum are very volatile and hence were found in greatest quantity in the first runnings from the still.⁸⁰ Thus stills of the old or 'discontinuance' type were preferred as they enabled the first half of the returns or any desired portion to be separated, in order to produce a spirit of the first quality. During the latter half of the century excise taxes were levied on rum in the various colonies as a result of increasing financial difficulties. Regulations requiring stills to be kept under lock and key and /

and that continuance type stills be used, interfered with the separating of various qualities of rum. Much of the difficulty in levying an excise tax arose from resentment at this interference.⁸¹ In British Guiana and Trinidad where one standard of low grade rum was made, this problem was not of importance.

Rum was usually coloured by means of burnt sugar (caramel) in solution with strong proof rum, and this mixed with rum so as to produce the colour desired.⁸² The most skilled part of rum making lay in setting up the proper ferment and, as in Jamaica, to have the proper ferment or wash set up was almost a fetish. "It was a nuisance and a loss if the wrong ferment got into a vat, it had to be cleaned out, the vat scoured and whitewashed before the proper ferment could be planted".⁸³

Much of the skill and attention required in the making of the best rum went hand in hand with the leisurely wasteful muscovado process. A contrast between efficient modern method of producing rum and the muscovado system, was to be seen in the case of British Guiana and Jamaica. In the humid, very high temperature of British Guiana, the low grade vacuum /

vacuum pan molasses went through a process of fermentation in no more than 48 hours, compared to at least a fortnight⁸⁴ in the case of rich muscovado molasses in the drier air of Jamaica, where great care and time was taken in setting up ferment. The two different methods were reflected in the value of the two rums. Jamaica better rum brought as a rule five times the price of Demerara rum throughout the period 1865 - 1900.⁸⁵

The whole question of rum and its chemistry was but little understood by the muscovado sugar planter, and until the later years of the nineteenth century there was little need for a scientific knowledge. The old skimmings un-doctored with chemicals turned out what was considered by connoisseurs to be a delightful rum. The flavour of the rum was due to various causes such as the type of caramel added and the organic matter present. Of this complex question, the muscovado producer knew little and cared less. Apart from the northside rum estates, in Jamaica, there was long a feeling in the West Indies that rum made itself and required no looking after. The molasses was diluted and the wash distilled and if the results were low, the molasses was blamed, and /

and if the rum was bad the distiller got a 'reminder'.

As was the case with muscovado sugar, British West Indies rum had long enjoyed a favoured market in the United Kingdom, up to 1860 having an advantage of 9s. per gallon over foreign spirits under the duty rates of the United Kingdom.⁸⁶ From 1860 duties on all imported spirits into the United Kingdom were approximately equalized. The United Kingdom producer however paid an excise tax 2d. less than the British West Indies producer. This advantage given to the home producer was criticised by the West India Committee throughout the remainder of the century.⁸⁷

The decrease in the price of sugar after the removal of sugar duties had also brought a decrease in the price of rum and consumption of this spirit rose steadily reaching its maximum in the period 1873 - 80, when rum was as low as 12s. per gallon (1880), and an average of five million gallons were consumed.⁸⁸ This high consumption of West Indian rum was not maintained. In 1881, the duty on colonial spirit was raised from 10/2d. to 10/4d. and foreign reduced from 10/5d. to 10/4d. (for mere clerical convenience, so claimed the West India Committee). This alteration of duties gave the /

the British distiller an advantage of 4d. per gallon over West Indian rum and the West India Committee continued their opposition,⁸⁹ more strenuously than ever against the British distiller.

In conjunction with the great influx of bounty-fed beet sugar after 1884, an increasing quantity of continental beet root spirit, called rum, was also thrown on the English market at reduced prices. Thus home buyers of rum were becoming more fastidious and critical of West Indian rum. By 1888 it was evident that the old attitude of mind towards the making of rum must change, and it was necessary to know what were profitable and unprofitable processes especially in Jamaica.

Jamaica of all the West Indies colonies specialized most in the production of rum. By the end of the century, when sugar prices had dropped and the reputation and price of Jamaica rum remained high, it was stated by Jamaican planters that sugar was but a by-product to the main industry of manufacturing rum. As late as 1896, the Planters Association in Jamaica stated that as long as rum remained as valuable or more valuable than sugar, their existing appliances /

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appliances involved no loss of the juice obtained.⁹⁰

The growing emphasis on rum is evident in the increasing proportion of rum to sugar made in Jamaica. In 1837, the proportion was 36 puncheons of rum to 100 hogsheads of sugar, by 1869 - 79 it was 55 puncheons to 100 hogsheads⁹¹, and at this date, rum was "the most profitable manufacture in the colony". At the International Exhibition at Philadelphia in 1876, Jamaica rum was "unexcelled by that of any country" with such a high reputation that all rum sold in the United States was termed Jamaica rum "although only 65 puncheons of Jamaica rum were exported to the United States in 1876".⁹² By 1897, on some estates in Jamaica, the proportion of rum to sugar had risen to 70 puncheons to 100 hogsheads (seven estates in St. Annes parish, in 1896, yielded 740 puncheons of rum and 1,039 hogsheads of sugar),⁹³ compared to 30 puncheons of rum to 100 hogsheads of sugar as made in Demerara.⁹⁴

During the latter half of the 19th century Germany became an increasing importer of rum and a profitable business grew up in Jamaica supplying this German demand. A number of the rum estates on the northside of Jamaica began to specialize in a high priced rum, not for drinking purposes, but /

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but exported to Bremen and Hamburg, where it was used for mixing purposes.⁹⁵ This Jamaica 'ether' rum, as it was termed, had a remarkable power of imparting its own flavour to six or seven times its own bulk of 'silent' or beet spirit made in Germany. This enabled the whole mixture to be sold as Jamaica rum.⁹⁶ By the 1880's German houses had their buyers in Jamaica "going around and spotting distilleries with the right kind of ferment in the liquor loft ... a man with a good nose spots this immediately."⁹⁷ These "German rum estates" depended more and more on the high value of their rum. The use of the centrifugal enabled a greater quantity of molasses in much quicker time and, when an agriculture chemist was appointed in Jamaica, experiments and analysis of fermentation were carried out. The smelling process was also complemented by the use of Lovebond's tintometer so that quality could also be more accurately ascertained by colour.⁹⁸

Rum estates in Jamaica continued to make profits long after many others had collapsed, and by the end of the century when ordinary rum had dropped from 2/9d, per gallon to 1/3d. Jamaican German rum was fetching 5s. per gallon a drop of 2s. from the 7s. per gallon it brought in 1891.⁹⁹ (These prices /

prohibitive import duty in that colony (prices are those obtained in the Colonies).

Trinidad and British Guiana continued to produce a low-grade vacuum pan molasses (suitable for a poorer brand of rum) which, by 1897, was selling in the colony as low as 3d. per gallon.¹⁰⁰ Trinidad molasses, for several years prior to 1897, had a market in Martinique, where, owing to protective duties, it could be worked up at a profit and sold in France. Vacuum pan molasses sold as low as 4½c. per gallon in Trinidad in the year 1894, but brought 10c. per gallon in Martinique. The Martinique outlet ended in 1897 when that colony imposed an import duty of \$10.00 per puncheon.¹⁰¹ Trinidad had another outlet for her molasses in the considerable amount of rum used for the manufacture of Angostura Bitters, the base of which is rum.¹⁰²

In the smaller islands, where muscovado sugar was made, as Barbados, Antigua, St. Kitts-Nevis, and St. Vincent, emphasis was on producing a rich molasses which established a specialized market in the United States and Canada in the last two decades of the century. St. Kitts-Nevis sent some of their molasses to the Martinique market as Trinidad did, this market was also shut to St. Kitts-Nevis in 1897 by the prohibitive /

prohibitive import duty in that colony.¹⁰³

That improvements had reduced the labour involved, and had speeded up sugar manufacturing in the period 1865 - 1900, especially in the years of depression 1884 - 1894, was most evident in British Guiana, where sugar estates were models of efficiency.

The old wagon boilers had been replaced by new boilers utilizing all the back pressure steam and enabling the triple and other effects already described, to be used. The old logies, the megasse carriers, boilerman on the copper wall, and the boxtop men, were all done away with and represented a saving of £2 per ton.¹⁰⁴ In the curing house small boxes, or buckets, running on lines into which the pan strikes were placed, cooled the sugar much more quickly. Hydraulic lifts were used for emptying the sugar into the sugar bunk (storehouse) where it was put through a sifter to remove any lumps - (previously it had been tossed about by spades, and, in regard to this practice, there was an idea current among United Kingdom consumers that these lumps were caused by trampling bare feet of the labourers - one estate in British Guiana had provided a canvas boot for this purpose).¹⁰⁵

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On many estates, by the 1890's, in British Guiana, automatic megass firemen were in use whereby green megass could be fed by hopper and a cold rush of air excluded. On the first estate where this improvement was made a saving of twelve men was claimed.¹⁰⁶ A similar automatic firemen was installed in the great Usine St. Madeline in Trinidad.¹⁰⁷

The effect of all these improvements in British Guiana was a speeding up of the whole tempo of 'grinding' and 'crop time'. In the 1860's grinding lasted from August, when the arrow was in the cane and the juice poor and full of starch, and continued on till February or even March, with many stoppages to allow the megass to dry and to work off accumulation of molasses. Under the old system the operations were never finished at the same time, and to keep the syrup from spoiling it had to be boiled sweet and kept overnight or over the weekend. By the 1890's everything was turned into massecuite, not syrup. There was no difficulty in obtaining operators or mill workers, compared to the mid-century when the building overseer had to make out a list of those men told off to man the factory, and pass it to the field and other overseers, to ensure their going to the factory.¹⁰⁸

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By 1880, in British Guiana, it was stated that the average cane juice was both purer and richer than twenty years previously because of shorter and more intense grindings when the canes were most fit to be cut. The greater strength of the factories on the large estates in British Guiana and Trinidad was particularly noticeable at the end of the year. Canes bloomed or arrowed about September and the best time for reaping was when the arrow began to dry and fall off - generally in October or November. A sharp brisk grinding of six or eight weeks disposed of the same amount of cane as formerly lingered over four or five months.¹⁰⁹

The muscovado estates on the other colonies provided a contrast to the atmosphere of efficiency in British Guiana. There is no one chief reason for the limited improvements on the muscovado estates. The root of the trouble extended a long way back, and perhaps the heavy burden of mortgages from which many estates never escaped may be taken as one of the more important reasons for non-improvement. Throughout the depression years more than one sugar planter voiced his belief that but for interest and debt, he could make headway and make capital improvements.¹¹⁰ Estates sold through the Encumbered /

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Encumbered Estates Court were those which came through the difficult years most easily, and these were estates which had been freed from the great weight of encumbrances.

Mortgagees at a distance were not always in sympathy with progressive ideas that would delay receipt of their annual income, nor did they always understand that the lucrative days of the past were gone for ever, and that the alternative to improvement was collapse.

In addition to the retarding of improvements by mortgages, the fact that the old muscovado system had been profitable on most estates right up to the mid 1880's (and on some estates always remained profitable) suggested no reason why expense should be incurred for improvements. With the growth of beet competition, uncertainty about the future and hesitancy to give up a small but certain income for what was more speculative and uncertain, deterred a number of planters from improving.¹¹¹

In summing up the result of improvements made during the period 1884 - 94 as reflected in a reduced cost of production, it is evident that the greatest reduction had been made on vacuum pan estates. The large usine St. Madeline in Trinidad had /

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had reduced its cost of production by 50 per cent within the above period.¹¹² In British Guiana vacuum pan sugar which cost £16 per ton to produce in 1885, was being turned out for £9 per ton in 1892. The £7 saving being made up of a £5 reduction in manufacturing costs and £2 in labour.¹¹³

Reduction in the cost of producing muscovado sugar in the period 1884 - 94 is more difficult to ascertain. Correct data as was increasingly required on vacuum pan estates in British Guiana and Trinidad, was lacking on muscovado estates. Many muscovado sugar proprietors had no definite idea as to their cost of production and the manner in which they attempted to reckon it at times is confusing. In some instances the value of rum and molasses is deducted from the total cost of producing sugar and its by-products and in other instances this is not done and in many cases no indication is given as to how the cost is reckoned. This difficulty plus that of unfavourable location and varying susceptibility to droughts make an exact cost of production on muscovado estates nearly impossible, as was found out by the Royal Commission of 1897. An approximation is that the average cost of production on muscovado estates, during the period /

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period 1865 - 84 was from £10 - £15 per ton of sugar. By 1894, this average was from £8 - £13 per ton. The average reduction of £2 per ton is almost wholly the result of lowering wages by roughly 30% in the period 1884 - 94. In those instances where centrifugals and improved extraction were introduced, reduction was approximately £2 per ton. Centrifugal estates were those having generally the lowest cost of production.¹¹⁴

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1. P.P. 1898. V. 50. Trinidad. p. 343.
 2. P.P. 1898. V. 50. Append. C., Pt. I. p. 9.
 3. P.P. 1898. V. 50. Trinidad. p. 296.
 4. Loc. cit.
 5. C.O. 28/219. Sept. 23, 1873.
 6. P.P. 1898. V. 50. Barbados. p. 171.
On some estates the proportion tended to be nearer
one-half - see P.P. V. 50. Trinidad. p. 318.
P.P. V. 50. British Guiana. p. 100.
 7. Labat Pere, J. B. Nouveau voyage aux isles de
l'Amerique. Paris, 1742. V. III passim.
 8. P.P. 1898. V. 50. British Guiana. p. 71. (As late
as 1897, 54% extraction only was obtained on a vacuum
pan estate in Antigua - a new mill would have been
the wiser investment.
 9. P.P. 1898. V. 50. Barbados. p. 164.
Timehri (Journal of the British Guiana Agricultural
Society) V. 3. 1884. p. 61. - (to successfully
burn megass requires at least 70% extraction).
 10. P.P. 1898. V. 50. Barbados. p. 224 (error - experiments
was by Professor Harrison).
 11. Watts, F. Manual for Sugar Growers. Antigua 1892.
p. 75.
 12. Loc. cit.
 13. P.P. 1871. V. 20. Pt. II. p. 119.
 14. P.P. 1898. V. 51. Jamaica. p. 263.
 15. P.P. 1898. V. 50. British Guiana. p. 71.
 16. Ibid. p. 101.

17. Timehri. op. cit. V. 5. 1891. p. 388.

18. P.P. 1888. V. 72. A.R. British Guiana. 1887.

19. Watts. op. cit. p. 75.

20. C.O. 111/406. Dec. 4, 1875. "the megasse is passed over a moveable table through a trough filled with steam".

21. Timehri. V. 3. 1884. p. 61.

22. Loc. cit.

23. Loc. cit.

24. Timehri. V. 4. pp. 54-70.
P.P. 1890. V. 48. A.R. St. Lucia. 1889.

25. Timehri. June 1. 1890.

26. P.P. 1884. V. 55. Pt. III. p. 581.

27. P.P. 1862. V. 13. p. 249.

28. P.P. 1873. V. 48. A.R. Jamaica. 1870-1.

29. P.P. 1882. V. 44. A.R. British Guiana. 1881.

30. P.P. 1884. V. 55. Pt. III. p. 505.

31. C.O. 111/427. Mar. 15, 1883.

32. P.P. 1898. V. 50. Barbados.

33. P.P. 1898. V. 50. Barbados. p. 156.

34. P.P. 1898. V. 59. Dominica. pp. 63, 70.

35. Kerr. op. cit. p. 131.

36. Loc. cit.

37. Russell, W. Prize Essays. Georgetown, 1876-8.

38. Watts. op. cit. p. 89.

39. Russell. op. cit.
Timehri. V. 8. 1894. p. 207.

40. Watts. p.89.

41. Ibid. p. 99.

42. Kerr. p. 131.

43. P.P. 1862. V. 13. p. 112 and passim.
P.P. 1878-9. V. 13. Q.Q. 2838-9.
Mathieson, G. "Should Sugar be Shackled". London.
1899.

44. P.P. 1862. V. 13. p. 113; and labour scarcity and
manufacturing see P.P. 1878-9. V. 13. p. 128.

45. Kerr. p. 131. Watts. p. 99.

46. Watts. p. 99.

47. Loc. cit.

48. P.P. 1877. V. 59. A.R. Tobago. 1875-6.
P.P. 1898. V. 50. British Guiana. p. 71.

49. Watts. p. 89. ff.

50. Dearr, N. History of Sugar. London. 1950. p. 561.

51. By the end of the century only two estates in B. Guiana
make muscovado sugar.

52. P.P. 1898. V. 50. p. 237.

53. P.P. 1878-9. V. 13. p. 141.

54. P.P. 1898. V. 50. Barbados. p. 153.

55. P.P. 1873. V. 48. A.R. Jamaica. 1871.

56. P.P. 1898. V. 51. Antigua. p. 159.

- 57. Watts. p. 103.
- 58. P.P. 1862. V. 13. p. 92.
- 59. Times. May 24. 1910. Imperial Supplement (British West Indies section).
- 60. Timehri. V. 6. 1892. "Demerara Sugar Production".
- 61. Kerr. p. 132.
- 62. Watts. pp. 99-100.
- 63. Commission on Juvenile Population. Jamaica. 1879. P.P. 1878-9. V. 13. pp. 128-9.
- 64. P.P. 1871. V. 20. Appendix. Part II. p. 52.
- 65. Deerr. op. cit. p. 428.
- 66. P.P. 1862. V. 13. p. 92.
- 67. Ibid. pp. 12, 13, 19.
- 68. P.P. 1877. V. 59. A.R. Tobago. 1875-6.
- 69. C.O. 28/236. Sept. 14. 1894.
Barbadian planters maintained that when drainage took place the sugar polarized higher and the loss there-fore but 2½%.
- 70. C.O. 28/211. No. 11. Jan.-June 1870.
- 71. P.P. 1862. V. 13. p. 263.
- 72. Deerr. p. 573.
- 73. P.P. 1878-9. V. 13. P. 422.
- 74. P.P. 1898. V. 51. Jamaica. p. 369.
- 75. Watts. p. 112.

- 76. P.P. 1898. V. 50. British Guiana. p. 15.
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- 77. Timehri. V. 8. 1894. p. 207. ff.
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- 79. P.P. 1903. V. 44. Report on Excise Regulations in
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- 81. C.O. 137/604. Jamaican Correspondence.
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- 82. Watts. p. 136-7.
- 83. P.P. 1898. V. 50. Appendix C. Pt. I. p. 33.
- 84. Deerr. p. 568.
- 85. P.P. 1898. V. 50. Appendix C. Pt. I. pp. 17, 130-1.
and see Annual Reports.
- 86. West India Committee's publication "Some Protected
British Industries." London. 1900.
- 87. Loc. cit.
C.O. 111/418. June 4. 1881.
- 88. "Some Protected British Industries". op. cit.
- 89. C.O. 111/418. June 4. 1881.
- 90. P.P. 1898. V. 51. Jamaica. p. 370.
- 91. P.P. 1872. V. 42. A.R. Jamaica. 1870.
- 92. C.O. 140/178. Leg. Council Minutes. Jamaica. 1877.

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93. P.P. 1898. V. 51. Jamaica. p. 367. - see large proportion of rum to sugar produced.
 94. P.P. 1898. V. 50. Appendix C. Pt. I. p. 32.
 95. C.O. 140/178. Leg. Council Minutes. Jamaica. 1877. P.P. 1898. V. 50. Appendix C. Pt. I. p. 32.
 96. Loc. cit.
 97. Loc. cit.
 98. Timehri. op. cit. V. 4. 1890. pp. 78-88.
 99. P.P. 1898. V. 51. Jamaica. p. 254.
 100. P.P. 1898. V. 50. Trinidad. pp. 240-1.
 101. Ibid. V. 51. St. Kitts. p. 209.
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 102. P.P. 1900. V. 54. A.R. Trinidad. 1899. - 38,000 gallons of Angostura bitters were exported in 1899 from Messrs. Sargent factory.
 103. Ibid. p. 101.
 104. Timehri. V. 8. 1894. Art. by F. C. Thorpe.
 105. Timehri. V. 6. 1892. p. 15.
 106. Ibid. p. 351.
 107. C.O. 28/236. Sept. 14. 1896.
 108. Timehri. V. 6. 1892. p. 20.
 109. Timehri. V. 5. 1891. p. 329.
 110. P.P. 1899. V. 62. A.R. Trinidad. 1897.
P.P. 1898. V. 50. Barbados. p. 171.
 111. C.O. 321/167. 1896. St. Vincent.

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112. P.P. 1898. V. 50. British Guiana. p. 93.
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pp. 197-8.
113. P.P. 1898. V. 50. Appendix C. Pt. I. p. 9.
114. For average cost of production on muscovado estates,
as given to Royal Commission of 1897 - see
P.P. 1898. V. 51. Antigua. pp. 157, 159, 162-3.
Ibid. V. 51. St. Kitts-Nevis. pp. 216, 235, 239.
Ibid. V. 51. Jamaica. pp. 352, 370, 373.
Ibid. V. 50. Barbados. p. 198.

CENTRAL FACTORIES.

The ultimate solution to the problem of small sugar estates unable to finance modern improvements in manufacturing, was the establishment of central factories in the early twentieth century. During the years 1865 - 1900 there was no general movement to adopt this system.

The leading feature of the central factory system was, that instead of every estate however small, having its own set of works and machinery, large manufactories would be established at central places and would receive and grind, the crops of several estates.¹

Central factories were first established in the French West Indies; Pointe Simon in Martinique, the oldest, was established by an Englishman in 1847.² In Guadeloupe, about the same time, a local earthquake had damaged the existing manufactories and instead of replacing them, a central factory system was started.³ The question of central factories was first raised in the British West Indies in connection with the Royal Commission on Commerce in the British West Indies in 1847 - 8, when Earl Grey considered that central factories were the ideal remedy for the post-Emancipation difficulties of the sugar colonies, and stated that
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the sugar proprietor was incapable of acting efficiently in the many capacities of planter, merchant, manufacturer and distiller.⁴ Earl Grey's suggestion evoked little enthusiasm from the planters at the time. The ostensible objection was that the planter already had existing works, and that the layout of the estates did not lend themselves to centralization. The real difficulty then, as later, was the lack of capital and co-operation for such a venture. The finances of the colonial governments were all in a poor state; and opposition from mortgagees and merchants to any prior claim of a central factory on contracting estates, was also a real cause of discouragement to the movement. Many planters felt they would suffer a loss of independence and prestige,⁵ under this system, and finally, the improvement of conditions in the late 1850's made the need for central factories less urgent.

