

# OFFICIAL REPORTS

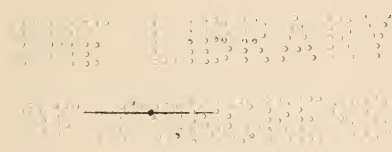
OF THE

## OUT ISLANDS OF THE BAHAMAS:

BY

THOS. CHAPMAN HARVEY, Esq.

*Civil Engineer and Assistant Surveyor General to the Bahamas.*



PUBLISHED BY

T. DARLING, J. M. CONNOR, THOMAS WILLIAMS,

*Committee of the Inhabitants of Nassau.*

1858.

## ERRATA,

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- Page 10, line 20. For "of," read to.  
" 12, " 19. For "brought," read brought.  
" 22, " 6. For "establishment," read Establishment.  
" 42, " 7. For "there," read here.  
" 56, " 18. For "and I am," read that I am.  
" 72, " 23. For "was," read were.  
" 78, " 12. For "answer," read answers.  
" 86, " 24. For "has," read have.  
" 87, " 23. For "87 miles," read 87 acres.  
" 104, " 18. For "those," read these.  
" 119, " 37. For "residency," read Residency.  
" 121, " 15. For "(Commissioners' residences.\*)" read  
(Commissioner's residence.  
" 124, " 4. For "but," read only.

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## BAHAMA ISLANDS.

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TO HIS EXCELLENCY SIR ALEXANDER BANNERMAN, Knight, Governor and Commander-in-Chief in and over the Bahama Islands, and Ordinary of the same, &c. &c. &c.

WE, Inhabitants of Nassau, New Providence, deeming the Reports of the Out Island Civil Engineer of such importance to the Colony, do beg that Your Excellency will sanction our publishing the Official Reports and Documents of that gentleman in pamphlet form, for general circulation.

(Signed)

“

TIMOTHY DARLING,  
WILLIAM MARSHALL,  
And others.

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COLONIAL SECRETARY'S OFFICE, NASSAU, N. P.

7TH APRIL, 1857.

GENTLEMEN :

In reply to your communication received this day, requesting the Governor to sanction your publishing the Official Reports and Documents of the Out Island Civil Engineer, in pamphlet form, for general circulation, I subjoin a copy of a Minute which His Excellency has been pleased to make thereon.

I have the honor to be, gentlemen,  
Your obedient servant,

(Signed)

C. R. NESBITT, Col'l Sec'y.

(MINUTE COPY.)

The Governor can have no objection to the publication of the Documents in question, in the shape of a pamphlet, for general circulation, provided the parties will bear the expense of such publication, as it might establish a bad precedent if it were otherwise done.

(Signed) A. BANNERMAN, Governor.

7th April, 1857.

MESSRS. TIMOTHY DARLING, WM. MARSHALL, MICHAEL E. KNOWLES,  
DANIEL S. FARRINGTON, JAMES M. CONNOR, and others.

# LETTER

ON

## THE PUBLIC WORKS OF INAGUA.

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MATHEW TOWN, INAGUA,  
APRIL 26TH, 1855.

SIR :

I beg to acknowledge the receipt, by the Government schooner, of directions respecting a road at Long Island, and of a letter from the Crown Commissioner of Inagua. Since I sent my letter of April 19th, to announce my arrival at this place, I have, according to His Excellency's instructions, communicated with the Crown Commissioner, Mr. Meadows, the company's agent for the salt ponds, and many of the lessees, and I find that the inhabitants generally feel the necessity that exists for various public works to improve the present state of the Island, and that the principal and more wealthy residents are very anxious to co-operate with the Government in any plans that may facilitate such improvements. I may at present just allude to—The sheds, for the protection of the staple commodity before shipment ; a railroad, to convey the salt from the ponds to the

seacoast ; tanks, to preserve the rain water ; a wall across a part of the rich savanna of the interior, to keep the wild cattle within bounds and afford security for agricultural industry ; and the removal of brush