In the French islands the central factory system was a success.⁶ At first there had been considerable difficulty in coming to an arrangement with proprietors who were under engagements to consignees, but as the latter (here called commissioners) were almost always resident, or represented, in /

in the islands they were more amenable to the idea of central factories. Also, commissioners did not have financial claims on estates to the extent that merchant-consignees had in the British West Indies, and in cases where they did have claims on estates they were induced to refrain from pressing them, the Usine (central factory) taking up the planters debts in a number of instances. After disconnection with the commissioners, advances were obtained by the sugar planter through the local bank, the Usine being security for their repayment. In some cases the Usines made advances to their contributory estates to assist in clearing land and extending cultivation.⁷ By 1870 central factories in the French islands were "in the highest possible favour as a means of investment".⁸ In 1884, when beet competition was greatly increased and prices of sugar had dropped, of the ten usines in Martinique "all but two gave returns of 8% and upwards on vested capital".⁹

Following the Report of the Royal Commission on Commerce in the British West Indies 1847, no movement was made to establish central factories until 1872. Bigelow, writing in 1851, urged there^{hmi} establishment in Jamaica and stated that /

that, "50 sugar mills of suitable dimensions and faithfully conducted would manufacture the largest sugar crop ever raised in Jamaica as well as 800 or 1,000 now do, and probably much better."¹⁰

The Governor's report for St. Kitts in 1860 remarked, as had Earl Grey, on the inability of the planter to perform the various offices of farmer, miller, distiller and manufacturer adequately, and called attention to the Martinique system.¹¹

In Antigua in 1871 when a hurricane caused great damage to buildings on the sugar estates, the leading planters asked the Governor to appoint a commission to report on the Martinique system. This report (very limited in its information) found the central factory system working successfully in Martinique, and recommended its establishment in Antigua where there was no physical difficulty except lack of fresh water.¹² No further action was taken in Antigua following this report and interest seems to have waned. The West Indies Encumbered Estates Court was very active in Antigua in the years immediately following 1870, and merchants were buying over estates at such low prices that profits / .

profits made were sufficient to dull interest in central factories.

Various objections arose whenever the question of central factories arose in the other colonies prior to 1884.

In Barbados, high cost of land deterred any private enterprise from purchasing sufficient acreage to support a central factory. Any co-operative venture among the planters to establish a central factory would have required a first charge on their estates as security for loans raised, and mortgagees, attorneys and managers were opposed to a scheme which, it was considered, would adversely affect their position.

In some of the colonies flat areas on which tramlines could be laid were difficult to obtain. St Vincent and Montserrat were examples of these.¹³

In Jamaica with the decreased importance of sugar production, interest in central factories was difficult to awaken. In addition many of the estates were encumbered or in the hands of merchant consignees, and it was felt that central factories would interfere with their interests.¹⁴

Many of the sugar proprietors still prided themselves on /

on being master of their own affairs, and felt that being committed to send canes under a contract with a central factory would lessen them in the eyes of the world. In addition, the particular brand of rum, in which some proprietors specialized could no longer be produced with central factories. In Jamaica, as in all the colonies, the prospect of scrapping existing machinery - especially steam engines and centrifugals newly purchased - was not welcome. Some planters said that the introduction of extensive tramways, doing away with stock and wains, would decrease the amount of manure available.¹⁵ There were also said to be few localities in Jamaica that could command the 38 square miles, felt to be necessary to support a large central factory. There were a few districts as St. Catherine's, Plantain River Garden and the flat land along the seashore between Montego Bay and Falmouth,¹⁶ but in these districts there seems to have been some prejudice or other, as in Montego Bay area where emphasis was on fine rum production. Again in Plantain River Garden region, where merchant consignees were adverse to sugar planters making contracts with central factories.¹⁷ In addition to these difficulties, there was no /

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no large body of cane farmers in possession of land suitable to support a central factory such as were found in Trinidad and St. Lucia.

The need for central factories did not exist in British Guiana; the large modern installations in that colony were equal to central factories.

The first central factories in the British West Indies were established in Trinidad and St. Lucia about approximately the same time, 1871 - 2.¹⁸ The Colonial Company, owner of one of the two factories started in Trinidad, obtained canes not only from their own large estates, but also from those of Messrs. Tennant and from an increasing number of small cane farmers.¹⁹ The central factory system in Trinidad got off to a good start. The Colonial Company, owning large estates in British Guiana, was in a strong financial position and there is no evidence of the Usine St. Madeline experiencing losses during the remainder of the century.

The first St. Lucia central factory was a less successful venture; it had been established in 1873 as a result of the influence of the French Usines in nearby Martinique.

Mr. /

Mr. Des Voeux, a French planter who lived in St. Lucia, interested the Governor of the colony in the scheme and by 1870 - 1, the Governor was urging the planters to support a central factory, and extolled its advantages to them and to the increasing body of cane farmers. Interest was awakened and the report for the year 1874 stated that "cane culture received unwonted stimulus from the introduction of a central factory during the year by Mr. Des Voeux with the support of English capitalists".²⁰ The Grand Cul de Sac Usine, as it was called, experienced difficulties which prevented it from being a success, and tended to prejudice sugar proprietors in the other sugar colonies against central factories. Ill management under a Frenchman, who was formerly the ruined proprietor of a usine in one of the French islands,²¹ and misappropriation of funds due to lack of a good audit system, were some of its misfortunes. Difficulty was also experienced in 1876 because of the bad quality and insufficient quantity of cane, plus extravagant use of fuel.²² Too many planters sought advances because merchants refused to finance them now that they were under contract to the factory.²³ The factory soon found that it was unwise to rely totally /

totally on sugar estates if canes were to be always had when wanted and, by 1877, the manager of the factory was instructed to obtain possession of Crown lands bordering on their tramlines, and thus avoid over-dependence on local estates and cane farmers. By 1884, evidence shows that the Cul de Sac factory had acquired a number of sugar estates, and was no longer relying solely on planters for canes.²⁴ The transfer of the factory in 1883 to a new company, in which the St. Lucia government had an interest, and the establishment of two other factories under the St. Lucia Usines and Estate Company, firmly established the central factory system in St. Lucia. These factories were seriously hurt by beet sugar competition after 1884,²⁵ but were in a much better position to meet this competition than individual muscovada estates, many of which succumbed in that island.

see
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Central factories in St. Lucia and Trinidad reduced the cost of production by nearly 50% in the period 1840 - 54, and it was stated, "all the elements of successful competition with beet sugar are here".²⁶

With the depression in the sugar industry that set in after 1884, little was done in the other sugar colonies towards /

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towards establishing central factories. The increasing competition from bounty sugar and uncertainty as regards the future, deterred capital investment needed for such factories. The difficulties experienced in St. Lucia were quoted as evidence that it was not a prosperous venture.²⁷

The question of central factories was raised a few times in the period 1884 - 95, chiefly in the form of schemes based on Government loans. Three such schemes, two in Barbados, and one in Antigua, in 1884, 1891 and 1895, were turned down by the Colonial Office on the ground that they were unsound, considering the state of colonial finances, and that unless a first charge on the estate was given as security, the Colonial Government must not enter into such speculation. Estate owners were usually agreeable to giving this first charge, but mortgagees were not.²⁸

The central factory movement did not receive real stimulus until the Royal Commission of 1897 recommended it, and this subject is discussed in connection with the work of the Royal Commission of 1897.

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1. In the French West Indies, central factories did complete refining of sugar using the charcoal process. In the British West Indies, lack of fresh water was said to be the reason for no attempt to do charcoal refining (which required ample fresh water).
 2. F. C. Williams. The French Antilles. Mauritius. 1885.
 3. P.P. 1847-8. Vol. 23. Q.10405.
 4. Ibid. Q.10408.
P.P. 1878-9. Vol. 13. Q.2841.
 5. C.O. 7/142. No. 161. Sept. 9. 1871.
See attitude of Barbados sugar proprietors who feared a loss of independence and prestige.
 6. The large Usine at Point a Petre had gross profits in 1876 of £23,485 - see Williams. op. cit.
 7. C.O. 152/109. No. 151. Sept. 23. 1872.
Report of Commissioners appointed by Governor Sir B. Pine to enquire into the working of the central factory system of Guadeloupe and Martinique. 1872.
 8. Loc. cit.
 9. C.O. 321/80. Feb. 14. 1884.
 10. Bigelow. P.P. 141: 146.
 11. C.O. 152/109. Sept. 23. 1872.
 12. C.O. 152/109. No. 151. Sept. 23. 1872. "the only step required to place sugar crop in West Indies abreast of its rival beet".
 13. P.P. 1898. Vol. 51. St. Kitts. pp. 210: 240-1.
P.P. 1898. Vol. 51. Montserrat. p. 150.
P.P. 1898. Vol. 50. Appendix A. p. 121. (Except in Carib district in St. Vincent).
 14. C.O. 137/471. No. 138. Aug. 22. 1873.

SUGAR CANE CULTIVATION

15. P.P. 1898. p. 187.
16. P.P. 1898. Vol. 50. Jamaica. p. 314.
17. P.P. 1898. Vol. 51. St. Kitts. pp. 210. 240-1,
C.O. 137/471, Aug. 22. 1873.
18. C.O. 295/266. No. 48. March 15. 1873.
C.O. 295/264. No. 263. Dec. 26. 1872.
P.P. 1875. Vol. 51. A.R. St. Lucia. 1873-4.
19. P.P. 1875. Vol. 51. A.R. 1872-3. Trinidad.
C.O. 295/264. Dec. 26. 1872.
20. P.P. 1875. Vol. 51. A.R. 1873-4. St. Lucia.
21. Loc. cit.
22. C.O. 321/18. July 1877.
C.O. 321/80. No. 7. Feb. 14. 1884.
23. C.O. 321/80. No. 7. Feb. 14. 1884.
24. C.O. 321/18. July 27. 1877.
C.O. 321/80. No. 7. Feb. 14. 1884.
25. P.P. 1884. Part II. Concluding remarks of Commis-
sioners. pp. 312, 345. "The Voice of St. Lucia".
Jan. 24. 1885 stated that, "despite central fac-
tories St. Lucia might be said to have remained
stationary.
26. Eves. op. cit. 197-8.
27. P.P. 1878-9. Vol. 13.
28. C.O. 321/74. Dec. 1884. Barbados.
C.O. 152/181. Dec. 15. 1891.
P.P. 1898. Vol. 50. Barbados. pp. 155-7 - 178.

SUGAR CANE CULTIVATION

Reduction in the cost of producing sugar in the British West Indies in the 19th century was effected primarily by improvements on the manufacturing side, and by reducing wages or skimping with labour. Opportunity for economy in the field was admittedly less than on the manufacturing side, and hand cultivation in some of the sugar colonies was carried out with a high degree of perfection. Much ignorance however prevailed as to manuring and soil husbandry until practically the end of the century.

Deficiency of organic matter in the soil, the principal and most general soil difficulty on the sugar estates could only be corrected by application of manure and fertilizers. Fortunately, sugar cane is one of the staple crops least likely to promote soil erosion, otherwise the "classical sugar colonies" would have given up sugar production long before the end of the 19th century.¹ Because of the binding power of the roots and the building up of organic matter in the soil, sugar cane can be grown on the same area for generations without serious retrogression.² This facility of the sugar cane was exploited to the utmost in most of the colonies, by ratooning and inadequate manuring.

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The West Indian practice of applying the manure to the land when the cane was about twenty inches high was at variance with the accepted practice in most countries of scattering the manure prior to planting.³ There is no reason given why this different method prevailed in the West Indian colonies. Perhaps the fact that crop time and planting coincided and that there was usually a rush to get planting done, left little labour or time for the work of manuring. The slack period following crop time was usually the period in which manuring was done.

The practice of burning trash in the cane field, instead of ploughing it under, was common on most estates.⁴ The rotted trash would have returned much organic matter taken from the soil. Planters maintained that burning trash made reaping easier and that the remaining ashes contained elements required by the soil, (Agricultural chemists showed however, that they were largely lost in burning).⁵ The custom of burning trash apparently arose from the supposed fear of the negroes as regards snakes.⁶

Deficient and indiscriminate application of manure and fertilizer was general. Even in Barbados where more was used /

used than in the other colonies, the amount applied was still below that used in foreign cane regions. In Hawaii, for example, by the end of the century, £8 worth of fertilizer was used per acre compared to £3: 10: Od. in Barbados and 30s. per acre, average in the other British West Indies. In Hawaii the highest return of sugar per acre in the world (9 tons per acre) was obtained, compared to an average return of 1¾ tons per acre in the British Indies (excepting Barbados, where 2 - 3 tons per acre were obtained.)

The high price of imported fertilizer as Peruvian guano, no doubt deterred manuring in the sugar colonies, but it is indicative of lethargy on the part of the sugar planters that the rich deposits of guano on the Morant and Pedro Cays, near Jamaica, were not utilized. This small group of islands, lying thirty to fifty miles south of Jamaica and governed from that colony, were being exploited by Americans from the early 19th century, although by 1885, small quantities of guano were being taken from these islands to Jamaica.⁸ Similarly in Antigua, where a need of fertilizer existed there was no attempt to make use of the deposits of guano on the adjacent island of Redonda, which were /

were being shipped to the United States.⁹ the decade ending

1897 The abandonment of estates and cutting down of stock in a number of the colonies, that took place after 1884, also reduced pen manure and caused soil exhaustion which in turn reduced the resistance of the sugar cane to disease.¹⁰

Professor Harrison, agricultural chemist, deplored "the lack of thoroughly rotten heavy pen manure in St. Vincent,"¹⁰ where cane disease was a serious threat in the 1890's.

The indiscriminate application of manure, regardless of type of soil and need could have been avoided by soil analysis as urged by agricultural chemists in the 1880's.¹¹ Jenkins speaks of a driver on a sugar estate, who declared he could tell good cane soil by tasting the sugar in it,¹² and that a peculiar unexplainable practice existed on Albion estate in Jamaica of applying a glass of "dunder" from the distillery to each cane root.¹³ Such erroneous ideas as to soil fertility and needs would have been explained away by soil analysis.

The great reduction in the price of fertilizers in the 1890's, especially the best of all, sulphate of ammonia, proved a boon to planters so minded to use it.¹⁴ In Barbados /

Barbados greater application of manure in the decade ending 1897 increased crop production there by 15 per cent.¹⁵ The majority of the sugar colonies, however, were by this date in so depressed a condition that manure imports were reduced, rather than increased.

There was no innovation of modern tillage on the sugar estates of the British West Indies during the second half of the century. The plough was still rarely used, and steam tillage was non-existent in most colonies.¹⁶ In some islands the physical surface precluded its use - as in Nevis where there were masses of rock¹⁷ and Montserrat and Dominica where there were ravines,¹⁸ or British Guiana where the extensive drainage system prevented its use. In Trinidad and Jamaica the expense of steam tillage in proportion to the short time it was used was stated by some planters to be their objection to its introduction.¹⁹ If the same steam power could have been used to operate the sugar factory and to till the fields, there might have been more steam ploughs introduced, unfortunately crop time and cultivation of the soil coincided.

In Antigua where heavy clay soils demanded, and the general /

general flatness of the fields facilitated its use, steam tillage, by the end of the century, was more common than in any other colony.²⁰

The adherence to the hoe for all field work had long been criticised and Kerr, a practical sugar planter, writing in 1851, had stated:-

"planters should insist on their attorneys not employing a single hoe" but "to plant the cane rows wide enough apart to permit the use of the horse hoe or cultivator".²¹

By 1890, the horse hoe and cultivator was still uncommon and the hoe was used for nearly all weeding and cleaning. Cane holing was usually done with the hoe, although a spade would have been more suited to the task. However, a hoe could be used as well for other operations as weeding cleaning and banking and the economy in the implements thus saved was sufficient to confirm the planter to the use of the hoe alone. In addition there was the objection to the spade that shoes would have to be provided to enable it to be properly used by the labourer.²²

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The method of digging cane holes and planting the pieces of cane perpendicular in these holes was necessitated by adhering to the use of the hoe. With a plough the cane pieces would have been placed horizontal planting because it gave straight single cane stalks, whereas with perpendicular planting, stoling often resulted.²³ In addition the West Indian practice of using the upper part of the cane for planting, because it contained little sugar, was condemned by the same agricultural experts, on the ground that it was more likely to rot and produced less hardy plants.²⁴ Watts and Harrison urged the selection of mature fairly hard canes and disagreed with the practice of leaving a late field of canes as standovers or to allow a crop to ratoon for the special purpose of planting.²⁵

There is less certainty in the twentieth century that, in adhering to the use of the hoe, the West Indian planter was perpetuating an obsolete method. According to soil experts (Imperial Sugar Cane Research - Empire Marketing Board Report, 1931) -

"It is a curious fact that countries with the best cane cultivation are those using manual labour only, as Mauritius, Barbados /

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Barbados and Java ... may it not be the case of the worker transferring his skill or intelligence to his implement ... soil is an orderly microsm - temperature, particles of mineral matter, constant chemical and physical changes, living plant and animal forms" are all involved, "it is a shock to see machine driven implements with no care for the mellowing and settling of the soil."²⁶

Reaping of the cane which took place when it was about twelve months old, was invariably done by the cutlass. No mechanical harvester has, as yet, been devised to harvest cane, and in the mid-twentieth century attempts are still being made to invent such a machine. Even in Cuba, where most modern methods are in effect, the cutlass is still used in reaping.²⁷

The transport of the cane from the fields to the mill was usually done by oxen cart in the older colonies. Tramways were only feasible where there were flat runs as on large or contiguous estates, and were most common in Trinidad and St. Lucia, where central factories were established after 1870. In St. Lucia haulage costs were reduced three shillings per ton of cane as a result of installing tramways.²⁸

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In Jamaica there were a few instances of small railways but oxen were in use on most estates for haulage.²⁹ In British Guiana the system of trenches provided efficient and economical navigation for cane haulage.

The Chief defect in the transport of cane from the fields to the mill was insufficient carts or punts, so that drivers and animals remained idle while loading and unloading. In British Guiana, iron punts were expensive and an estate required at least twenty punts, which had to be unloaded by hand, although on a few estates the practice was to run loaded waggons on to the punts, and tip the waggons to unload them.³⁰ The method of carrying canes in bundles on the head could have been avoided by falling the canes to allow carts to go up and down, or across the field, and cart wheels should have been spaced to fit between the cane rows. Depressed axles would also have facilitated loading and unloading.³¹

The unintelligent care of animals on sugar estates, especially in Jamaica, was noticeable and visitors remarked on the condition of draft cattle, bloated with guinea grass, straining in the heat of the day.³² In Barbados working cattle /

cattle were much better treated and the practice was to get the work done in the earlier and cooler hours of daylight.³³

In British Guiana mules were preferred to oxen for hauling the punts, being much quicker, but required careful attention "everyday, cuts, sores or bruises had to be attended to and special attention was required in having well-fitted collars."³⁴

A knowledge of the botany and mycology of the sugar cane was very limited among the sugar planters. Since its introduction into the West Indies, in the late 18th century, the Otchaité (more commonly known as the Bourbon) was the usual variety of cane grown. This cane acclimatized well and had produced abundantly throughout most of the 19th century. However, in the late 80's and in the 90's, this cane deteriorated and was attacked by cane disease in most of the colonies, in some, as St. Vincent and Antigua, becoming of grave concern. There are two theories as to why the Otchaité failed; "theory of deterioration - the end of the life of a form long vegetatively reproduced", and "change of soil through long continued cultivation and more hurried preparation" and resulting exhaustion.³⁵

Little would have been done to counteract this cane disease if the colonies had not in the late 1880's appointed agricultural chemists, who, in co-operation with newly founded agricultural societies, did much to prevent spread of the disease and introduce new varieties.³⁶ As early as 1780 botanic gardens had been founded in St. Vincent and, under the growing influence of Kew in London, had been established in most of the other sugar colonies.³⁷ When the Bourbon was attacked by cane disease, agricultural chemists were able to replace it with stocks of White Transparent or Caledonian Queen, fostered in experimental plots in the botanic gardens.³⁸

Cane disease was not entirely new, and had been described in 1828 from examples obtained in St. Vincent. It attacked British Guiana crops in 1879, and had appeared in Barbados and Trinidad in 1891; throughout the 90's it reduced some estates' crops by 30 per cent and in some distinct fields, 50 per cent losses were reported.³⁹

Important development in combating the disease was the discovery by Harrison and Bovell in 1889, of the fertility of the cane seed.⁴⁰ As the result of this discovery systematic /

systematic growing and experimenting with new and more resistant varieties of cane took place. The discovery about the same time of the eggs of the moth borer, which caused the disease, enabled the fostering of a parasite to prey on the eggs.⁴¹ By 1897, following the advice of Harrison and others, planters had the disease under control but not before substantial losses were experienced by proprietors, as Porter, in St. Vincent, who had to destroy 70,000 plants obtained from Barbados because they were infected.⁴² By the end of the century the "old prolific Bourbon, now sadly prolific with fungus", was being replaced by Caledonian Queen, White Transparent and other varieties, although, in colonies where it was unaffected by cane disease, as in British Guiana, the Bourbon's good sugar content and well-developed stalk still made it the favoured variety.⁴³

Another pest of the cane that seems to have caused extensive loss during the 19th century, but which received little publicity, was the rat. Records are available of rat damage to the cane as far back as 200 years.⁴⁴ Lunan, writing in 1816, speaks of the rat menace and urged the use of the mongoose as a rat catcher.⁴⁵ Davy speaks of rats causing /

causing great losses on Turner Hall estate in Jamaica in the 1850's and as does Beaton in regard to Reunion estate.⁴⁶ In some parishes of Jamaica depredations of the rat caused losses of nearly one-fifth of the produce. Forster Hall estate in Barbados reckoned its losses from rat damage at one-fourth of cane grown⁴⁷ and in the 1870's both Barbados and Nevis passed ordinances giving a 1d. bounty for rat heads.⁴⁸ These ordinances were repeated¹ in a year or two, because assiduous hunters tore down fences and ruined canes to extent of pounds damage.⁴⁹ In their desire to rid themselves of the rat menace the sugar planters displayed gullibility to the extent of importing a species of ant from Cuba, which was itself rendered useless by attacks from the Chigoe flea.⁵⁰ A gigantic toad was also introduced from South America, and this creature, causing at first considerable commotion with its hoarse bellowings, was thought little of as a rat catcher.⁵¹

The final solution was that advocated by Lunan in 1816. Mr. Espent of Spring Gardens estate in 1874, obtained the mongoose from India, which quickly reproduced and was distributed to different estates.⁵² By 1878, savings of rat catching /

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catching expenses and eaten cane were averaging over £180 per annum on some estates, and rat damage was down on all estates by 80 - 90 per cent.⁵³ By 1890, the rat menace had been nearly eradicated.⁵⁴ The mongoose remained the normal rat catcher throughout the remaining century. There was a disadvantage in that the mongoose took to killing chickens,⁵⁵ but, as these usually belonged to the negro labourer, this was, presumably, of little consequence to the sugar planter.

In dealing with this subject of cane cultivation and improvements outside of the sugar manufactory, British Guiana deserves a separate treatment. British Guiana is unique among the British West Indies, in that the sugar industry there is directly dependent on the maintenance of an extensive and intricate drainage system.

The coastal belt of British Guiana, a strip of clay about three to seven miles wide along the coast, contains nearly all the cultivable land in the colony. The coastal belt which is at or even below sea level had originally been laid out by the Dutch in areas of 2 - 4,000 ft. frontage and extending inland between parallel boundaries, for varying distances /

distances as much as seven miles and terminating in the back dam. This layout had been effected along about half the coast line for about 150 miles, between the Courantyne and Essequibo rivers.⁵⁶ The sugar industry of British Guiana is almost wholly confined to this coastal strip. Two problems had to be solved, the keeping out of the sea at high tide, and, in turn, some means of controlling the great volume of fresh water that accumulated on the landward side of the coastal strip and washed across it into the sea. The difficulty lay in controlling these two operations simultaneously, and was solved by a system of open drains termed 'trenches' which entered the sea by sluices constructed in the sea wall. These sluices could be controlled so that when high tide was in, drainage from the inland region could be halted and then renewed when the tide was out.⁵⁷

As British Guiana, despite a heavy rainfall, is subject to droughts, the fresh water behind the cultivated area was usually conserved in reservoirs, often made by walling large natural depressions, and then used for irrigation during the dry periods.⁵⁸

The expense involved in maintaining this system of water works /

works, dams and sea wall was enormous, and it is significant that no major sea works was undertaken after Slavery.⁵⁹

A sugar estate's value in British Guiana was directly determined by its liability or immunity to damage from a breach in the sea wall and to the state of its drainage system. It was a great boon to the sugar estates when the sea defences were partially placed under the control of public works in 1883; prior to this planters had taken advantage of the embankment of the British Guiana railroad constructed in 1858 and which ran parallel to the sea and were using it as their sea wall.⁶⁰

The layout of the former Dutch owners had favoured large estates, and the expense involved in maintaining the drainage system was such as to make it prohibitive for a peasant proprietor or a small sugar estate to support the undertaking. Thus the tendency in British Guiana towards large estates, is largely attributable to the fact that drainage and irrigation was a large scale capital enterprise. Amalgamation continued throughout the century, by adjacent estates having their trenches linked up and the machinery concentrated on one where formerly there were more than one or /

or two estates. With lack of labour and depression in the sugar industry during the later years of the century, the drainage system and sea banks became a real burden. Many of the coastal estates were continually threatened by mud banks thrown up by the sea and which caused havoc to the drainage system. From 1875 - 1888, plantation Leonora expended £20,000 in fighting the sea and of this sum £8,000 was to obtain stone, much of which came from England.⁶¹ In one lucky instance, a mud bank was thrown up in the ideal location for a sea dam and saved the sugar proprietor a large sum of money.⁶² In 1894, the large estates of Vryheid's Lust, and Better Hope were almost completely inundated and temporarily ruined as a result of the mud banks thrown up on them.⁶³ The abandonment of Bel Air, an exceptionally fine estate, in 1892, was a result of the heavy expense involved in the maintenance of the sea dam.⁶⁴ The chief difficulty for the British Guiana sugar planter, posed by the existence of this extensive drainage system was that of finding some means of cultivating the land mechanically. Steam tillage was essential to stir the heavy clay soils of the coastal belt to an adequate depth of at least twelve inches /

inches. The open system of drainage prevented the use of steam tillage because of the impossibility of traversing the trenches. Various devices were tried of turning the engines, but due to the small fields, resulting from intersecting trenches, this proved to be impracticable.⁶⁵ The expense of enlarging the size of the fields would have been too great. Some planters voiced the fear that to fill up the trenches would take the top fertile soil exposing the poorer underneath.⁶⁶ Many devices were tried such as running the plough onto a skeleton platform, on wheels, which could be moved up and down the trench permitting the steam plough to traverse it. This involved extra labour and the trenches were continually breaking down and had to be cleaned out.⁶⁷ The cable drawn plough already described in the introduction (p. 27) was successful, but was expensive and also required mechanical skill and extra manual labour.⁶⁸

The admirable solution of combining steam ploughing with drainage appeared to be the use of underground tile drainage, which left no surface obstruction.⁶⁹

Tile drainage was first introduced into British Guiana by Crum Ewing, owner of Enmore estate, who also brought out /

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out a Scottish "practical agriculturist" to superintend and to set up tile making machinery. Ewing's efforts to introduce tile drainage were not a success. The tiles silted up and had to be dug up, or there was too much surface water to drain away quickly enough the tiles.⁷⁰ Ewing also tried what was known as the "Louisiana system" - planting the cane rows parallel to the small drains so as to avoid crossing them. This method was also unsuccessful because with the stiff clayey soil the cane rows held water which was unable to drain into the main side trenches. On porous soil this system would perhaps have been satisfactory, but on stiff clay soil it failed signally, "each cane row holding water like a basin".⁷¹ By the end of the century planters had resorted again to using the hoe, and in 1896, the Louisiana Planter stated -

"There is no part of the world except the Straits Settlement, where so thorough a cultivation was given to the land by hand labour alone as in Demerara".⁷²

British Guiana planters were more successful in devising methods of simplifying trenching than they were in tillage.

Crum / action /

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Crum Ewing on his east coast estates had devised a method of digging trenches by means of a powerful engine and cable around well sunk piles, and with the engine place in an iron punt. The engine wound up the cable and thus dragged itself along, the punt ploughing out a ditch.⁷³ Attempts at horse husbandry never proved a success in British Guiana; Breaking up the heavy clay soil proved too much of a strain on horseflesh. Mules were used to haul the punts that traversed the navigation trenches of the drainage system, and were imported chiefly from the United States and Mexico.⁷⁴

Despite the handicap of maintaining the sea-works and the extensive drainage system the sugar industry in British Guiana derived certain unusual advantages from it. The drainage system provided waterways on which canes could be hauled in punts from the fields to the factory - thus haulage expenses in British Guiana were less than in any of the other sugar colonies.⁷⁵ The open trenches teemed with fish, which provided a staple food for the coolie labourers.⁷⁶

The irrigation system provided water during periods of drought which usually wrought havoc in the other British West Indies colonies. As has been mentioned in the introduction /

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introduction, the seaworks and drainage system permitted flood fallowing - that is the flooding of fields (usually every three years) which renewed the fertility of the soil, to a degree not obtainable by any method of direct manure application.⁷⁷

The yield of sugar per acre in British Guiana was no higher than the average for other British West Indies colonies, being about two tons per acre at the end of the century. Despite the careful cultivation, that this was so, was due to the lower sugar content in the cane, owing in part to climatic irregularities, which made it necessary to reap some of the cane before it was fully ripe,⁷⁸ and because soil fertility was less than for example Barbados. On the other hand the double wet season permitting of two planting periods, and the dry season allowing of two reaping periods, enabled the factories to grind canes for nine months in the year.⁷⁹ This was a considerable advantage as compared with competing areas and explains why vessels from Demerara were bringing sugar to the United Kingdom long after the other homeward cargoes of sugar from the other sugar colonies had ceased to arrive.⁸⁰

14. P.P. 1898. v. 50. British Guiana. pp. 67. 1892.

1. Robertson, C. J. World Sugar Production and Consumption. London. 1934. p. 48.
2. West Indies Royal Commission Cmd. 6608. 1945.
3. C.O. 7/133. No. 164. Antigua. 1868.
Manure was often carried in baskets on the labourers' heads, and scattered at their discretion. Carts were not permitted to traverse the fields of growing cane.
4. Burning trash was most likely adhered to because of insufficient labour to gather it in the latter half of the 19th century.
5. Timchri. V. 6. 1894. Art. "Trash burning." Watts. p. 42.
6. Timchri. V. 6. 1894. Art. "Trash burning".
7. International Sugar Journal. V. 4. 1902. p. 323.
8. Watts. op. cit. passim.
Timchri. V. 9. 1895. Art. by Prof. Harrison.
9. C.O. 7/133. Antigua. No. 164. May - Sept. Correspondence. 1868.
C.O. 7/36. Feb. 17, 1869.
C.O. 152/111. Sept. 24. 1872.
10. Imperial Sugar Cane Research. Empire Marketing Board. Art. "Cane plantations". London. 1931.
11. P.P. 1898. V. 50. Barbados. p. 164. British Guiana. pp. 67-8.
12. C.O. 111/494. June 23. 1897. (summary from British Guiana. Jubilee Gazette. June. 1897).
13. C.O. 137/471. Aug. 22. 1873.
14. P.P. 1898. V. 50. British Guiana. pp. 67, 100.

- 15. Ibid. Barbados. p. 164.
- 16. See Advertis^ements in colonial newspapers at the mid-century and later by British manufacturers endeavouring to sell their agricultural implements in the West Indies, e.g. St. Christopher Advertiser May 7. 1867. "ploughs, barrows, steam cultivators and horse rakes" for sale by J. F. Howard, Britannia Iron Works Bedford.
- 17. P.P. 1872. V. 42. A.R. Nevis. 1872.
- 18. The hoe was long used in St. Vincent on the ground that the terrain was too rugged for a plough. See Introductory Survey. p. 27.
- 19. P.P. 1898. V. 50. Trinidad. p. 340.
- 20. Eves. op. cit. p. 295.
- 21. Kerr. op. cit. p. 39.
- 22. See Introductory Survey. p. 28.
- 23. International Sugar Journal. V. 4. 1904. p. 523.
- 24. P.P. 1898. V. 50. British Guiana. p. 68.
Watts. p. 42. (Planters in the French West Indies maintained that there was less saccharine in the juice when tops of canes were used in planting).
- 25. Watts. p. 42.
- 26. Imp. Sugar Cane Research. op. cit. Art. "Kinds of Cultivation".
- 27. Robertson. op. cit. p. 13.
Int. Sugar Journal. V. 32. 1930. pp. 165, 210.
- 28. P.P. 1898. V. 50. Appendix C. Pt. I. p. 94.
- 29. Jamaica Guardian. Sect. 23. 1864.

30. Russell, Wm. Prize Essays. Georgetown. 1876-8.

31. Kerr. *passim*.

32. Jamaica Guardian. Jan. 20. 1864.

33. *Loc. cit.*

34. German Kali Works. Havana, Cuba. 1913. Cultivation of the Sugar Cane in the West Indies.

35. Imp. Sugar Cane Research. Art. "Cane Plantations".

36. Timehri. V. 5. 1886. pp. 256-264.

37. Imp. Sugar Cane Research. *op. cit.* *passim*.

38. Timehri. V. 6. 1890. p. 346.

39. C.O. 318/282. Aug. 8. 1892.

40. West Indies and Commercial. Advertiser. January. London. 1890. p. 7.

41. Knowles, C. Economic Development of the Overseas Empire. London. 1924. p. 234.

42. P.P. 1898. V. 51. St. Vincent. p. 91.

43. *Ibid.* V. 50. British Guiana. p. 68.

44. Morris, Dr. D. The Mongoose on Sugar Estates in the West Indies. London. 1882.

45. Lunan, J. Hortus Jamaicensis. Vol. 11. p. 206. Jamaica. 1814.

46. Beaton, Rev. P. Six months in Reunion. London. 1860. p. 120. (Lewis, M. G. Journal of a Residence among the Negroes in the West Indies. London. 1816. - also speaks of the rat menace).

47. Morris. *op. cit.*

48. Decreased exports of sugar in Nevis in 1879, were attributed to a plague of rats.
P.P. 1880. V. 48. A.R. Nevis. 1877.
P.P. 1883. V. 45. A.R. Nevis. 1882.
49. Morris. op. cit.
50. Morris. op. cit.
51. Morris. op. cit.
52. Morris. op. cit.
53. Timehri. V. 8. 1894. Art. "Some enemies of the cane fields".
54. Loc. cit.
55. Loc. cit.
56. West Indies Royal Comm. Report. Cmd. 6608. 1945.
57. Loc. cit.
C.O. 111/374. April 9. 1869. - see here a diagram of the drainage system on a British Guiana estate.
Report of the British Guiana and British Honduras Settlement Comm. Cmd. 7533. 1947.
58. C.O. 111/374. April 9. 1869.
59. There is no evidence of estates such as Bel Air abandoned because of defective sea-works being brought back into cultivation during the second half of the century.
60. Cmd. 6608. op. cit. "British Guiana drainage".
Cmd. 7533. op. cit. pp. 72-3.
61. P.P. 1898. V. 50. British Guiana. pp. 93, 143.
62. The exact reference for this cannot be located.
63. P.P. 1898. V. 50. British Guiana. p. 98.

- 64. Timehri. V. 6. 1892. p. 322.
- 65. P.P. 1898. V. 50. British Guiana. p. 104. The first trials of steam tillage were made at plus. Houston and Leonora.
- 66. P.P. 1871. V. 20. Coolie Immigration Report. p. 202.
- 67. P.P. 1878-9. V. 13. p. 202.
- 68. Introductory Survey. p. 27.
- 69. Report on the Agricultural Wants of British Guiana. (Wm. Russell). Georgetown. 1876.
- 70. International Sugar Journal. V. 4. Oct. 1902. p. 528. By 1902, all those estates which had introduced tile drainage had reverted to open drainage and had given up the steam cultivator.
- 71. Timechri. V. 8. 1894. pp. 96-7.
- 72. P.P. 1898. V. 50. British Guiana. p. 104.
- 73. Report on Agric. Wants of British Guiana. op. cit.
- 74. P.P. 1898. V. 50. British Guiana. p. 104. Report on Agric. Wants of British Guiana. op. cit.
- 75. Cmd. 7533. op. cit. p. 43.
- 76. Lees drainage from distilleries often polluted these trenches, and thus Ordinances were passed to prevent their pollution.
- 77. Cmd. 6608. op. cit. ... section "Husbandry Methods".
- 78. P.P. 1882. V. 44. A.R. British Guiana. 1881. 109 estates averaged 1.32 hogsheads per acre.
P.P. 1871. V. 20. p. 203. British Guiana. - In twenty years ending 1870, improvements on some estates raised production from 1 - 1¼ hogsheads to 1¾ - 2¼ hogsheads per acre.

79. Cmd. 7533. op. cit. p. 43.

80. Commercial Dictionary. McCulloch, J. R. London. 1882. p. 386.

The system of Coolie-indentation, as instituted in the first half of the century, was chiefly confined to the colonies of British India and British West India. By 1870, 44,825 coolies had entered British India and all of the 125 sugar estates relied on coolies for their labour force. Abuse of this indentured labour was not over-evident. It took nearly two years, with the calculation to make a seasoned worker, and it was to the interest of the sugar planter to ensure that he did not lose labour just when it was becoming proficient, and planters were always picked out for more coolie labour. One of the heart's desires of coolies, was the American planter's remark to Anthony Trollope "and we will supply the world with sugar."

Estates with bad harvest, and worse their treatment of coolies, were avoided by re-indenturing labourers. The county system provided a good test of the capability of the immigrant who originally indentured for five years, but, if re-indenturing for a further five years, received a bounty.

LABOUR PROBLEMS

Throughout all the sugar colonies labour supply continued to be of prime concern to the sugar planter, in the second half of the century.

The system of Coolie organization, as instituted in the first half of the century, was functioning best in the colonies of Trinidad and British and British Guiana. By 1870, 44,825 coolies had entered British Guiana and all of the 128 sugar estates relied on coolies for their labour force.¹ Abuses of this indentured labour were not over-evident. It took nearly two years, such was the calculation, to make a seasoned worker, and it was to the interest of the sugar planter to ensure that he did not lose labour just when it was becoming proficient, and planters were always clamorous for more coolie labour. "Give me my heart's desire of coolies, was the Demerara planter's remark to Anthony Trollope, "and we will supply the world with sugar."²

Estates with bad names, as regards their treatment of coolies, were avoided by re-indenturing labourers. The bounty system provided a good test of the satisfaction of the immigrant who originally indentured for five years, but, if re-indenturing for a further five years, received a bounty.

Some /

Some of the estates, as Vreed in Hoop, made it a practice to hire only indenture--served coolies, because of their proved worth.³

Regulations that planters would get no more coolies if abuses took place were in effect in British Guiana, but could be evaded. Immigration agents gave at least a month's notice of intended inspection visits to sugar estates, and were dependent on the hospitality of the planter, when visiting, which made impartiality difficult.⁴ The Governor of the Colony was empowered to enforce the good treatment of coolies in that he could refuse to allot further coolies to any estate on which there was excessive mortality, and could remove all immigrants on that estate. This removal of immigrants occurred only twice on record, in the case of Arthurville and New Forest estates.⁵ Excessive mortality was not always attributable to conditions on an estate. Those sugar estates on which there were more fresh immigrants had higher mortality rates.⁶ Planters maintained that the Madrassee coolie was a better physical type than the coolie from Calcutta, and that the peasant village coolie was also more fitted for cane work than those picked up off the streets of /

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of large Indian cities. Medical treatment and hospitalization seems to have been adequately provided on most sugar estates and out of 128 sugar estates classified as to treatment of coolies in this respect, only eight were listed as 'bad' in 1868.⁷

The British Guiana sugar planter made the most of the supply of coolie labour without seriously overstepping regulations. Planters reported that labour was performing a daily task of about seven hours, at a wage of 10d. to 1/4d.⁸ This may have been true out of crop time. But in crop time, which lasted for some months in British Guiana (prior to the great speeding up which took place in the last two decades of the century), very long hours were worked. Preference for work in the factory, because of the perquisites as rum and shelter from the sun was exploited, and according to the Agent General's report of 1873, boilermen were working fifteen hours a day, firemen eighteen, and the ordinary labourer never less than fourteen.⁹ Managers maintained that it was impossible to regulate their mill work if short specified hours of work had to be adhered to. The double shift system, as carried out in large factories in the French West /

West Indies and which would have shortened these hours, was stated by British Guiana planters to be unfeasible because night work was impossible with the water carriage system.¹⁰

Coolie labour throughout the second half of the century constituted the chief labour employed on the sugar estates in British Guiana. Negro labourers were used to some extent on estates located near negro villages, and the negro labourer, because of his superior physical strength, was desired for certain tasks, as for example, a black shovelman was preferred at 4/- per day although the coolie could be had for 1/4d.

Work such as trenching, cane cutting, and some of the principal mill tasks as boiling were more capably done by negro labourers.¹¹

On estates, near negro villages the practice seems to have been for task gangs, headed by a 'driver' to contract for a certain amount of work to be done. The lump sum paid to the driver, was divided by him among the members of the gang.

The intermittent manner in which the negro laboured and the habit of working but three days per week made the coolie, despite his inferior physical prowess, the favoured worker.¹²

During the depression in 1884 and again in 1894, attempts to reduce wages of the non-indentured labourer were not very successful /

successful. The minimum wage of 1/4d. per day ~~is~~ paid to the indentured coolie could not be reduced, and other labourers never consented to work for less.¹³ As in some of the other West Indian colonies, planters more than once remarked on the reliance placed on the coolie not merely in the sense of his being a more reliable labourer, but from a feeling that in any time of need he would be on the side of the planter rather than the negro. The negro and the coolie never tended to mix or intermarry to the degree that might have been expected, considering the small proportion of coolie women among indentured labour from the East.¹⁴

Unlike Trinidad and Jamaica, where there was much available land to attract labourers away, population in British Guiana was fairly well confined to the narrow coastal strip on which the sugar industry was chiefly centred and indentured-coolies had less choice of occupation, other than sugar, than in the other sugar colonies.¹⁵ The gold mines in British Guiana from the mid 1880's onwards attracted much labour but it was chiefly drawn from the negro portion of the labourers who were more suited physically for the type of work involved.¹⁶ Although, on the whole, no serious discord /

discord arose between the coolie immigrant and the sugar planter, there was not complete harmony. Many petty charges arose as a result of minor friction, much of it avoidable by having proper interpreters. Misunderstandings arose over stoppages of wages, medical care, absenteeism - and trouble over overseers associating with coolie women. For the five years ending 1870, there were 32,876 charges, dealt with in the local courts, charges resulting from action taken by employer and labourer against each other. Many of these charges however came to nothing. It was found that on those estates where correct pay books were kept there was usually contentment; planters were often vexed over absenteeism and deserters, some to Dutch Surinam. Many of these charges perhaps would not have arisen but for the coolies' love of litigation.¹⁷

By 1897, although the number of estates was now only 64, compared to 128 in 1870, coolie immigration was still in effect. The number of coolies working on estates in 1897 was over 105,000,¹⁸ indicating a great concentration of labour on estates, for example, Lusignan, on the east coast of Demerara, had 2,735 coolies quartered and employed on the estate /

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estate in 1891.¹⁹

The availability of reliable indentured coolie labour throughout the second half of the 19th century was an important factor in maintaining the superior prosperity of British Guiana's sugar industry compared with that of the other sugar colonies. The fear had been voiced in 1869, that assisted immigration into British Guiana²⁰ would retard improvements in the sugar industry. On the contrary, improvements had been more than commensurate with the increase of immigration throughout the century. Manufacturing capacity of the factories had so increased that intensive cultivation in the field was needed to cope with this increased capacity. Coolie labour in ever increasing numbers was imported to maintain this intensive cultivation.

Trinidad, next to British Guiana, had the greatest coolie immigration of the British West Indies. By 1870, the old negro creole population had fallen back mostly into villages on the borders of estates or newly opened lands of the interior. Imported labourers were the main resident population on the sugar estates. A rationing ordinance had had been introduced in 1869 to ensure that indentured coolies were /

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were fed sufficiently. This measure did reduce mortality in the first year of indenture and it was found that the mortality rate increased in the second year when the Coolie fed himself.²¹ As in British Guiana estates with excessive mortality (of over 7 per cent) were excluded from immigrants by an ordinance of 1870. As a result of this measure, the number of such estates was reduced from 20 in 1869 to 9 by 1872.²² In this matter of mortality of immigrants on estates, it was found, as in British Guiana, that on estates where more fresh immigrants were employed, deaths were greater in number than where more seasoned labourers were employed. this continual drift from the Crown land and to

the Difficulties arose in Trinidad with Coolie labour on estates, not experienced elsewhere. The opening of Crown lands in 1868 saw many indenture-served Coolies leaving the estates just when they had become skilled seasoned labourers.²³ Re-indenturing on sugar estates, as was common in British Guiana, was less so in Trinidad. The practice arose of coolies purchasing out their remaining indenture at the end of the third year (permitted by law). This practice led to many Coolies becoming hopelessly indebted to their own countrymen /

men who were merciless money lenders, and who induced labourers to leave the estates.²⁴

Sugar proprietors opposed the opening up of the Crown lands and had it made a ruling that "plots chosen must bound with land already alienated" and that these contiguous lots be as close as possible to sugar estates to ensure a nucleus of labour. To keep labour after indenture was served, planters often offered lots of land on the estate,²⁵ but the desire for independence and cheap Crown land usually proved to be a stronger attraction.

The sugar industry in Trinidad never had enough labour. There was this continual drift from the Crown land and to the centres of population, and the later growth of cane farming by coolies tended to draw off more labour from the sugar estates.²⁶ In addition to East Indian immigration there was during the latter half of the century a constant stream of immigrants from the other West Indies colonies into Trinidad. This stream of immigration to Trinidad by 1873 had reached large dimensions, 20,000 "deckers" in one year alone entering from the 'other West Indies colonies'.²⁷ The higher earnings possible in Trinidad was perhaps the main reason /

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reason for the drift to this colony. In Trinidad a labourer could earn 1/3d. for a task, three of which could be performed in a day, while in Grenada and St. Vincent one shilling was received for a nine hour day.²⁸ When crop time was finished in Trinidad, labourers would return to their home islands, where dwellings and living ~~was~~ ^{was} cheaper.²⁹ Establishment of steamship service in the 80's facilitated this movement. Barbadian labourers also emigrated to Trinidad in considerable numbers, but were never in favour with the sugar proprietors. A reputation for truculence, independence of spirit and reluctance to enter into contracts or remain for any length of time, made the Barbadian little wanted on Trinidad sugar estates.³⁰ A number of Chinese also were introduced, about 4,000, by 1875, although industrious and intelligent, they were difficult to manage preferring to take up holdings or, more usually, becoming shopkeepers.³¹ ~~labour. The labour supply which had dis-~~
~~into~~ Trinidad sugar estates never had sufficient labour despite comparatively high wages and other inducements (all livestock in the district of Naparima, was owned by coolies, kept at the expense of sugar estates).³² Coolie immigration continued /

continued throughout the half century and by 1900, approximately 110,000 coolies had been introduced of whom some 18,000 had returned to India,³³ taking savings with them. In some cases individuals took back sums of over a thousand pounds (not however from accumulated wages received on sugar estates). These returning, apparently prosperous coolies, did much to induce other coolies to emigrate to the sugar colonies.³⁴

During the periods of deep depression in 1884 and 1894, attempts to reduce wages in Trinidad were unsuccessful. Labourers immediately left the sugar estates and the reduction had to be cancelled. Planters had to fall back on better supervised tasks and application for more coolie immigrants.³⁵

The sugar industry in Jamaica, more than in any of the other British West Indies colonies attributed its difficulties to shortage of labour. The labour supply which had disintegrated after Emancipation never responded to the needs of the sugar industry during the remainder of the century.³⁶

The general claim of the sugar planter in Jamaica was that labour was unwilling to work, and that the "orderly well /

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well behaved old slave folks are dying out and being replaced by lazy vagabonds" and "persons turn out for a few days in August and at Christmas who never handle a bill at other times".³⁷

Bigelow, writing in 185 had attributed the depression in the sugar industry to the result of the

"degraded estimate placed on every species of agricultural labour by the white population ... a pernicious effect and an enervating example to the blacks".³⁸

That there was a definite aversion, on the part of the Jamaican negro, to labouring on sugar estates, more than usual in the other colonies, is evident. Memories of slavery receded more slowly than in most of the other colonies. The exodus from the sugar estates had been fairly complete and rapid, without any period of adjustment such as had existed in some of the other colonies as Barbados, Antigua and St. Vincent where less available land confined the erstwhile slaves to the estates. The negro labourer in Jamaica tended to identify work on the sugar estates with slavery; there had been no intermediate relationship experienced by him /

him .³⁹

Besides this deepseated aversion, mixed with memories of slavery there were other reasons for dislike of work on the sugar estates. Jamaican planters never paid a wage to attract the negro labourer, and on the slightest pretext of economic difficulty was^{as} prone to reduce wages. During the period of disturbances in 1864 - 5, during Governor Eyre's term of office, planters reduced wages from 1/3d. to 1s. per day and increased tasks in the mill by enlarging cyphones and pans, "only 7-9 could be done compared to 9-12 previously". The argument put forth by planters that the negro would work only sufficient to obtain the necessaries of life led them to adopt the attitude that if wages were lowered the negro would work harder to attain the bare minimum necessary for the hand-to-mouth existence he desired. To raise wages above this minimum was, according to the planter, of no avail in inducing the labourer to work longer. In addition to low wages, there was never steady work for the negro labourer. Even in the period 1865 - 70, when sugar production was prosperous and despite the diminished number of estates and the increased population, sugar estates could not /

not provide three or four days work per week.⁴¹

Easily acquired land, continually being augmented by the resumption of great areas for non-payment of quit-rent, made available an attractive life of provision growing and peasant settlement that drew off labour from the sugar estates.⁴² Unfortunately provision planting season was from January to May and this was also the time of the sugar crop. In the smaller sugar colonies provision grounds were usually adjacent to the sugar estates, but in Jamaica were up to ten miles distant from place of labour.⁴³ The best type of negro labourer was generally conceded to be the mountain peasant who was however not easily accessible to the sugar estate. In some of the parishes as St. Elizabeth, part of Manchester and St. James, where it was very dry, labourers were desirous of attaining work on estates because provision grounds were not profitable; however, sugar production also suffered from the dryness, and estates had little work to offer.⁴³ Attempts to attract labour from centres where it was plentiful to where it was in demand, never succeeded in Jamaica, chiefly because of inadequate wages offered.

As in British Guiana and Trinidad, coolie immigration had /

had been introduced into Jamaica in the first half of the century, but never proved of great value in resuscitating the sugar industry as it had done in the two above-mentioned colonies. Almost from its incipiency in Jamaica, coolie immigration was a burden on the revenue of the colony, and, in addition, management of coolie introduction broke down. Three times within the period 1855 - 1875, coolie immigration was ceased. In 1858 the local Immigration Act authorized indentures beyond the time permitted and was therefore promptly disallowed.⁴⁴ Failure to appoint an agent general of immigration under salary conditions laid down by the Colonial Office also brought cessation from 1863 - 66.⁴⁵ Another cessation took place in 1870 because the compulsory requirement that employers provide coolies with rations for three months only and after that to be dependent on wages (rarely 1/- per day for a two to three day week) was inadequate.⁴⁶ By 1871, these matters had been corrected but difficulty now arose as to the debt incurred for immigration. In 1865, the Colonial Office had refused to grant loans for immigration owing to the poor state of Jamaican finances,⁴⁷ (there still being loans outstanding from the hurricane grant of /

of 1831). In 1866, an arrangement was made whereby cost of immigration was to be apportioned, as in British Guiana. This arrangement was not adhered to; planters who were to have paid indenture fees by personal notes over a period of five years, never fulfilled their part of the agreement. The portion to have been paid for by export duties on sugar and rum was also unpaid as the export of these products had dropped to such an extent that the duty on them was far too little to cover the portion they should have contributed.⁴⁸

By 1877, Governor Musgrove reported that the immigration fund in Jamaica was insolvent, with a debt outstanding of £140,000.⁴⁹ This attempt, as it were, to throw the full cost of immigration on to the general revenue met with firm opposition from the Colonial Office, coloured members in the Legislature, and missionary elements in the colony.⁵⁰

In 1877, a deputation, consisting of persons opposed to Coolie immigration into Jamaica, waited on Carnarvon, Secretary of State for Colonies.⁵¹ Their criticism was that no need for imported labour existed in Jamaica if a decent wage and steady work were provided. Instances of parishes where surplus labour existed were given. In St. Mary's there /

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there was such a surplus of labour as the result of abandonment of estates that labourers were appearing in the nude. There had been 4,627 deaths out of the last 16,000 coolies introduced and in the period, 1873 - 5, the immigration debt had increased by £28,000. Practices ^{mark} as stoppages of pay, holding back two weeks pay to ensure a return to work, increasing task work without increase in pay, were all condemned. ⁵²

Immigration controversy in Jamaica was mingled with many inaccurate statements by planters, the local press "soi disant" friends of the planters who attempted to represent conditions in the colony as much distressed. Usually

Allowing for contradictory evidence given, it is undeniable that labour / for the sugar estates was only given in a haphazard manner by the negroes and that coolie labour was inadequate for estates' needs. ⁵³ fresh gathering and rat

In 1879, Musgrave appointed a commission to report on the state of the juvenile population of Jamaica. ⁵⁴ This report and evidence taken gives a fairly accurate picture of labour conditions on sugar estates in the vicinity of which evidence was largely taken. The report does however mislead in that it would make the sugar industry the dominating industry /

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industry in the economic life of the island, where in truth, sugar exports were giving place to other products. From the report it seems that disintegration of the negro population, who contributed estate labour, was practically complete, and that, apart from estates in Clarendon parish, coolies were not in any great number on sugar estates. Estate labour in some parts of the island was supplied by roving gangs of young labourers, 14 - 16 years of age. These "demoralized" gangs wandered from estate to estate sleeping indiscriminately in trôsh houses, and after remaining for about a fortnight on a sugar estate, moved on. Usually unskilled and indifferent, they contributed to the slovenly air ^{which} ~~as~~ existed on most sugar estates. Women and children were increasingly used; "pickaninny gangs" in charge of an elderly negress, were employed for trôsh gathering and rat catching. Adult negro labourers were very few, preferring their own provision grounds or growing bananas for the increasing market for this fruit in America.⁵⁵

There were places in Jamaica - Trelawny and Hamilton parishes - where, on estates as Holland, Golden Grove and Cobbs, the original negro barracks had been kept in repair and /

and where slaves had not been driven off at the time of Emancipation.⁵⁶ A large negro village was permitted to reside on these estates. As memories of slavery receded, they became a sort of peasantry in the district, forming a reliable labour supply. The superior prosperity of these estates, especially Cobbs in Hamilton parish, was directly attributable to this unusual condition.⁵⁷

On the other estates, where negroes had left at the time of Emancipation, quarters for labourers had never been maintained. Planters, prior to 1882, complained of the house tax as being a deterrent to providing lodgings for labourers. Other planters stated that even if houses were provided, the labourer refused to live in them as detracting from his sense of freedom, and would walk miles rather than compromise this feeling of independence.⁵⁸

Labour conditions on the sugar estates in Jamaica were further aggravated in the period of depression following after 1884. In 1886, coolie immigration was temporarily suspended at the instance of the newly elected coloured members of the reformed Jamaican Legislature.⁵⁹ About the same time a heavy exodus of labourers took place to the Panama /

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Panama Zone, where work had commenced on the Panama Canal. Jamaica, being nearest to this project, geographically, lost more able-bodied labourers than the other sugar colonies. Approximately 25,000 Jamaicans were employed under the French company when De Lessups suspended his operations. When work was resumed by the United States, between 40 - 50,000 Jamaicans were working on the canal. Wages in the Panama Zone were not high, \$1.00 for a ten hour day, but much more preferable to 9d. - 1s. a day for a three to four-day week on the sugar estates.⁶⁰

Some thousands of Jamaicans also went to Costa Rica to work on the banana plantations there, others went to Puerto Rico to work on railway construction. In Jamaica, banana plantations, the Jamaica railroad and other public works as the Rio lobre water works, all attracted labour. Wages on all these projects were higher than those offered on the sugar estates and evidence given by foremen in charge of Jamaican labourers, spoke of their industry while labouring in these other fields.⁶¹

As a result of these more desirable opportunities for labourers, in the years following the collapse of sugar prices /

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prices in 1884, sugar estates in Jamaica were particularly affected as need for economy was now greater than ever. Attempts to reduce wages as an economy measure availed little, although it should have been evident that higher wages would have attracted sorely needed labour. As a result of urgent appeals by sugar planters the local legislature advocated a renewal of coolie immigration⁶² and in 1891, an attempt was made to establish a form of contract law, whereby negroes would be guaranteed certain conditions, as were granted to coolies, in return for a guarantee to work for a stated time and remuneration.⁶³ No result accrued from this contract law, it smacked too much of slavery for the negro, who looked upon the indentured coolie as being in such a state, and contempt for whom was expressed in the term of "slave coolie".⁶⁴

With the failure of the contract law coolie immigration was resumed and continued until 1897, when owing to a plague in India it was again suspended.⁶⁵ This coolie immigration was of little use, at this latter stage, in reviving the sugar industry in Jamaica, and by this date coolies were in greater demand on banana than on sugar estates, sugar exports having /

having dropped to seventh place in the list of exports.⁶⁶

in 18 Labour difficulties in the smaller sugar islands of the Leeward and Windward group were less pronounced. Coolie immigration was carried on only to a minor degree and was usually discontinued after a few desultory attempts.

Of the upwards of 4,000 coolies introduced into St. Vincent and Antigua by 1880, but 250 remained at that date, the rest had left for other colonies or had died.⁶⁷ In

1884, St. Vincent was still paying grudgingly for the expense incurred in this brief period of coolie immigration.⁶⁸

In St. Lucia, the few thousand coolies introduced were more successful in that crown land was available there and a prosperous cane farming industry sprang up which contributed canes to the central factories established after 1870.⁶⁹

There was little need in the smaller colonies for coolie labour. Abundant population and little available land, plus discouragement of emigration, even to the extent of ordinances making it a punishable offence to entice labour away,⁷⁰ all tended to provide adequate labour for the sugar estates. Wages were reduced from 20 - 25 per cent. in these small colonies during the serious depression periods of 1884 and / On /

and 1894, without serious incident, except in St. Kitts in 1894, where a riot broke out over introduction of larger clarifiers - with no increased remuneration for task work.⁷¹ Wages remained low throughout the half century and by the 1890's were from 8d. to 10d. per day.⁷² Complaints were frequent, of cutting and stopping of wages, and enlarging tasks without increase of pay. In St. Vincent wages were paid monthly, so labourers complained, to insure diligence, planters, stated, however, that the labourer liked to have his pay accumulate.⁷³ There was also a law in St. Vincent, whereby a labourer who worked one day, was bound to work five days by implied contract.⁷⁴ When Antiguan labourers tended to go to British Guiana in the late 1880's sugar planters in that colony complained of the 'crimping' methods used to entice them away and stated that only the able-bodied emigrated, leaving the decrepit women and children.⁷⁵ The proposal of the Governor in Antigua that a nursery be established for the children of parents who would thus be free for estate labour was turned down by the planters, on the ground of the increased tax involved in supporting such an institution.⁷⁶

On /

On the whole, these small islands could not attribute their difficulties to the labour factor, as was done for example in Jamaica. Barbados, as in many other features, differed from the other sugar colonies as regards labour supply. Although labour was very abundant and Barbadians emigrated reluctantly, there is not much evidence of abuse of this labour. Task labour was largely prevalent in Barbados and was preferred by labourers to day-wages. Amenities as provision grounds at low rents, rum in crop time, and grinding the labourer's cane, all tended to produce better relations between planter and labourer. Apart from these factors there was a definite feeling among Barbadians that they had roots in the island and they were loath to leave it. The peculiar position of Barbados in this respect is perhaps attributable to that colony, containing a greater portion of resident planters than any of the other British West Indies - over two-thirds, compared to, for example, one-third in Jamaica. Planters would to some extent in taking care of themselves, take more care of the people in the colony. Skilled labourers were common in Barbados, the Apprenticeship system and the training

ing of skilled workmen, had not broken down so rapidly in this colony as in many others. A soil of great fertility and this skilled labour enabled the Barbadian sugar planter to produce sugar more cheaply than anywhere else in the West Indies.

Emigration of Barbadians did take place during the latter half of the century because the sugar industry in that colony found it physically impossible to employ all available labour, and as the sugar industry was practically the sole industry in the island there was no alternative employment.

Emigration of Barbadian labourers took place to the Panama Canal, these workers however largely returned when work on that project ended.⁷⁷ Many Barbadians also went to Trinidad and British Guiana. Their aversion to contract made them less preferred to the indentured coolie, although superior skill was undeniable.⁷⁸

In British Guiana, where 2,793 Barbadians went in 1872 - 3, refusal to live in ranges on the estates, and a susceptibility to malaria, plus a serious riot of Barbadian labourers in Dutch Surinam, all tended to prejudice sugar planters against the Barbados immigrant.⁷⁹ Emigration agents were not encouraged in

Barbados /

Barbados, although one from Tobago was appointed to Barbados in 1870, but as Tobago was about the most depressed sugar colony at this period, little attraction existed for labour in that colony.⁸⁰ It was found that immigrants from Barbados settled down much better if they were employed by a planter who was, himself, formerly a resident of Barbados. This was evident in the case of St. Kitts-Nevis where Barbadian labourers were employed by men like Sir Graham Briggs, who previously came from Barbados.⁸¹ In the other colonies, where little understanding of the Barbadian's disposition existed, and of how competition in his home island, had sharpened his wits, the opinion, as expressed, was that "Barbadians when they leave the island are cheeky".⁸²

The usually good relations between employer and labourer in Barbados were marred in the 1870's by an epidemic of cane fires - attributable to various motives as revenge or, to hasten cane cutting. Whatever the true motive, the practice of insuring cane crops, which began in the late 1870's, brought a marked decrease in cane fires. This decrease was attributed to the realization on the part of the culprits, that the fire now involved no monetary loss to the sugar proprietor /

prietor.⁸³

In regard to Coolie immigration into the British West Indies, it is undeniable, from the manner in which it was assisted by loans and by being a charge to a great extent on the general revenue of the colonies concerned that it was in the nature of a bounty to the sugar industry.

In British Guiana the general revenue contributed one-third of the cost of immigration, the other two-thirds was raised by indenture fees paid by the planters by a personal note payable over five years, and by export duties on sugar and rum. A similar arrangement existed in Trinidad and Jamaica. In the latter colony however, the full charge was ultimately thrown on to the general revenue, by 1884 amounting to £210,800.⁸⁴

In the crisis of 1894, additional assistance was given to British Guiana and Trinidad. The Government took over, in the case of British Guiana, two-thirds instead of the former one-third of the cost of immigration. In Trinidad assistance was given in the nature of a special grant, and, by extending time for payment of planters' notes. Jamaican planters already were receiving full assistance and little additional /

additional help could be expected in the matter of immigration expenditure in this colony.⁸⁵

Coolie immigration from India into the British West Indies did not come in unfailing numbers whenever the sugar colonies so desired it, but rather was it determined by conditions in India, as for instance a bad harvest there in 1870, a demand for coolies on the tea plantations in Assam and Burma, in the late 1880's and, a plague in 1897, which effectively stopped immigration to Jamaica for a number of years; all caused a diminution or cessation of coolie immigration into the British West Indies for a time.⁸⁶

Transport of coolies from the East provided opportunities for a number of mercantile firms as Sandbach, Parker and Company and Booker Brothers, to employ their ships in bringing back ^{Coolies} to the British West Indies, chiefly to British Guiana.⁸⁷ The fairly advantageous rate for carrying coolies had added inducement in that import of rice could be carried on in conjunction with coolie intake and the sailing ships found a profitable business in this trade, in which steamships did not partake, sailing ships being considered the cheaper.⁸⁸

On /

On the whole coolie immigration was carried on with a minimum of mortality - an average of approximately 4 per cent. This transport was entirely done by sailing ships in the 19th century, and regulations were followed with a minimum of friction. The adoption of Thiers Automatic Ship Ventilator, in 1879, in coolie emigrant vessels further reduced possibility of mortality.⁸⁹

In some of the West Indian colonies attempts to solve labour problems resulted in adopting an arrangement known as Metayage, which was introduced from the French West Indies shortly after the mid-century.⁹⁰ Metayage originated as a result of the inability of some sugar planters to pay wages, and was a compromise whereby labourers shared proceeds with the planter in lieu of wages.⁹¹ Under the metairee system labourers cut the cane, did all cultivation and provided all manual work involved in manufacturing. The sugar proprietor under the system provided all equipment, stock and the manufactory.⁹² The sugar made was usually divided in halves, the planter generally purchasing the metayer's share of sugar.⁹³

In Tobago, where metayage was most common, it was estimated /

estimated that by 1884, two-thirds of the sugar estates in that colony would have been abandoned but for the adoption of this system.⁹⁴ The bankruptcy of the house of Gillespie in Tobago in 1884 had nearly ruined many estates, the greater number of estates in the island being in the hands of this firm. The reduced circumstances and difficulties of these estates had led their proprietors to take up metayage which had already a foothold in the island.⁹⁵ Metayage took hold in a few of the other islands of the Windward group, as St. Lucia and Grenada. In Barbados there was no need for metayage and in Jamaica negro labourers expressed a feeling of dislike for the implied contract in the arrangement.⁹⁶

On the whole, metayage was only a temporary palliative. In Tobago where most common, the Administrator, reporting in 1874, had stated that -

"the present effete and obsolete system cannot last and the planters are gradually being ruined by it".⁹⁷

The Royal Commission of 1883 - 4, had remarked that the system was anything but a success.⁹⁸ Many of the metayers complained of a need for written agreements, and were suspicious /

suspicious and exacting as to the price of the sugar they sold to the proprietor.⁹⁹ The sugar planter, for his part, was usually critical of the cultivation, and abuse of his stock and equipment, and, in cases where he ground a portion of his own cane, interruptions to grind the metayer's cane was a source of irritation.¹⁰⁰ The chief reason for the metayer system falling into disrepute was the lack of any stated laws on the subject. Custom being adopted instead, there was dissatisfaction on the part of both parties to the arrangement.¹⁰¹ There was also a feeling, remarked on by Governor Barkly of British Guiana in 1858, that the adoption of metayage was tantamount to admission of failure of a sugar estate, and loss of prestige was involved.¹⁰²

By the 1890's metayage had practically disappeared in the few colonies where it had obtained. In Tobago, where it still existed to a diminishing extent, at a meeting of labourers in 1897 a resolution was passed to the effect that metayage was ruinous to the island and that cane farming should be substituted.¹⁰³

Cane farming, more successful than metayage, did not develop until the end of the century, when it began in Trinidad /

Trinidad and St. Lucia where there were central factories.

Under the system of cane farming, the labourer grew canes, on land he owned, rented or leased, and sold these canes to a nearby factory, usually at so much per ton of canes.

A few attempts were made to establish cane farming in British Guiana, where there were large factories. The vast drainage system could not be supported by small cane growers, and estates were blocked in such a manner as to leave no available location for the independent cane farmer. At La Bonne Intention estate where the Colonial Company started cane farming on a small scale in the 1890's, difficulty was experienced in arriving at a basis of payment for canes.¹⁰⁴ Punts with their loads of cane, could not be weighed as land carts and attempts to keep lots of cane separate in passing through the mill entailed much time and bother.¹⁰⁵

In Trinidad and, to a lesser extent, St. Lucia, cane farming was taken up by indenture-served coolies. In Trinidad there was a quick development and by 1902, cane farmers were contributing over half the cane produced in that colony.¹⁰⁶

Sugar /

Sugar proprietors in Trinidad objected to cane farming as attracting labour away from sugar estates. By 1896, in one district in Trinidad the production of sugar from sugar estates was stated to have been reduced by 25% as a result of labourers turning to cane farming.¹⁰⁷ Many coolies put themselves in the hands of rapacious money lenders of their own race in order to take up cane farming in Trinidad.

Practical difficulties found in cane farming were - transportation costs limited the extension of cane farming in any one area - cost of transportation from field to factory was reckoned at as much as 50% of the value of the cane.¹⁰⁸ A satisfactory basis of payment for cane received at the central factory was still not found by 1900. Purchasers of the cane claimed that weight in itself was no indication of sucrose content. The use of the polariscope was tried, but cane farmers did not understand its principle, and were suspicious, and, in addition, the polariscope test of cane juice could only be used if each lot of cane was put through the mill separately. Central factories found it unwise to rely solely on cane farmers for their supply of cane because of irregularity of delivery. For example, the supply of canes /

canes delivered by cane farmers at one central factory in Trinidad in 1900, were Feb. 24 - 92 tons; Feb. 25 - 164 tons; and Feb. 26 - 345 tons.¹⁰⁹

The subject of cane farming really belongs to the 20th century and is therefore outside the scope of this thesis. Until central factories were established there was little hope of a general development of cane farming throughout the sugar colonies.

9. L.S. 111/100, Dec. 6, 1871 (Immigration Report).
10. *Ibid.*
11. P.F. 1871, V. 20, p. 90.
12. Finckh, *op. cit.*, V. 1, 1850, p. 290.
13. Efforts to reduce wages in British Guiana as economy measures were not common until the 1890's when British Guiana sugar estates first experienced real depression.
14. This subject is discussed fully in *Geolic Immigration Report*, P.F. 1871, V. 20.
15. Cane farming, as discussed later, was not feasible considering the expensive drainage system necessary.
16. Finckh, V. 1, 1850, p. 290. "gold fields are at trawling labour and demand for it is in excess of supply".
17. P.F. 1871, V. 20, p. 103.
18. P.F. 1893, V. 20, *British Guiana*, Appendix C, Part II, pp. 126-7.

1. P.P. 1871. V. 47. A.R. British Guiana. 1869-70.
2. Bennett, G. W. "British Guiana". Georgetown. 1866. p. 103.
3. P.P. 1871. V. 20. p. 122.
4. Berbice Gazette. Nov. 19. 1864.
5. P.P. 1871. V. 20. pp. 79-80.
6. C.O. 111/363. Oct. 17. 1867.
7. C.O. 111/369. Sept. 5. 1868.
8. C.O. 111/363. Oct. 9. 1867.
9. C.O. 111/400. Dec. 6. 1873 (Immigration Report).
10. Loc. cit.
11. P.P. 1871. V. 20. p. 90.
12. Timehri. op. cit. V. 4. 1890. p. 298.
13. Efforts to reduce wages in British Guiana as economy measures were not common until the 1890's when British Guiana sugar estates first experienced real depression.
14. This subject is discussed fully in Coolie Immigration Report. P.P. 1871. V. 20.
15. Cane farming, as discussed later, was not feasible considering the expensive drainage system necessary.
16. Timehri. V. 4. 1890. p. 290. "gold fields are attracting labour and demand for it is in excess of supply".
17. P.P. 1871. V. 20. p. 103.
18. P.P. 1898. V. 50. British Guiana. Appendix C. Part II. pp. 126-7.

- 19. Stark, J. H. Guide and History of British Guiana. London. 1900. p. 51.
- 20. Pringle, H. Fall of the Sugar Planters. London. 1869.
- 21. C.O.295/266. Mar. 15. 1873.
- 22. Loc. cit.
- 23. P.P. 1871. V. 47. A.R. Trinidad. 1869.
- 24. C.O. 295/266. Mar. 15. 1873.
P.P. 1875. V. 51. A.R. Trinidad. 1872-3.
- 25. P.P. 1898. V. 50. Trinidad. pp. 282, 347.
- 26. Ibid. see Alcazar, H. A., evidence of.
- 27. C.O. 28/219. Sept. 23. 1873.
P.P. 1898. V. 50. Trinidad. p. 247.
- 28. C.O. 28/219. Sept. 23. 1873.
- 29. Loc. cit.
- 30. Chas. Kingsley. - "At last a Christmas in the West Indies." London. 1872. p. 319. - speaks of Barbadians being the only persons who give any trouble in Trinidad.
- 31. The Chinese, unlike the coolie, intermarried with the negroes, probably due to absence of caste system.
- 32. C.O. 295/283. Mar. 27. 1879. (The Colonial Company complained of the diversion of labour to public works in the colony).
P.P. 1898. V. 50. Trinidad. p. 13.
- 33. See figures of coolie immigration in the Annual reports of Trinidad and British Guiana.
- 34. A better type of coolie, physically, was attained, during the latter years of the century, more attention being given to selection.

- 35. P.P. 1898. V. 50. Trinidad. p. 182.
- 36. P.P. 1878-9. V. 51. Correspondence re. Coolie Imm. to Jamaica.
- 37. P.P. 1866. V. 51. Jamaica. pp. 69, 118.
- 38. Bigelow. op. cit. p. 114.
- 39. Bigelow, passim; P.P. 1866. V. 51, passim.
- 40. P.P. 1866. V. 51. p. 159.
- 41. Cmd. 3517. West Indies Royal Commission. 1930. p. 117. Labourers still abstain from working on Sat., Sun., and Monday.
- 42. Annual Reports from 1872-1900 give figures of acreage resumed.
- 43. P.P. 1866. V. 51. p. 118.
P.P. 1898. V. 51. Jamaica. p. 332.
- 44. C.O. 128/75. April 16. 1864.
- 45. P.P. 1866. V. 51. p. 247.
- 46. Gardner, Rev. W. J. Hist. of Jamaica. London. 1874. pp. 497-9.
- 47. C.O. 138/177. July 25. 1866.
- 48. C.O. 811/8. Sept. 9. 1877.
- 49. C.O. 811/10. June 30. 1877.
- 50. C.O. 812/9. June 30. 1877.
- 51. Loc. cit.
- 52. C.O. 811/10. Aug. 1st. 1879.
P.P. 1866. V. 51. p.227.

- 53. C.O. 351. Index - 13116. Oct. 7. 1877. - Reference to the demoralization of labour and deserted estates. P.P. 1884. V. 55. Pt. II. pp. 664-5.
- 54. Report of Commissioners on Conditions of Juvenile Population in Jamaica. Kingston. 1879. p. 10. (obtainable at Royal Empire Societ, London.)
- 55. Banana growing especially appealed to the negro labourer, both on small holdings, and on banana estates established by Americans where much better conditions, as housing and food prevailed.
- 56. Commission on Condition of Juvenile Pop. op. cit.
- 57. Loc. cit.
- 58. P.P. 1898. V. 51. Jamaica. p. 308.
P.P. 1890. V. 55. A.R. Jamaica. 1888-9.
- 59. P.P. 1887. V. 57. A.R. Jamaica. 1886.
- 60. See Annual Reports of this period. e.g. P.P. 1890. V. 55.
- 61. As on Jamaican and Costa Rico railroad construction. P.P. 1898. V. 51. Jamaica. p. 409.
- 62. Olivier. op. cit. p. 293.
- 63. P.P. 1898. V. 51. Jamaica. p. 375.
- 64. Loc. cit.
- 65. Olivier. op. cit. p. 293.
- 66. P.P. 1898. V. 51. Jamaica. p. 368. By 1897, there were only 581 indentured immigrants on sugar estates.
- 67. P.P. 1884. V. 55. Pt. II. pp. 511-12.
- 68. C.O. 321/3. Feb. 2. 1874.

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69. P.P. 1898. V. 51. St. Lucia. p. 57.
H. de R. Walker. The West Indies and the Empire.
London. 1901. p. 36.
 70. P.P. 1880. V. 48. A.R. St. Vincent. 1879.
 71. P.P. 1898. V. 50. Appendix C. Pt. I. p. 82.
 72. In St. Vincent wages were never higher than this,
e.g. P.P. 1874. V. 44. A.R. St. Vincent. 1872.
 73. P.P. 1898. V. 51. St. Vincent. p. 91.
 74. 1878-9. V. 51. p. 72.
 75. C.O. 321/3. Feb. 7. 1874.
 76. P.P. 1880. V. 48. A.R. Antigua. 1879.
 77. See Annual reports for the period.
 78. Salmon, C. S. Capital and Labour in the West Indies.
London. 1883. p. 75.
 79. C.O. 28/219. Oct. 31. 1873.
P.P. 1898. V. 59. A.R. British Guiana. 1896-7.
 80. C.O. 28/216. Aug. 8. 1872. There was also an agent
from Jamaica established in Barbados at this period
but he also had no success in obtaining Barbadian
labourers.
P.P. 1871. V. 20. p. 14. Imm. Report.
 81. P.P. 1898. V. 50. Appendix. C. Pt. I. p. 228.
 82. Ibid. p. 79.
 83. P.P. 1878-9. V. 50. A.R. Barbados. 1877.
 84. P.P. 1884. V. 55. Jamaica. p. 6.
 85. P.P. 1898. V. 50. Appendix C. Pt. I. p. 313.

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86. P.P. 1878-9. V. 50. A.R. Barbados. 1877.
P.P. 1871. V. 20. p. 199. Olivier. op. cit. p. 293.
 87. C.O. 811/12. Sept. 1. 1879.
C.O. 351. Index. 13117. May 1878.
P.P. 1886. V. 23. p. 232.
 88. P.P. 1886. V. 23. p. 232.
 89. C.O. 811/12. Sept. 1879.
 90. Ottley, C. R. Complete History of Tobago. Trinidad.
1946. pp. 74, 81.
 91. P.P. 1874. V. 51. A.R. Tobago.
 92. P.P. 1851. V. 39. pp. 28-9.
 93. P.P. 1884. V. 51. Pt. II. p. 334.
 94. Pringle. op. cit. p. 52.
 95. P.P. 1898. V. 50. Tobago. p. 359. - Cultivation of
sugar in Tobago at this date (1897) was solely by
the metayer system, and by this date there was an
ordinance in the colony regulating the system.
 96. P.P. 1884. V. 55. Pt. 11. p. 334.
P.P. 1898. V. 51. Montserrat. p. 152.
 97. C.O. 321/4. Aug. 22. 1874.
 98. P.P. 1884. V. 55. Pt. II. p. 402.
 99. Ibid. p. 334.
 100. P.P. 1898. V. 50. Trinidad. p. 229.
 101. P.P. 1884. V. 55. Pt. II. p. 402.
 102. P.P. 1851. V. 39. p. 29.

DECLINE OF SUGAR PRODUCTION IN THE WEST INDIES
AND GROWTH OF THE AMERICAN MARKET.

- 103. P.P. 1898. V. 50. Trinidad. p. 358.
- 104. Timehri. V. 7. 1893. p. 277.
- 105. C.O. 111/419. Aug. 4. 1881.
P.P. 1887. V. 57. A.R. British Guiana. 1886.
- 106. P.P. 1906. V. 76. Trinidad. pp. 63, 73.
- 107. Ibid. p. 74.
- 108. Ibid. p. 63.
- 109. H. de R. Walker. The West Indies and the Empire.
London. 1901. p. 40.

Report to sugar production. The West Indian...
 attitude to old family estates which had been...
 failed by the liquidation of property...
 capital in the years following Emancipation, and during the
 crisis of the late 1840's and early 1850's continued to be
 weakened throughout the century.
 Revolution in the order of estates was...
 the hands of fewer owners and...
 and was... in the case of British Guiana and...
 In British Guiana the change had begun...
 1870, and... had proceeded to such an extent that...
 the 184 sugar estates in cultivation at the time of
 Emancipation /

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AMALGAMATION OF ESTATES; CONSIGNEE SYSTEM,
AND GROWTH OF THE AMERICAN MARKET.

Emanc. In addition to those developments that took place in manufacturing, cultivation and in the labour supply of the British West Indies Sugar industry, which were accentuated in the years immediately following the great drop in the price of sugar in 1884, another trend was also evident.

In the latter half of the 19th century there was a noticeable trend in most of the British West Indies colonies towards a purely commercial and speculative attitude in regard to sugar production. The traditional sentimental attitude to old family estates which had been seriously affected by the liquidation of property and withdrawal of capital in the years following Emancipation, and during the crises of the late 1840's and early 1850's continued to be weakened throughout the century.

Reduction in the number of estates and amalgamation in the hands of fewer owners was associated with this trend and was most marked in the case of British Guiana and least so in Barbados.

In British Guiana the change had begun early and by 1870, amalgamation had proceeded to such an extent that of the 404 sugar estates in cultivation at the time of Emancipation /

Emancipation, there were but 135 remaining - a reduction in number effected chiefly by the unions of two or more estates under one management and with one set of machinery and buildings, where adjacent estates had come into the possession of the same proprietor.¹

About fourteen or fifteen of these estates had the proprietor or part proprietor residing on and managing them. Eighty-five were entirely owned by proprietors not resident in the colony. The remaining thirty-five or thirty-six were at least partially owned by colonists who were either merchants, estateattorneys, or in some cases, managers of other estates. Among the non-resident proprietors, the largest holder was the Colonial Company with nine large estates. Messrs. Daniels of Bristol, also owned nine estates; Messrs. James Ewing, Messrs. Sandbach, Parker and Company, Messrs. Bosanquet, Curtis and Company, and other well-established houses as Booker Bros., Barber and Company, and Winter and Preston, either by themselves or their partners individually held a large portion of the remainder. Perhaps fifty out of the eighty-five estates owned entirely out of the colony were in the hands of such merchants, and these /

these included nearly all the largest, finest and best cultivated estates in the colony.²

The extent to which these same houses held mortgages upon the remaining estates is difficult to ascertain, but the tendency of estates in British Guiana, since Emancipation, had been to fall into their hands and the process was continuing. By 1870, three fourths of the attorney business in British Guiana was in the hands of such firms, as for example, McCalman and Hadow who were attorneys for eight estates and Sandbach Parker and Company who, in addition to the three large estates they owned, acted as attorney for four others.³

The resident proprietors in British Guiana had all purchased, not inherited their estates, and there did not seem to be any strong feeling among these owners in favour of treating an estate as a family property by devising it to a single heir - a thing moreover which could not be effected under Dutch colonial law, as prevailed in British Guiana, except by an application of the doctrine of election.⁴

Since a sugar estate was of little value if broken up, the death of a proprietor in British Guiana was frequently followed /

followed by a sale. This difficulty, under Dutch law explains why most sugar estates in British Guiana, even those not in the hands of a mercantile firm, were held in the form of limited companies by the end of the century. Members of a family, faced with the division of an estate, found it more feasible to form a limited company for the management of the property.⁵ Most of the old families had disappeared by the mid-century who were formerly associated with British Guiana and by 1870, there was only one Dutch proprietor, C. J. Van der Ondermenter, left in the colony, descendant from the former planters of that nationality.⁶

Upon the whole, the aspect of the sugar industry in British Guiana in the second half of the century, was exclusively commercial. Utility, economy and the latest manufacturing appliances constituted the chief features of a sugar estate in British Guiana by 1884, when it was stated that a fall in the price of sugar by a penny per pound would cause the best estate in British Guiana to lose money, so closely had the margin between profit and loss been drawn.⁷

Amalgamation of estates under the ownership of large West India firms had been largely carried out during the years /

years 1840 - 55, when Governor Barkly reporting to Grey in 1851, had stated that -

"at least one fourth of the sugar plantations have within the last two or three years, been taken into execution and sold publicly at prices which brought the land to an average of 40s. per acre, throwing buildings, machinery and all invested capital into the bargain".⁸

The low prices at which these estates had been purchased enabled their owners to realize large profits during the more stable period of the 60's and 70's. Evidence of this prosperity is given in chapter 3 p. 86-7. A few other examples of profitable estates are - Great Diamond estate, purchased in 1848 by Messrs. Steele and Loxdale for £2,000, which by 1870, was producing 1,800 hogsheads of sugar and was valued at between £40 - 50,000.⁹ Plantations Eccles and Peters Hall purchased for a total of £4,800 in the same year had been united into one estate which by 1870, was producing 1,600 hogsheads of sugar worth £36,000. Albion estate, in Berbice, purchased by Cavan Bros. in 1847, for a mere £200 was by 1870, one of the finest estates in the colony /

colony, as a result of improvements made on it.¹⁰

Amalgamation of sugar estates in British Guiana continued throughout the century, and profits continued to be made, although decreasingly after 1884 when accentuated beet sugar competition took place. For example, Mr. Richter, a London business man, who purchased Nismes estate in 1879 for £13,500, reported that "it paid for itself twice during the first ten or eleven years".¹¹

As in the other colonies, abandonment of estates in British Guiana, as stated by witnesses before Royal Commissions of 1878 - 9, 1889, and 1897, was in many cases really the uniting of one estate to another more productive and the pooling of machinery and linking up of the trenches of the drainage system.¹² Diamond estate, the largest in British Guiana, represented the amalgamation of five estates, as did likewise Bal Air. Ewing's Sugar Estates Company owned a great estate on the east coast of Demerara known as Vryheeds Lust, which was really a block of estates, some of which had formerly been reported as abandoned.¹³ Amalgamation of estates usually meant a decrease in cultivated acreage but did not necessarily signify a decrease in production, because of /ally /

of better cultivation and concentration on the remaining acreage. For example, between 1886 and 1897, the Colonial Company decreased their cultivated acreage by some thousands of acres as a result of abandoning some of their less suitable land. The total production of sugar however increased by some 6 - 10,000 tons, as a result of concentrated cultivation and more modern manufacturing appliances.¹⁴ In the district of Berbice there were thirteen estates producing sugar in 1882, only seven of these were in existence by 1898, and the production of these seven almost equalled the former thirteen.¹⁵

Amalgamation of estates and reduction in numbers never ceased, and by the end of the century there were in British Guiana but 50 sugar estates listed as such, of the 150 sugar estates in existence in 1865.¹⁶

In Trinidad similar amalgamation of estates occurred. In the earlier part of the 19th century sugar estates were outlined along the western part of the southeastern coast, chiefly because there was easy shipment to Port of Spain.¹⁷

After the abolition of slavery many small muscovado estates, less favourably situated and lacking labour, had succumbed, especially /

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especially in the Toco and Mayaro districts. Cocoa and coconuts replaced sugar on many of these small estates. Sugar from the mid-century, tended to concentrate (where it is today) in the drier and sunnier areas along the west part of the island - especially in the counties of Caroni, Victoria, part of St. George and in the Naporima district.¹⁸

By 189 practically all the sugar estates in Trinidad were in the hands of a few individuals and firms. Thirteen alone were in the hands of the Colonial Company and Burnley and Company, Greig and Company, Messrs. Turnbull and Company, Sir Chas. Tennant, and the Lamont family, were the other principal owners.¹⁹

Amalgamation and reduction in a number of sugar estates in Trinidad was largely a process of natural selection. Most of the estates, which went out of sugar cultivation, had produced only muscovado sugar and were too small to warrant the cost of erecting modern machinery and appliances, or there was a lack of funds to carry them on.

The Lamont family's acquisition of property in the second half of the century, is a good example of what took place in the island. This family concentrated on choice sugar areas in /

in the Napōrima district by purchasing old muscovado estates, scrapping machinery, cultivating only the best land and tagging them on to adjacent actively cultivated estates.²⁰ In Trinidad central factories were first established in the West Indies, and this development tended to concentrate cane cultivation into more compact areas. The great Usine St. Madeline estate owned by the Colonial Company, and comprising an area of 4,000 acres, formerly consisted of a number of small muscovado estates.²¹

Trinidad, British Guiana reflected a business like air in its sugar industry and the historian Fromde visiting Trinidad in 1887 had remarked that there was "a set of people here on a better level with the times than the old-fashioned aristocracy in the other islands."²² Reduction in number of sugar estates in Trinidad was from 110 in 1865 to 56 by the end of the century.²³

Jamaica next to British Guiana exemplified most this reduction in number of sugar estates. By 1865, one-half of the 600 sugar estates in cultivation at the time of Emancipation were "either abandoned or converted into grazing pens."²⁴ The process of natural selection had been the cause of the abandonment /

abandonment of most estates, up to 1865. This process of natural selection continued throughout the remainder of the century. By 1875, the number of sugar estates were 244 and by 1896, there were but 140 remaining of the 600 at Emancipation.²⁵ In some parishes extinction of sugar was complete or nearly so. For example in St. Mary's parish, in 1875, there were thirty sugar estates cultivated, by 1897, there were but two.²⁶

As already stated, the shift of sugar cultivation in Jamaica was towards the western and more dry parishes of the island and even in these districts the number of estates was much reduced. In Westmoreland, of the sugar estates at the beginning of the century, there were but 15 remaining in 1897.²⁷

Although reduction in the number of estates in Jamaica throughout the 19th century had taken place largely as a result of abandonment of the poorer unprofitable estates, reduction of numbers also took place as a result of the amalgamation of estates sold through the Encumbered Estates Court, and which were concentrated in fewer hands - (chiefly consignee merchants) than previously.²⁸

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such The speculative commercial attitude remarked on in the case of British Guiana and Trinidad, was also present in Jamaica, but labour difficulties chiefly, prevented successful enterprise in this colony. However, the improvements that were made in Jamaica in the matter of installing centrifugals and open steam pans, were chiefly effected by the merchant firms who had acquired holdings through the Encumbered Estates Court. Many of the old family estates as Worthy Park, Spring Garden, Harmony Hall and Bushey Park estates had passed out of the hands of families long associated with Jamaica into the ownership of firms who converted them into grazing pens, logwood and pimento estates, or, if remaining in sugar cultivation, installed centrifugals and open steam pans.²⁹

Abandonment of sugar estates in Jamaica did not signify a great decrease in cultivated acreage, nor did decreased cane acreage mean a commensurate drop in sugar production. The abandonment of Holland estate (formerly Gladstone's) containing 10,000 acres, meant a loss of but 300 acres of cane cultivation.³⁰ The abandonment of four sugar estates in 1879 meant a loss of only 323 hogsheads of sugar.³¹ Many such / Reduction /

such sugar estates were in only a partially cultivated estate when abandoned. From 1875 - 95, cane cultivation in Jamaica decreased from 48,246 acres to 30,971 acres, but sugar production practically remained the same.³²

During the second half of the century, the resumption of land by the Crown, for non-payment of quit rent, also extinguished many former sugar estates. Patents of land granted by the Crown, in the early years of the colony, were made, subject to the payment of annual quitrent by the grantees. Payment of quitrent had never been punctual, and when depression hit the colony after Emancipation, it virtually ceased. The loss of revenue in unpaid quitrent and the anomaly of vast acreages lying uncultivated was first dealt with by Sir John Grant, Governor of Jamaica (1866-73 .) On his initiative the forfeiture of this land was begun and continued throughout the century. By the end of the century, although thousands of acres had been resumed by the Crown, there were still over 200,000 acres liable to forfeiture. The resumption of such land, as has been mentioned, increased available acreage on which labourers could settle and aggravated the labour shortage.³³

Reduction /

Reduction in the number of sugar estates in the smaller colonies of the Leewards and Windward groups, was also marked. The colony of Grenada, by 1900, had experienced the total extinction of 119 sugar estates that existed at the time of Emancipation.³⁴ In Tobago, Dominica and Montserrat, the small muscovado sugar estates were severely hit in 1884 and as no attempt to improve had been made, they were in a hopeless position and quickly collapsed.³⁵ Grenada, by 1897, was importing instead of exporting sugar.³⁶ Decline of sugar production in St. Vincent had been brought about by the definite policy of the principal proprietors, Messrs. Porter (see chapter 2.47) who refused to invest further capital and improve in the face of falling prices, preferring to wait on events.³⁷

Antigua, ideally suited to sugar cultivation from the viewpoint of fertile soil and flatness of fields, tended to the modern commercial attitude, and sugar production here, by 1887, was stated to be more and more a "manufacturing industry" as the result of "commercial men exercising close control over estates"³⁸ they had purchased - many through the Encumbered Estates Court. By 1900, there were stated to be /

be 78 sugar estates in the colony but some of these were grouped together and worked as one, and if this is taken into account, the number of sugar estates was actually 53 - compared to a total of 107 in 1865.³⁹

As in the other sugar colonies, the sugar industry in Antigua was largely in the hands of a few firms, Lee Crerar and Company, Messrs. Boddington and Fryer and Company being the largest proprietors. The acquisitions of these firms were principally made through the Encumbered Estates Court.⁴⁰

In St. Kitts and Nevis, abandonment and amalgamation of estates was not marked. Messrs. Ewings, with large interests in St. Kitts, stated they would gladly have joined their estates, but these were too scattered to do so, and costly management resulted because of separate and duplicated services.⁴¹

In Barbados reduction in the number of sugar estates was less than in any of the colonies. Of the 500 sugar estates in active cultivation at the time of Emancipation there were 440 remaining in the 1890's. This small reduction, which was gradual to 1884, was accentuated after that date, chiefly by a number of estates in Chancery being broken up and /

and sold in small lots.⁴²

The trend towards "big business" was never common in Barbados, and in 1897, there were but 19 estates of the 440 in the island, owned by public companies.⁴³ The remaining 421 estates were owned by private persons.⁴⁴ There had been no concentration of a number of estates in the hands of one mercantile firm, apart from the case of Messrs. Daniels and Company, who owned nine (in liquidation in 1897).⁴⁵ There were however many cases of private ownership of more than one estate, although little ~~expense~~^{evidence} of amalgamation of these estates into one.⁴⁶ The accepted method in Barbados appears to have been to scatter one's property - contrary to the usual English method of concentrating it. This feature of Barbadian land tenure may have arisen from an attempt to catch the advantages of rainfall, at least on some estates if not on others, the rainfall in Barbados being curiously variable.⁴⁷ There was also for the greater part of the century keen competition to acquire land in Barbados and acquisition was made, whenever the opportunity arose, with disregard to whether areas were always contiguous to property already owned. The high cost of property in Barbados / in British Guiana.

Barbados, approximately £100 per acre for most of the century, made large areas very costly to purchase. One of the many examples of this dispersal of property is that of the eight Alleyne estates, scattered throughout six of the eleven parishes in the island.⁴⁸

This scattered holding of land in Barbados, in addition to discouraging amalgamation of estates, also deterred the development of central factories when their establishment was urged in the 90's. It was not always possible to obtain a consensus of opinion favourable to supporting central factories in any one block of estates of sufficient area to maintain a central factory.⁴⁹

The traditional patriarchal air, if it ever existed to any degree in the British West Indies, was still to be found in Barbados. Barbadians looked upon the island as a home as well as a place from which to obtain an income. Two-thirds of the Barbadian proprietors were resident, and their pride in the colony seems to have been transmitted to the labouring population.⁵⁰ Whatever the many reasons were for its existence, there was a definite ethos in Barbados different from the purely commercial speculative attitude as existed in British Guiana.

The over-all effect of abandonment and amalgamation of sugar estates in the British West Indies was a reduction in the number of sugar estates from approximately 2,200 at the time of Emancipation to between 750 - 800 by 1900.⁵¹

A noticeable effect of amalgamation of sugar estates in the hands of mercantile firms was a waning of the old consignee system, which had been a marked feature of the sugar industry in the British West Indies, almost from its beginning. Merchant firms taking over sugar estates became their own consignee with no longer a need for the old system of advances, mortgages and commissions. By 1870, thirty per cent of British Guiana sugar was coming home to its owner, and by the end of the century, the consignee system in the old-fashioned sense, had disappeared in British Guiana.⁵²

Similarly, in Trinidad and Jamaica, sugar was coming home to the large firms who owned the sugar estates, often in their own ships, as in the case of Prentice, Service and Henderson Cavan Bros., Bosanquet Curtes and Company and Messrs. Daniels. Some of these firms were carrying home the sugar of adjacent estates in addition to their own.⁵³

A number of the large West India houses as Sandbach Parker /

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Parker and Company and the Colonial Company sold their sugar directly to the refiner, as, for example, Tate's of London.⁵⁴ But by the end of the century, practically all these houses, whether their sugar went to the United Kingdom or the United States, sold through the medium of the large produce brokers who, in London, were centred in Mincing Lane and Tower Street and, if in Glasgow, in Queen Street and dealt through the Greenock Sugar Exchange.⁵⁵

By the end of the century, the entire sugar production of British Guiana - 110,000 tons out of total British West Indies production of 235,000 tons, was in the hands of six mercantile firms, who, in turn, sold through Czarnikow and Company, and Booker Bros. of Mincing Lane.⁵⁶ Czarnikow and Company, sugar brokers throughout the 19th century, were, by far the largest firm, and by 1900, had agencies in New York and Montreal. Most West India houses found it to their advantage to sell sugar through these large sugar brokers who had cosmopolitan connections and wide experience. Even the Colonial Company, owner of large estates and central factories which had long sold ^{its} ~~their~~ sugar directly to refiners both in the United States and in the United Kingdom, ceased /

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ceased handling their own sugar and went over to Cznarikow and Company in 1897.⁵⁷

The consignee connection still existed in many instances between sugar proprietors and the United Kingdom merchant, but only a small proportion of total sugar produced in the British West Indies, by the end of the century, was sold under this system. Where the consignee system was still in effect, chiefly in the smaller colonies and to some extent in Jamaica, evidence given in 1897, showed that the old charges were still paid by the sugar planter connected with the consignee merchant - viz. 6 per cent on advances, plus 2½ per cent on sugar sold, and ½ per cent for brokerage. The usual 5 per cent on estates supplies scarcely entered into the picture by the 1890's the local merchant supplying these requirements to the estates in most cases.⁵⁸

A more noticeable weakening of the consignee system and business connection of the British West Indies sugar industry with the United Kingdom, was brought about by the growth of the United States market, and developments in more speedy communication and ocean transport.

Exports of British West Indies sugar to the United States /

States increased from a yearly average of 14,523 tons in the period 1865 - 8 to 38,119 tons in the period 1872 - 4. By 1887, 194,920 tons of sugar out of a total production of 336,016 tons were exported to the United States, and by 1900 over two thirds of British West Indies sugar exports were to the United States.⁵⁹

Various influences brought about this increased export of sugar to the United States. The alteration of duties in that country in 1872 was such as to favour the American refining industry and thus British West Indies unrefined sugar, most of which was muscovado, came in under the lower scale of duties. British Guiana vacuum pan proprietors, by making a dark grey refining crystal, also had an advantage in the United States market, but sold their yellow crystals to the specialized market in the United Kingdom because this lighter coloured sugar, fit for immediate consumption, was liable to prohibitive duties in the United States.⁶⁰

The removal of sugar duties in the United Kingdom in 1874, and the increasing beet sugar competition in the home market caused West Indies sugar producers to prefer the United States market. Here, continental beet sugar was at a /

a disadvantage, being subject to a higher duty than muscovado and, in addition, freight charges from the West Indies to the United States were approximately one fifth to one-quarter of what they were to the United Kingdom.⁶¹ With the great drop in the price of sugar after 1884, the sugar producers in the British West Indies found it more profitable to the extent of usually £2 per ton, to send sugar to the United States market, despite the 40 per cent duty it was subject to in that country.⁶²

Finally, the factors of geographical nearness to the United States, and the large amount of trade done with that country, especially in foodstuffs brought close association. Ships returning to the United States from South America and the West Indies were desirous of return cargoes and allowed favourable freight charges to obtain them.

By 1866 American importers of sugar were sending down agents to the British West Indies to buy sugar on the spot. By 1879, it was stated that, as regards St. Kitts-Nevis,-

"those sugar proprietors who are not tied to English merchants dispose of their crops to purchasers for the United States market and realize £2 or £3 per hogshead on the /

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the price obtained in the United Kingdom."⁶³

The annual report for Antigua (1882) shows that approximately half the sugar exports from that colony went to the United States and stated that -

"it is significant evidence of the extent to which the growers of sugar have become free from the control of English consignees".⁶⁴

(This observation is not necessarily accurate because sugar consigned to the consignee merchant could still be sold and controlled by him even if it went to America).

The Royal Commission on Finance, 1883 - 4, in evidence taken, reports that -

"everywhere one goes one sees American buyers" and that "the American market is a great boon even with the heavy duty".⁶⁵

Resentment was expressed to this Commission by planters in the various colonies, who were tied to the English merchant and who had to forego the higher prices offered by American buyers /

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buyers.⁶⁶

Sugar exported to the United States appears to have been sold to that market by any of three methods.

There were the large West India houses, as in British Guiana and Trinidad, who had their sugar conveyed direct to the New York market, sometimes in their own ships, but increasingly by means of the regular steamship lines that were established after 1870. These firms, some of whom were acting as consignee merchants, usually sold through the American agencies of the large brokers as Cznarikow and Booker Bros. and their sugar was usually unloaded directly into refineries on the water front in New York.⁶⁷

In addition to this more direct method, local merchants in the colonies were acting as agents for American commission merchants and obtaining for them shipments of sugar purchased from the smaller sugar proprietor and also from consignee merchants who were selling to the American market. The American Commission merchant charged a round commission, usually 2½ per cent for selling the sugar, and gave his West Indian agent - the local merchant, a portion of it, in some instances /

instances, as low as 1/2 per cent.⁶⁸ The local merchant did little more than contact those sugar proprietors desirous of selling their produce and made certain that the sugar was available for shipping to the United States when wanted. Advances to sugar proprietors were not usually made by these local merchants. With the establishment of the telegraph in 1871, and daily price quotations received, and the speedy transport to the United States market, account sales were usually had within a matter of, at the most, a few weeks and there was thus less need for advances.⁶⁹ In many respects the position of the local merchant, acting as agent for the American commission merchant, was similar to that of the "commissioner" or factor, in the French West Indies, who had long handled the sale of sugar from those colonies without any financial responsibility - merely acting as a local broker.⁷⁰

The third method of purchase of sugar for the American market, which seems to have been widespread during the late 1860's and 70's, was that of American agents who came to the colonies in person and bid for the proprietors' sugar on the spot.⁷¹ For the small planter who was put in possession of funds /

funds immediately this must have been a refreshing experience in comparison to long tedious delay under the consignee system. The forwarding of sugar to the English merchant by the sugar planter and the drawing of bills on him for what he thought the sugar was worth and the arrival, perhaps months later, of account sales, itemizing proceeds and various charges were now needless. Charges, as commission for sales, brokerage, insurance and dock charges all part of the "phlebotomizing" process were avoided, or seemingly so, by the sugar planter who sold to the American agent.⁷²

This practice of selling sugar to American agents on the spot appears to have given way to the method of having a local merchant acting as agent although there is still reference to these American buyers up to the end of the century. During the season 1881 - 2, the bulk of the crop of St. Kitts-Nevis went to the United States and was sold through these "American speculators in the local market".⁷³ In the 1890's, when American sugar cartels were being established, planters complained of the lack of competition among the American buyers and stated that "they bought as a man".⁷⁴

Coinciding with the growth of the American market, the development /

development of steamships and the establishment of telegraphic service in 1871⁷⁵ tended also to effect the merchandising of sugar and to lower cost of transport of sugar.

The increase of steamship traffic in the West Indies was rapid. For example, in Jamaica in 1876, 216 steamships entered ports of that colony, in comparison to 641 sailing ships; by 1881 the figures were respectively 382 and 333.⁷⁶ By 1879, regular steamship connection was established between Jamaica and New York,⁷⁷ and in evidence given in 1884, by Messrs. Ker, pioneers of the steam carrying trade in Jamaica shows that most of the sugar carrying trade from Montego Bay (the chief export area for sugar) was being done by steamers.⁷⁸ This sugar was transported in steamships to the United Kingdom at a rate of 50 - 55s. per ton compared to 60 - 65s. per ton by sailing ships.⁷⁹

Much of this growing steamship traffic was to the United States where after 1884, the greater quantity of sugar went. American steamships and sailing vessels returning from bringing down cargoes of food and timber products were calling at the various islands seeking cargo and, as was stated, "competition among the Yankees" tended to keep freights down.⁸⁰
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The Pickford and Black line of steamers between Georgetown and New York, the agency for which was held by Sandbach Parker and Company, complained of these American vessels seeking cargo and remarked, "they will hold over if there is a chance of getting one".⁸¹

With increasing steamship traffic, it was found that existing harbour and navigational facilities were inadequate. All the ports were in the Windward and protected side of the islands and were not necessarily the best harbours.⁸² Most of these ports had insufficient depth of water even for sailing ships, to load at the wharf, and lighterage was usually necessary. For many years the bulk of sugar from the sugar colonies had gone to Bristol and as the Avonmouth did not permit of passage of vessels over 500 tons⁸³, West India ships were usually never more than this tonnage and harbour facilities in the West India ports were fairly adequate to the needs of such sailing vessels. By the 1880's steamships of tonnage of up to 3,000 were entering the harbours to take on sugar cargo. In all the ports of the British West Indies, there were only, at the most, three ports where steamships could dock at the pier - Castries in St. /

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St. Lucia, Kingston, Jamaica and Georgetown, British Guiana.⁸⁴ Most of the sugar exported from Jamaica was loaded in the Bay of Lucy and Montego Bay on the northwest coast and here lighterage was necessary.⁸⁵ At Georgetown, docking facilities were handicapped in that a bar across the Demerara river made crossing dangerous for ships of anything but the smallest tonnage,⁸⁶ and Castries in St. Lucia was but a minor port for the shipment of sugar.⁸⁷ At all other ports in the British West Indies steamships had to dock in the open roadstead.⁸⁸ At the harbour of St. Johns, Antigua, steamers anchored two miles out, and similarly at Bridgetown, Barbados (prior to harbour improvements in the 1880's) and at Kingstown in St. Vincent.⁸⁹

Due to the short distances between the islands, steamships endeavoured to journey between the island at night in order to make use of the daylight hours for loading.⁹⁰ However, customs hours did not permit of this being done to the best advantage, especially in the Leewards and Windward group. Customs hours were usually from 10 a.m. to 3 p.m.⁹¹ If a steamer arrived at 3 p.m. or later it meant remaining over until next day. Vexatious customs hours and the different /

ferent rates of harbour dues and export duties of the various British West Indies colonies, did not cause so much difficulty when only sailing vessels were used and were sent out to some port and returned home without calling at other ports.⁹² But, by the 1880's, steamers with greater cargo capacity were calling, loading and discharging at various ports. The factor of wind that had determined sailings between the islands was of less importance and steamships with their heavier working expenses did not wish to hold over if it could be avoided.⁹³ Pickford and Black claimed that their steamship captains were afraid to approach the islands at night.⁹⁴

There was much loading and unloading in shipping sugar from the colonies. Most estates had their own small shipping bays and wharves fitted with hand-operated winches, and from these sugar was loaded on to the droghers and taken to the main port of the colony.⁹⁵ Much of Jamaican sugar exports were loaded directly from the drogher to the steamer waiting off shore, from the estates chiefly along the Bay of Lucea and Montego Bay.⁹⁶ In most of the smaller colonies this sugar was warehoused at the port and from there loaded on /

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on to a lighter and transferred to the ship when it arrived. If times of loading were well arranged, the sugar could be loaded on^{to} the ship directly from the drægher bringing it from the estate to the port. However, most sugar was warehoused at the port of the colony in the process of export. Georgetown, British Guiana, had thirty such private warehouses⁹⁷.

Inland estates, such as Worthy Park, which were sufficiently profitable in the prosperous period of the sugar industry to justify hauling sugar over miles of rough road (at a terrible cost to draft animals) had, by the later years of the 19th century, nearly all gone out of sugar cultivation.⁹⁸

With the development of the railroad, in British Guiana, Trinidad and Jamaica, some plantations shipped sugar to the ports via this medium, on which they usually enjoyed favourable freight rates.⁹⁹ But as these railways usually skirted the coastline on which sugar estates bordered, as in Trinidad and British Guiana, sugar planters preferred the cheaper drægher which, with its one large square sail, was still a familiar sight at the end of the century.¹⁰⁰

As the result of ample cheap labour, expense in handling sugar /

sugar at the colonial ports was not excessive. The usual loading charge for a hogshead of sugar was 4d.-5d. and for a bag of 250 pounds, 2½d.¹⁰¹

With the increasing number of steamships calling at the various ports of the sugar colonies, it was found necessary to improve harbour facilities and navigational aids. In 1869, the carenage at Bridgetown was being altered to accommodate steamships "up to 72 feet across at the paddle boxes".¹⁰² In 1886, £70,000 was spent on improving the harbour of Castries, St. Lucia,¹⁰³ and by 1887, this harbour and Kingston, Jamaica, were the only ports at which ships drawing 27 feet could dock.¹⁰⁴ In Trinidad, the Caroni river was deepened gradually after 1886 to permit steamships to come up to Port of Spain.¹⁰⁵ In British Guiana, the Committee of Pilotage was empowered to purchase certain tall chimneys situated on sugar plantations and which for many years had served as landmarks for ships approaching the low-lying shore, but which the sugar planters proposed to move.¹⁰⁶

By 1890, regular steamship service was established between all the British West Indies, the United Kingdom and the United States. In 1889, a steamship service was established around /

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around the island of Trinidad and direct to New York, giving sugar planters the opportunity of loading sugar offshore to steamers, instead of droghering to Port of Spain.¹⁰⁷

The manager of Estridge's estate, in St. Kitts, in 1881, stated that -

"English sailing ships began to cease calling at the island as the chance of obtaining produce decreased".¹⁰⁸

By this date most of the sugar from St. Kitts was going via American steamers to the United States. Being almost the last colony on the northern journey of ships returning from South America and the West Indies, St. Kitts planters often experienced difficulty in that space on ships was occupied by sugar from the more southern colonies.¹⁰⁹ Despite there being less competition for freight in St. Kitts, the manager of Canada estate, maintained that he realized £1 more per ton of sugar in shipping to the United States rather than to the United Kingdom.¹¹⁰ Montserrat planters being slightly off the recognized sailing route and also at the end of the northern journey through the islands, stated that charges for freight from this island were higher because of lack of competition /

competition.¹¹¹

By 1890, freight on sugar carried to New York from Barbados was 16s. per ton, compared to £2 - £2: 10s. per ton to London.¹¹² In addition to the lesser freight charge there was less drainage of molasses in going to the United States. Despite the quicker transport by steamers, molasses drainage on the ocean trip to the United Kingdom was still anywhere from 10 - 12 per cent when hogsheads were used.¹¹³ On the trip to New York from Barbados, muscovado sugar lost an estimated 3½ per cent in weight by drainage.¹¹⁴ Various port charges in New York and London harbours were equal except that barging as necessary in London, and which cost 1s. per ton, was unnecessary in New York,¹¹⁵ and in addition the charge of draft, peculiar to London, was not deducted by the New York buyer (draft was an allowance made to the refiner or wholesale grocer in London for sugar which adhered to the cask and was usually estimated at 2 ^(lbs) pounds per hogshead.)¹¹⁶

By 1895, sailing ships handled very little West Indies sugar; Sandbach, Parker and Company speak of selling their small sailing ships at the end of the century and shipping by steamers of the regular lines, especially those of the Trinidad /

Trinidad Trading Corporation, carrying up to 3,000 tons of sugar per ship.¹¹⁷

The reduction in shipping costs and speedier transport contributed towards the reduction in price of sugar during the second half of the century. Freight on sugar carried to the United Kingdom, was reduced approximately £1 per ton during the period 1865 - 1900.¹¹⁸ Sugar exported to the United States from British Guiana in 1897 was carried for as low as 9/4d. per ton, representing a drop of approximately one-half from the charge of 18s. - £1 per ton in 1865.¹¹⁹ Even sugar carried from British Guiana to New York at 9/4d. per ton, found it difficult to compete with beet sugar carried by subsidized German lines from Hamburg to New York at 7/6d. per ton in the 1890's.¹²⁰

1. P.P. 1891. V. 39. P. 102-3.
2. P.P. 1871. V. 20. British Guiana. p. 224.
10. Loc. cit.
11. P.P. 1895. V. 30. British Guiana. p. 37.
12. P.P. 1898. V. 32. Appendix C. Pt. 3. p. 153.
"Schubert" estate was also built up by various other estates. See also C.O. 11/10/1897.

1. Russell's Prize Essays. Georgetown. 1876-8. p. 165.
British Guiana Directory. 1870.
2. C.O. 111/494. 23 June. 1897. (List of Commercial houses)
British Guiana Directory. 1870.
3. C.O. 111/373. Oct. 6. 1869.
P.P. 1871. V. 20. British Guiana. see Appendix -
list of estates; gives proprietors, attorneys and
managers in British Guiana.
4. P.P. 1898. V. 50. Appendix C. Pt. 1. pp. 189-90 -
e.g. Plantation "Schoonoord", "the proprietors con-
verted the estate into a limited company for purely
family reasons in 1878, the shares being allotted to
them fully paid up, no capital whatever being asked
from the public".
Burge's Colonial Laws. London. 1838. v. ~~ix~~ ^{iv} pp 50-55
P.P. 1871. V. 20. British Guiana. p. 78.
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7. P.P. 1886. V. 23. p. 233 - Cost of production on
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been reduced £3 - 4 per ton since 1879 by improvements
in manufacturing.
8. P.P. 1851. V. 39. P.P. 152-3.
9. P.P. 1871. V. 20. British Guiana. p. 201.
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- 27. Ibid. p. 411.
- 28. Chapter p.
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- 30. P.P. 1898. V. 51. Jamaica. p. 411.
- 31. P.P. 1881. V. 64. A.R. Jamaica. 1879.
- 32. P.P. 1897. V. 59. A.R. Jamaica. 1895-6.
- 33. Olivier, Lord. Jamaica. (The Blessed Island) London.
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- 34. P.P. 1898. V. 51. Grenada. p. 14.
- 35. See Annual Reports, and production figures given in
P.P. 1898. V. 50. Appendix B. p. 171.
- 36. All the colonies imported a certain amount of refined
sugar but not muscovado as Grenada did at this period.
- 37. C.O. 321/167. April 24. 1896.
C.O. 321/168. Sept. 29. 1896.
- 38. P.P. 1887. V. 57. A.R. Antigua. 1886.
- 39. P.P. 1898. V. 51. Antigua. p. 164.
- 40. Ibid. p. 204.
- 41. P.P. 1898. V. 51. St. Kitts-Nevis. p. 233.
- 42. P.P. 1898. V. 50. Barbados. pp. 171, 231.
P.P. 1899. V. 61. Barbados. p. 53.
P.P. 1866. V. 49. A.R. Barbados.
- 43. P.P. 1898. V. 50. Barbados. p. 200.
- 44. Loc. cit.

- 45. Ibid. p. 231. Appendix C. Pt. I. p. 6.
- 46. Ibid. p. 231. Appendix C. Pt. I. p. 74.
- 47. P.P. 1898. V. 59. A.R. Barbados. 1897.
- 48. P.P. 1898. V. 50. Barbados. p. 231.
- 49. This had been a difficulty when the subject was first raised in 1873. C.O. 28/218. Mar. 7. 1873.
- 50. C.O. 321/4. Aug. 27. 1874.
 "Its peculiar condition of population and patriotism, almost amounting to a nationality, do not present the Barbadian planter with the difficulties experienced by planters in the smaller islands where pressure is on labour is less."
- 51. These figures are based on information obtained from Royal Commissions commencing with that of 1842, and ending with that of 1897 (See Dr Morres, Subsidiary Report, Appendix A.). Annual reports throughout the years also contain figures of estates cultivated. See also handbooks, as British Guiana Handbook. 1909, and Watkins, F., Handbook of the Leewards. 1924.
- 52. P.P. 1878-9. V. 13. pp. 135, 141, 171;
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- 53. P.P. 1886. V. 23. pp. 229-31.
- 54. C.O. 111/494. June 23. 1894.
 P.P. 1898. V. 50. Appendix C. Pt. I. p. 150.
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- 55. McCulloch. Commercial Dictionary. London. 1884.
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- 56. P.P. 1910. V. 10. Pt. III. p. 96.
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- 58. P.P. 1898. V. 50. Appendix C. Pt. I. p. 26.
- 59. P.P. 1889. V. 72. Return of Sugar production. p. 15.
P.P. 1910. V. 10. Comm. on West Indian - Canada Trade -
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- 60. C.O. 111/494. June 23. 1897.
P.P. 1874. V. 44. A.R. British Guiana. 1872.
- 61. P.P. 1898. V. 51. St. Kitts-Nevis. pp. 210, 240.
- 62. P.P. 1898. V. 50. Trinidad. p. 310.
Hansard. 1890. V. 343. p. 11. West India sugar
pays a duty of £6: 10s. per ton in the U.S.A.
- 63. P.P. 1880. V. 48. A.R. St. Kitts-Nevis. 1879.
- 64. P.P. 1883. V. 45. A.R. Antigua. 1882.
- 65. P.P. 1884. V. 55. Leewards. p. 534.
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- 66. P.P. 1880. V. 48. A.R. St. Kitts. 1879;
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- 67. P.P. 1898. V. 50. Appendix C. Pt. I. See Mr.
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Cznarikow.
- 68. Trade and Taxes Commission. Trinidad. 1886. pp. 11-
12. (British Empire Society, Library).
- 69. Loc. cit.
- 70. P.P. 1910. V. 11. Pt. IV. pp. 28, 126; instances
of such agents in Trinidad and Barbados.
- 71. P.P. 1880. V. 48. A.R. St. Kitts-Nevis. 1879.
P.P. 1874. V. 44. A.R. British Guiana. 1872.
P.P. 1898. V. 51. St. Kitts-Nevis. p. 242.

- 72. P.P. 1884. V. 55. Jamaica. p. 161.
- 73. P.P. 1910. V. 11. Pt. II. p. 12; reference to the "Yankee ostensibly on pleasure but picking up orders".
- 74. P.P. 1898. V. 50. Appendix C. Pt. I. p. 101.
- 75. C.O. 28/215. Sept. 2; Nov. 7. 1871.
- 76. P.P. 1884. V. 55. Jamaica. Appendix R.
- 77. C.O. 351. Index. 13117. June 1. 1879.
- 78. P.P. 1884. V. 55. Jamaica. p. 195.
- 79. Loc. cit.
- 80. P.P. 1898. V. 50. Barbados. p. 156.
- 81. P.P. 1910. V. 11. pp. 69-71.
- 82. There were one or two exceptions, e.g. Kingston, Jamaica.
- 83. Clowes, G. S. L. The Story of Sail. London. 1936. p. 26.
- 84. C.O. 111/370. Jan. 15. 1868.
C.O. 28/207. Sept. - Dec. 1868.
- 85. P.P. 1884. V. 55. Jamaica. pp. 195-6.
P.P. 1865. V. 37. A.R. Jamaica. 1863.
- 86. P.P. 1910. V. 11. p. 111. In 1950, this bar still presented a barrier to entering the harbour of Georgetown.
- 87. P.P. 1887. V. 72. A.R. St. Lucia. 1886.
- 88. P.P. 1910. V. 11. p. 111.
- 89. P.P. 1898. V. 51. Antigua. p. 201.
West India Committee Circular. No. 36. Mar. 4. 1889.

- 90. P.P. 1910. V. 11. p. 111.
- 91. P.P. 1884. V. 55. Jamaica. p. 197.
- 92. Ibid. Supplementary remarks. p. 658.
- 93. P.P. 1910. V. 11. pp. 68-9.
- 94. Loc. cit.
- 95. Kerr, op. cit.; mentions the use of hand winches as early as 1850.
- 96. P.P. 1884. V. 55. Jamaica. p. 196.
- 97. C.O. 111/494. June 9. 1897.
- 98. Dominica was stated to have only ten miles of road fit for wheeled traffic in 1883. See P.P. 1884. V. 55. pp. 396-
- 99. Report on the Agricultural Wants of British Guiana. Wm. Russell. Georgetown. 1876. p. 26. P.P. 1898. V. 50. Trinidad. p. 282.
- 100. P.P. 1910. V. 11. pp. 68-72. Report on Agricultural Wants of British Guiana. op. cit. p. 26.
- 101. P.P. 1898. V. 50. Trinidad. p. 348. Ibid. British Guiana. p. 45.
- 102. C.O. 28/209. Aug. 30. 1869.
- 103. P.P. 1887. V. 72. A.R. St. Lucia. 1886.
- 104. Loc. cit.
- 105. Trade and Taxes Commission Report. Trinidad. 1886.
- 106. C.O. 111/494. May 11. 1897.

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- 107. P.P. 1890. V. 48. A.R. Trinidad. 1889.
- 108. P.P. 1898. V. 51. St. Kitts-Nevis. p. 242.
- 109. P.P. 1910. V. 11. p. 144.
- 110. P.P. 1898. V. 51. St. Kitts-Nevis. p. 240.
- 111. P.P. 1910. V. 11. p. 157.
- 112. P.P. 1898. V. 51. St. Kitts-Nevis. p. 210.
P.P. 1878-9. V. 13. p. 176.
- 113. P.P. 1877. V. 59. A.R. Tobago. 1875-6.
P.P. 1862. V. 13. Sugar Duties. p. 263.
- 114. C.O. 28/236. Sept. 14. 1894; P.P. 1898. V. 50.
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- 115. P.P. 1898. V. 50. Appendix C. Pt. I. p. 153.
- 116. P.P. 1910. V. 10. Pt. III. p. 186.
McCulloch, J. R. Commercial Dictionary. London.
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- 117. P.P. 1898. V. 50. Appendix C. Pt. I. p. 46.
- 118. Ibid. p. 14, 26; P.P. 1910. V. 11. Statistics.
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Survey. p. 38.
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re British Trade
- 120. P.P. 1898. V. 50. British Guiana. p. 45.

1890
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1893
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1900

BEEET SUGAR COMPETITION 1884 - 1896.

ROYAL COMMISSION 1897,

ABOLISHMENT OF BOUNTIES 1903.

Following the great drop in the price of sugar in 1884, there was no cessation of beet sugar competition in the United Kingdom market.

The following figures (in thousands of tons) indicate the total imports of sugar into the United Kingdom during the period 1884 - 1900, and show the decreasing amount of British West Indies sugar going to the United Kingdom market. The balance of sugar exports from the British West Indies were almost entirely to the United States.

	<u>Total B.W. Indies Exports of Sugar</u>	<u>Imports of Sugar into United Kingdom</u>			
		<u>Cane Sugar</u>		<u>Beet Sugar</u>	<u>Total</u>
		<u>B.W. Indies</u>	<u>Other Regions</u>		
1884	329	168	414	559	1,194
1885	283	138	423	562	1,237
1886	256	99	367	586	1,125
1887	336	108	331	772	1,250
1888	299	106	468	661	1,237
1889	289	94	376	855	1,326
1890	298	67	216	987	1,285
1891	264	54	298	1,001	1,377
1892	279	75	311	958	1,346
1893	273	61	307	1,009	1,379
1894	260	85	239	1,087	1,412
1895	236	85	243	1,169*	1,558
1896	206	72	226	1,144	1,526
1897	254	47	228	1,159	1,518
1898	289	41	235	1,117	1,419
1899	244	39	106	1,258	1,406
1900	238	37	113	1,362	1,476

Note to Table.

* (By far the greatest proportion of beet sugar came from Germany, e.g. 1896 (in thousands of tons) Germany 755, France 143, Holland 106, and the balance made up by various other European countries)²

Bounties on German and French sugar during the period 1884 - 94, averaged approximately £1 per ton and £5 per ton respectively, but by 1894 were down to 12/6d. per ton in the case of Germany and £2: 8s. per ton in the case of France.³

On August 1st 1896, the bounties in both countries were approximately doubled, so that by the end of 1896, they stood at £1: 5s. and £4: 10s.³

Cost of producing beet and cane sugar by 1890 was approximately equal and in some instances vacuum pan sugar made in British Guiana and Trinidad was produced at ^{a price} below that ~~for~~^{of} which German beet sugar with the advantage of the bounty. Comparative cost of beet and cane sugar per ton in 1895 - 6 was

Beet sugar (Germany)	£9: 12: Od. ⁴
Cane sugar (Demerara)	£9: 5: Od.

On some estates in British Guiana, as those of the Colonial Company /

Company, sugar was produced at as low as £8: 19: 4d. and at the Usine St. Madeline in Trinidad, for slightly less.⁵

The advantage that beet sugar had in the price for which it could be sold in the United Kingdom market, arose not so much from the bounty (which, in the case of Germany, the greatest exporter to the United Kingdom, was never more than a £1 per ton until 1896) but, rather from the lower freight charge on sugar from German ports to the United Kingdom, approximately 6s. per ton compared to about £2 per ton from the West Indies.

The price of raw sugar in London by 1895 - 6 was £11: 6s. per ton.⁶ Thus German raw beet sugar, with the advantage of the bounty of £1 per ton (1896) less the cost of freight 6s. per ton, was realizing a profit of £2: 8s. per ton.

Vacuum pan sugar from the British West Indies however, did no more than break even if sold in the United Kingdom.

Demerara yellow crystals (also produced in Trinidad) were in a better position. This special form of sugar, made by adding a small amount of sulphuric acid to the clarified juice, cost only a few shillings more per ton to produce than ordinary vacuum pan sugar, but brought, on an average,

£1 /

£1 - £2 per ton more than beet sugar in the London market.⁷ Yellow Demerara crystals had a limited and prized market, and, by the late 1890's, this too was being invaded by beet crystals 'doctored' to resemble Demerara crystals.

Muscovado sugar, which in 1890 formed by far the greatest quantity of sugar produced in the sugar colonies, apart from British Guiana, was in the worst position of all classes of sugar sold in the United Kingdom market. By 1895 Muscovado sugar, which cost approximately £9 per ton to produce in the colonies, was quoted at from £7: 14s. to £10: 0s. per ton and could not be sold at this price on the London market.⁸

It was evident in the United Kingdom by 1890 that public taste in the matter of sugar had changed. The British public quickly appreciated the dry white semi, or fully refined beet sugar that came in a granulated state from the continent. The British refiner "who produced the filthy pieces that turned black in the cup"⁹ was doomed. Muscovado sugar was poor refining sugar, as the loaf sugar refiners had remarked as early as 1862 (see p.100). The loss by shrinkage, so common in muscovado sugar, continued after /

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after it was refined in the United Kingdom. Beet sugar lost no weight in transit, and wholesalers were quick to appreciate this saving. Loss of weight in storage and transit had been an endless source of complaint between the grocer and the wholesale dealer. On the top of invoices for British pieces it was stated -

"All English and Scotch sugars sold by filled out weight and no responsibility taken for shrinkage".¹⁰

Grocers claimed that the 'pieces' were filled out hot and that "the art of the sugar refiner was to make them carry moisture".¹¹

As regards raw sugar for direct consumption in the confectionary trades, some refined beet sugar, almost white in colour and in a dry state, was infinitely preferred to mucovado and was extensively used in jam making. In 1899, a prominent confectioner stated -

"No self-respecting confectioner will be bothered with the huge dirty casks and syrupy bags in which cane sugar is mainly imported now, he may buy some of it for special work (as for gingersnaps) but can rarely use it without careful examination /

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examination".¹²

Tate, and Messrs. Lyle, in the late 1880's were importing thousands of tons of Java sugar in their own sailing ships, and Mr. Crosfield in 1896, estimated that nine-tenths of the cane sugar used in the refining industry came from Java, Manilla and Brazil.¹³ Java vacuum sugar was produced at a very low price, chiefly because of the low price of labour (3d. per day) in that colony. In addition, in the 1890's, the depreciation of their standards of value - silver and the rupee, relative to the gold standard of the West Indies, gave the East Indies an advantage in selling sugar in the United Kingdom.¹⁴

Even this foreign cane sugar gradually lost out to beet sugar, as figures given on p.306 show. Those refiners who were using both this foreign cane sugar and semi-refined beet sugar, where unable to compete with fully refined beet sugar which came into the United Kingdom from Germany in the 1890's in enormous quantities.

Reduction in the cost of producing beet sugar continued throughout the 1890's. Some of the West Indian planters, especially those of British Guiana, appreciated the technical improvements /

improvements made in the German sugar industry, and admitted that it was not alone bounties and lower freight charges which enabled German beet sugar to come into the United Kingdom at a low price.¹⁵ But sugar had certain advantages not enjoyed by sugar cane. Beet root pulp from factories was in great demand for cattle food, and a prosperous cattle industry had been built up in sugar beet areas in Germany.¹⁶ The beet root also played an important part in the crop rotation system. The sugar beet industry employed a large working population the year round. Harvest of the beet took place in the Autumn and the beet could be stored; manufacturing of sugar took place during the winter months.¹⁷ The by-product beet molasses, much inferior to sugar cane molasses produced a great quantity of cheap spirit, which was shipped abroad disguised as Scotch whisky, gin and Jamaica rum.¹⁸

Witnesses who visited German villages in the beet sugar industry area before and after its great development remarked on the change from former destitution to present prosperity.¹⁹

Bounties /

Bounties were, no doubt, a drain on the exchequers of Europe, but benefits derived were diffused so as to have a wide and appreciable influence on the country's economy. Bounty on export of beet sugar was only one aspect of German policy to develop industry by state assistance. Beet sugar by the late 1890's was carried on subsidized steamship lines, and the whole German system of light railways received a boost from the enormous expansion of the beet sugar industry.²⁰

Beet sugar was also exported to the United States and lowered the price of sugar in that country (beet sugar exports from Germany to the United States rose from 200,000 tons in 1887 to 717,170 tons in 1897).²¹

Fortunately a reciprocal trade agreement between the major British West Indies sugar colonies and the United States in 1892, further enhanced the value of that market to the sugar colonies.²² A price had to be paid for this reciprocity chiefly in the form of removal of duties on food-stuffs which came principally from the United States and, which duties, formed the chief revenue of the sugar colonies. Compensating measures were necessary in all colonies except Jamaica /

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Jamaica which was sufficiently prosperous to require no alternative revenue to make up the loss.²³ The compensatory measures in the other colonies took the form chiefly of increased export duties on sugar products.

This reciprocity was short-lived. A new president in the United States in 1894, resulted in duty changes. There had been, in addition, complaints on the part of the United States Government that the British West Indies had not reciprocated sufficiently and that imports from the United Kingdom were unduly favoured in the colonies.²⁴ Reciprocity at the end of 1894 was terminated.

With the termination of the commercial agreement with the United States, in 1894, the sugar colonies were in a difficult position. ~~But~~ competition was severe in both the United States and United Kingdom market. United States refiners were less inclined to use muscovado unless it were centrifugalled, i.e. dried, and, in addition, there was the threat of Cuba's coming into the United States market as a great sugar cane producer. To round off their difficulties in 1896, both Germany and France doubled their bounties and it appeared likely that a race of bounties between those two countries /

countries had begun.²⁵ As in 1884 - 6, 1894 - 6 marked the depth of depression in the British West Indies, and, as in 1884, a number of commercial houses collapsed. Hawthorn and Watson in Jamaica; Swendell and Mathews, St. Kitts-Nevis; F. & G. Garroway, Antigua; Gregor Turnbull and Company, Messrs. Burnley, both of Trinidad all went under. Messrs. Daniels, one of the oldest and most widely connected of West Indies houses also went down.²⁶ These firms were connected with both vacuum pan and muscovado estates. Daniels and Company were purported to have lost over one million pounds in the trade.²⁷

Gloomy conditions were reported in all the colonies. In Barbados, plantations appraised at £15,000 in 1883, by 1896 were worth £5,500. The Receiver in Chancery for Barbados applied to have those estates in his hands abandoned. Barbados plantations long the best in the West Indies, by 1895 were experiencing "a universal loss".²⁸ In the Leewards sugar exports went down in value by £91,000 at the end of 1894.²⁹ In British Guiana, the Colonial Government appointed a Commission to report on how relief could be extended to the sugar estates.³⁰ The British Guiana Bank which /

which had loaned money to estates also collapsed.³¹

Jamaica, alone of the sugar colonies, with little dependence on sugar, evinced prosperity, "Jamaican 4% stock in the London money market being inferior only to Canada and the Cape".³²

The doubling of bounties on August 1st, 1896 by Germany and France resulted in a further drop in the price of sugar which, by 1897, was down to £10 per ton for raw sugar in the London market. Muscovado sugar was down to £8: 2s. which on the best estates left but a profit of 6s. per ton insufficient to continue on, ^{and} but caused others a loss.³³

British West Indian sugar producers were claiming, by mid 1896, that their sugar industry was faced with extinction unless the United Kingdom Government intervened.³⁴

Ever since the early 1880's there had been complaints and resolutions coming to the Colonial Office from the sugar colonies in the West Indies in connection with depression, and the need for action by the United Kingdom to bring about the abolition of bounties. Colonial Office indifference to these complaints appears to have arisen from a conviction that the immense boon to the British public in having /

having cheap sugar from the continent far outweighed the attempts of the West India Committee to awaken honest Imperial enthusiasm through the columns of the "Times" and by organizing anti-bounty organizations.³⁵

In addition, there was the definite feeling in the Colonial Office that beet competition had a healthy effect on the British West Indies in forcing them to abandon obsolete methods of sugar production. Lord Derby, Secretary of State for Colonies had remarked in 1884 -

"It will be a great step if the present crisis turns those who survive it to the best methods of manufacturing sugar as their only hope of prosperity".³⁶

By the end of 1884, when depression had shown no signs of lessening, Derby also stated -

"No doubt there must be a revolution in West Indian methods, but I am not sure that it would be wise or right to leave them to their own devices at the present juncture".³⁷

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West Indies sugar producers to their own devices, for there is no evidence of sympathy in the Colonial Office towards their continual complaints of depression throughout the period 1884 - 94. The bulk of West Indies sugar was also going to the United States and their claim for Imperial action was not held to be justified considering the small proportion of their sugar consumed in the United Kingdom.

By 1895, it was evident from the collapse of West Indian houses, and the drop in the price of sugar, apart from the increased agitation of the West India Committee, that distress in the West Indies was genuine, but even at this date the Colonial Office's view is expressed in a minute to the effect that -

"Our policy ought, I think, to be to let mortgagees and encumbrancers foreclose and if they cannot make the estates pay, let them sell them to those who can".³⁸

The Under Secretary of State's added note to this minute states -

"I am afraid no one would buy, there are hundreds of mortgagees in England, who would thankfully sell".

In /

In 1895, Mr. Joseph Chamberlain became Secretary of State for Colonies. By this year, Free Trade Doctrine in the United Kingdom was less strong. Germany and the United States were encroaching on Britain's overseas markets, and there was increased Imperial enthusiasm in the United Kingdom. Mr. Chamberlain showed more solicitude towards the sugar proprietors than his predecessors although his public utterances of sympathy with their plight are at variance with opinions expressed in official correspondence at the Colonial Office.³⁹

In 1895, remarking on a letter from a sugar proprietor, Mr. Ewart, who complained of depression, Mr. Chamberlain stated -

"Americans say that hereditary West Indians like Mr. Ewart appear to have been born tired, in which opinion there is a good deal of truth".⁴⁰

In 1896, Chamberlain remarked -

"I have felt more than once or twice, that the British West Indies sugar colonies show very little energy. If they /

they had devoted to cultivation of the cane as much industry and science as other countries have given to beet they would have been in a much better position."⁴¹

Mr. Chamberlain qualified these remarks to the effect that they did not apply to sugar planters in British Guiana.

As the result the doubling of bounties on August 1st, 1896 by Germany and France, and active agitation by the West India Committee for action to end bounties, Mr. Chamberlain was apparently convinced of the need for action. In the autumn of 1896, Mr. Cznarikow began a rumour that German Consuls in the British West Indies had been requested to inform the Home government as to how long the sugar-cane industry in the colonies could withstand bounties and what extra bounty was suggested. The truth of this report, according to Colonial Office comment on the incident, is difficult to ascertain but it does appear to have had a stimulating effect in bringing action for a removal of bounties.⁴²

In a speech of November 9th, 1896, Mr. Chamberlain stated that he could no longer, "acquiesce in a policy of non /

non-intervention as hitherto pursued in regard to bounties"⁴³
 In the same month Chamberlain proposed to the Treasury that
 a Royal Commission be sent to the West Indies to enquire
 into the effect of foreign sugar bounties on their prin-
 cipal industry. Mr. Chamberlain "desired not so much an
 academic inquiry into the bounty legislation as a reliable
 presentation of evidence",⁴⁴ and stated on December 16th,
 1896 -

"The appointment of the Royal Commission may indirectly
 assist matters by suggesting to Foreign Governments the
 possibility of our taking some action if bounties are con-
 tinued".⁴⁵

A Royal Commission, consisting of Sir Edward Grey, Sir
 Henry Norman (a former financial secretary to the Governor
 General of India) and with Doctor Morris (Assistant Director
 of Kew Gardens and with years of experience in the West
 Indies) as expert adviser*, proceeded to the West Indies in

* The West India Committee opposed the appointment of Dr.
 Morris on the ground that he had often minimized the
 importance of the sugar industry to the British West
 Indies. Colonial Office comment on West India opposition
 to Dr. Morris appointment was that "it shows the worst
 side of the sugar planters - their intense jealousy of
 any other industry in the West Indies - it will do them
 more harm than good". (C.O. 318/289 Mar. 17, 1897).

December, 1896 returning at the end of April, 1897.⁴⁶ In addition to evidence taken in the West Indies, further witnesses were examined in London (such as, Mr. Cznarikow, sugar broker, Mr. Tate, sugar refiner, and Sir N. Lubbock, Chairman of the West India Committee).

The Report of the Commission, general in its nature, stated that the depression in the West Indies sugar industry was due to the competition of other sugar producing countries and in a special degree to the competition of beet sugar produced under a system of bounties. The Commissioners stated -

"The special causes of the present depression have only begun seriously to affect the sugar producing colonies within the last fifteen years".⁴⁷

Imperfect manufacture, extravagant management or absenteeism were not in any considerable degree the cause of the depression, although there were many places where sugar was not produced by the latest and best methods due chiefly to a conviction that in the face of bounty competition it would be of no avail.⁴⁸

Apart /

Apart from the recommendation of central factories in those colonies suited to their establishment, the Royal Commission was more interested in alternatives to, rather than the rehabilitation of the sugar industry.

The special remedies or measures of relief unanimously recommended were, settlement of labourers on plots of land; establishment of minor agricultural industries; improved communication; encouragement of the fruit trade; and the grant of an Imperial loan for the establishment of central factories in Barbados.⁴⁹

All Commissioners agreed that the best immediate remedy for the depression in the sugar industry "would be the abandonment of the bounty system by continental nations"⁵⁰, but looking to the future, the uncertain tariff policy of the United States, to the great cheapening of the cost of production of beet sugar and the artificial stimulation of the sugar industry in many countries "it is not clear that, even if bounties were abolished, another crisis of a similar character might not arise in the West Indies at a future day".⁵¹

The Royal Commissioners' Report was submitted in the Autumn /

Autumn of 1897. No action followed immediately. The only recommendation that would have had an immediate effect would have been the abolition of bounties, and West Indian agitation for this action to be taken was lessened in the autumn of 1897, when the United States placed a countervailing duty on bounty subsidized sugar imports to the full extent of the bounty. By February, 1898, German exports of beet sugar to the United States dropped from 717,170 tons in 1897 to 17,000 tons.⁵² This shutting out of beet sugar from the United States was worth 35s. per ton to the West Indian producer,⁵³ and lessened their drive for the removal of bounties and the implementation of the recommendations of the Royal Commission. At this stage, oddly, the Leewards petitioned the home Government for compensation in case the United States removed countervailing duties. Some muscovado producers now maintained that as there was a definite market for muscovado and few countries were engaged in producing it, "Barbados and the Leewards would err if they sought to replace it by more highly refined sugar".⁵⁴

Despite the countervailing duty imposed in the United States, German beet sugar exports to that country, were by 1900 /

1900 back to their original level, without having had any increase in bounty, but did have subsidized steamship transport at 7/6 per ton to New York.⁵⁵ The British West Indies sugar produced however still had an advantage on beet sugar in the United States market to the extent of the countervailing duty against bounties and, by 1900, three-quarters of British West Indies sugar was going to the United States.

Despite this greater proportion of British West Indies sugar going to the United States market, the West India Committee continued to petition the home Government for the removal of bounties. Uncertainty of the United States market and the fiscal policy of that country which was being adjusted to favour the Hawaiian Islands, the Philippines and finally Cuba, was the cause of much of this agitation for removal of the bounties.⁵⁶

Behind much of the uncertainty of the United States market was the fear of potentiality of Cuba as the great supplier of cane sugar to the United States. Prior to 1880, British West Indian planters had remarked that the freeing of the slaves in Cuba would hinder that colony's sugar industry.⁵⁷ A view commonly held was that Emancipation of /

of the slaves in Cuba would result in a relapse into a state of affairs as existed in the Jamaican sugar industry.⁵⁸ Cuba had far more available land and other products to attract the freed slaves than ever existed in Jamaica. Events in Cuba had not fulfilled such expectation. American capital had been increasingly invested in Cuba and the growth of the colono (cane farming) system with the exploiting of great tracts of virgin soil in the eastern portion of the island⁵⁹, plus the establishment of central factories of large capacity, resulted in an enormous increase in sugar production. By 1894, Cuba was the largest cane sugar producer in the world manufacturing one million tons in that year. The Cuban rebellion which broke out in 1895 reduced exports of sugar to 77,000 tons in that year,⁶⁰ and but for the great increase in bounty fed sugar in 1896, would have temporarily raised the price of sugar. The cessation of the Spanish-American War in December 1898, and Cuba's becoming a protectorate of the United States, diverted the bulk of Cuban sugar to that market and in 1903, the United States granted preferential rates to Cuban sugar to the extent of a 20% advantage over British West Indies sugar.⁶¹

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The other factor which induced the West India Committee to persist in its agitation for removal of bounties was, ^{that} this body ~~itself which~~ had long been representative, more or less, of all the sugar colonies, was, in the last decade of the nineteenth century, more nearly representative of British Guiana and Trinidad.⁶² The Colonial Office by 1894, was equating the West India Committee with the "large sugar growers of British Guiana"⁶³ "who were nearly all large mercantile houses in the United Kingdom. The decline of Jamaica's sugar industry and its practical extinction in a number of the smaller islands, followed by the liquidation of Messrs. Daniels who largely represented Barbadian interests, left British Guiana and, to a lesser extent, Trinidad, the two colonies most influentially represented in the West India Committee.⁶⁴

These two colonies had continued to send yellow crystals to the United Kingdom long after muscovado sugar ceased to go there. By the late 1890's, these yellow crystals formed the greater part of the value of British West Indies sugar exports to the United Kingdom, where a definite specialized market existed for this class of sugar. British Guiana and Trinidad vacuum ~~sugar~~ sugar producers valued this market highly /

highly both because of the £1 - £2 advantage it had over beet crystals and because of the increasing difficulty of obtaining good prices for their grey refined crystals in the United States.⁶⁵

Throughout the 1890's the introduction of doctored yellow beet crystals hit this exclusive London market, and the West India Committee was busy during the last decade of the century bringing legal action against purveyors of yellow beet crystals under the name of Demerara crystals.⁶⁶ By the end of 1897, it was estimated that 1,500 tons of beet crystals were dyed in the London market and sold at below the price of Demerara crystals.⁶⁷ These yellow beet crystals had a strong chemical odour but with their attractive appearance sold well. By 1897, it was stated, as regards Demerara crystals that, "a very few thrifty middle classes still show discriminating preference".⁶⁸

This new form of competition from beet sugar explains much of the continued agitation against bounties by the West India Committee.

British refiners were also strenuously opposing bounties, having been submitted to increasing pressure from the great amount /

amount of German refined sugar that came into the United Kingdom in the 1890's. Of the ten refineries in Liverpool in 1890, there were but five left in 1896, and the state of Greenock was spoken of as disastrous.⁶⁹

By 1898, Mr. Chamberlain was again urging steps for the removal of bounties. There was less Free Trade opposition to their removal and it was evident by this year that feeling on the continent was more amenable to a discussion of a means of abolition of the bounty system. The action of the United States in imposing countervailing duties in 1897 was followed by India in 1899.⁷⁰ A fresh conference of the Powers which had assembled at Brussels in June 1898 adjourned indefinitely with no concrete result,⁷¹ but following the action of the Indian Government in 1899, in levying a countervailing duty, and investigation in Germany into the sugar cartel system in that country hastened action. When the cartel got to work in Germany, the price of refined sugar in that country (already very high because of a prohibitive duty of £10 per ton) rose by £7 per ton. The disclosure of the enormous profits made by the cartel decided public opinion in Germany against bounties.⁷² When the /

the Sugar Bounties Conference re-adjourned in 1900, and France was also now more agreeable to the idea of the removal of bounties, in view of Germany's attitude. Following negotiations and conferences in 1900 and 1901, a Convention was signed on March 2nd, 1902, ratified on February 1st, 1903, and came into force on September 1st, 1903.⁷³

West Indian difficulties were not ameliorated during this period of protracted negotiations, despite their sending most of their sugar to the United States market. The great quantity of cane and beet sugar going into that country had forced down the price of sugar so that Muscovado sugar from Barbados had fallen from £8: 10s. per ton in 1901 to £5: 15s. in 1902.⁷⁴ The indefinite adjournment of the Bounty Conference of 1898 had caused a feeling of little hope of bounties being abolished. As in 1884, there was talk in the colonies of joining the United States.⁷⁵ The question of central factories also came up again and as the Royal Commission of 1897 had recommended their establishment, and specifically so in the case of Barbados, the Imperial Government was willing to grant a loan for this purpose to Barbados. In 1899 Mr. Chamberlain commissioned Sir C. Quilter /

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Quilter and Sir N. Lubbock, Chairman of the West India Committee, to report on the prospect of the establishment of central factories in the West Indies.⁷⁶ These two gentlemen did a yachting tour of the West Indies. Nothing constructive resulted from their visit. Private capital for such a venture could not be had. An attempt to interest Sir Thomas Lipton in the idea of central factories fell through, he having no intention of investing capital unless assurance of the removal of bounties was given.⁷⁷ The same former difficulties, as regards attorneys and mortgagees opposition, was also revealed. A feeling was also still said to exist that bounties might be abolished and thus existing appliances would still make sugar production profitable.⁷⁸

By 1902, the project of central factories was still only contemplative. There did not seem to be any likelihood of private capital coming in until the convention for the removal of bounties was ratified. On the other hand, the Imperial Government was unwilling to advance a loan unless they were absolutely certain that no private capital would come in. Finally, the possibility of bounties being /

being abolished, lessened the urgency for the establishment of central factories. With the signing of the Convention on March 1st, 1902, West Indian hopes soared. Sugar proprietors' optimism and their feeling that the golden era was about to return was reflected in March 1902, when Dr. Morris stated, in regard to Barbados -

"People here already regard the removal of bounties as likely to increase the value of sugar properties to about 100% - but as they were worth practically nothing before, this may not mean much".⁷⁹

... by cheap steadily freight charges and by the increasing technical efficiency.

With the abolition of bounties in 1853, British sugar manufacturers suffered also and British West Indian cane and beet sugar competed on equal terms in their market where they enjoyed a preference of 25%.

The first year following the abolition of bounties there was only a slight increase in the price of sugar - notwithstanding both the Cobden Club and the West India Committee who had demanded price rises of 25 and 33 per cent respectively.

... follow.

CONCLUSION

The cessation of bounties on beet sugar on September 1st, 1903, had no miraculous effect on the British West Indies sugar industry. The beet sugar industry was too well established to be seriously affected by the removal of bounties. There was only a limited market for West Indies sugar in the United Kingdom (in 1909, out of total United Kingdom consumption of 1,600,000 tons, only 129,000 tons was cane sugar),¹ and beet sugar producers knew how to retain that market by prohibitive duties at home to keep down consumption and by cheap steamship freight charges and by increasing technical efficiency.

With the abolition of bounties in 1903, United States countervailing duties also ended and British West Indies cane and beet sugar competed on equal terms in this market where Cuba enjoyed a preference of 20%.

The first year following the cessation of bounties there was only a slight increase in the price of sugar - confounding both the Cobden Club and the West India Committee who had predicted price rises of £8 and £2 per ton respectively.² A failure /

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CONCLUSION

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failure of the beet crop in 1905 brought a price rise from £8 to £16 per ton but by 1906, beet sugar exports into the United Kingdom were greater than ever and the price of sugar in London was back to £8 per ton.³

The United Kingdom cane sugar refining industry was practically extinct at the end of 1902; of the fifteen surviving refineries only one refined cane sugar. When in World War I beet sugar supplies were cut off, Britain had to go to New York for her refined sugar.⁴

The saving feature in the decade following the removal of bounties was the growth of the Canadian market. In 1898, as regards British West Indies difficulties, Mr. Fielding, Minister of Finance for Canada, stated that Canada had some Imperial responsibilities in the matter.⁵ In 1898 Canada admitted British West Indies sugar under a preferential rate of 25% below existing duties and this was raised to 33½% in 1900.⁶ In 1903, when the United States imposed countervailing duties against bounty sugar, Canada placed a surtax on German sugar imports into Canada to the extent of 33½%. The steady expansion of the Canadian market is shown in imports of British West Indian sugar which rose from /

from 11,000 tons in 1897 to 133,000 tons by 1909.⁷

The muscovado industry in the smaller colonies, especially Barbados, was undoubtedly permitted to survive as a result of the demand for this type of product in Canada. A large amount of molasses was absorbed in the lumbering industry and the fishing industry, where it was used as a staple food. As was the case with the United States trade, Canadian commission merchants, chiefly those located in Halifax and St. John's New Brunswick, established connections with West Indian agents through whom they purchased sugar supplies.⁸

This thesis, covering the period, 1865 - 1900, has been carried up to the date of abolition of bounties to show that conditions after their removal did not restore solid prosperity in the British West Indies. Sugar production was never again so lucrative as in the days prior to Emancipation, although sugar proprietors never really looked upon the palmy days as beyond recall. Bounty competition had greatly helped to force down sugar production costs which were reduced approximately one-half in the period 1884 - 1903.

The /

The price of sugar never rose to expected heights of £12 - £20 per ton except in two World Wars which did revive a taste of the halcyon days.

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 pp. 29, 209.
 Q. Hogg cleared £16,000 from the Penang estate he cultivated in 1896 "because our dollar costs us 2s. 2d. to put down there. In Demerara we barely cleared our expenses, because our dollar costs us 4s. 2d."
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APPENDIX I.

Sugar Machinery.

Most of the sugar machinery imported into the British West Indies (1865 - 1900), came from England. There were some instances of installation of German and Austrian machinery. German technology had made a great advance in connection with the beet sugar industry, and a number of the developments could be used in the cane sugar industry. Quinton Hogg, the British Guiana planter, speaks of making personal visits to Austria in the 1880's to purchase a triple and multiple evaporator, and obtained his diffusion batteries at Sangerhausen in Germany.¹ Vacuum pans, clarifiers and gadgets for testing and controlling sugar manufacture were imported from Germany, chiefly for British Guiana sugar estates, improvements being made.

Along with the purchase of German machinery, contacts were made with German technologists - a number of whom came out to British Guiana and Trinidad. Shortly after the mid century, there was a German sugar boiler on plantation Friends in British Guiana.² By the 1890's German chemists were /

were employed on most of the large estates as, Diamond, Non Pareil and Reliance.³ The Planters Association of British Guiana corresponded with a sugar expert, Professor Horzberg, on the chemistry of sugar, and this Association giving evidence in 1897, stated that the German chemists and engineer employed had a familiarity with German beet sugar factories.⁴ Eves, going out to the West Indies in 1896, speaks of "a sprinkling of German on board, generally chemists or engineers goint to large usines in Trinidad or to set up diffusion sugar processes in Demerara".⁵

Quinton Hogg also purchased French sugar equipment and brought out a French chemist but stated that he shortly reverted to English machinery, it being the best.⁶

Apart from the few instances of import of German sugar machinery and from France or Austria, the bulk of heavy sugar machinery continued to come from the United Kingdom. For example, in British Guiana, in 1890, (the year of greatest foreign sugar machinery imports in the period 1872 - 1896), figures for sugar machinery imported are: -

<u>From U.K.</u>	<u>From U.S.A.</u>	<u>From other countries</u>
£120,292: 11: 3½d.	£5,261: 1: 7d.	£6,115: 3: 10d.

There /

There were a large number of light sugar mills imported from the United States into Jamaica during the second half of the century, for use by the peasant cultivator. By the end of the century there were some 6,000 of these mills in use in Jamaica. Chamberlain's circular to the governors of British colonies in 1897, enquiring as to the extent of foreign encroachment on British overseas markets, revealed that only the lighter machinery came from the United States.

The chief engineering firms manufacturing sugar machinery in the United Kingdom tended to concentrate in the Glasgow area although there were three prominent exceptions - Manlove, Alliot and Company of Nottingham, Fawcett, Preston and Company of Liverpool and Fletcher of Derby, the latter supplying the heaviest mills in use as, for example, those of the Usine St. Madeline in Trinidad. Castings for mills supplied by Fletcher of Derby in the mid nineteenth century, were still in use in the mid twentieth century. The chief Glasgow sugar engineering firms were McOnce and Harvey; Mirlees, Watson; Craig and Company; Smith and Company; Blair, Campbell and McLean. These sugar firms did a world wide /

wide business, and the British West Indies market was a comparatively small one for sugar machinery (apart from British Guiana and Trinidad).

Cuba was the chief buyer in the West Indies. For example the mill book sales of Mirlees, Watson, Glasgow, shows - 58 sugar mills sold in this island during the period 1860 - 70, compared to 44 in Demerara and 27 in Jamaica.¹⁰

There was a tendency in Jamaica, whenever depression in the sugar industry was felt more than usual, to sell sugar machinery to Cuban planters. In 1866, it was stated that sugar machinery costing thousands of pounds, was going to Cuba at the price of old metal and some also went to Haiti.¹¹ In 1878 - 9, when beet competition was accelerating abandonment of poorer estates, machinery was again sold to Cubans.¹² A number of estates sold by the Encumbered Estates Court had been stripped of their machinery which was sold to Cuba. English engineers were employed on many Cuban estates to set up and to supervise machinery imported from England. This factor may have been an incentive to purchase disused English sugar machinery from not too-distant Jamaica.

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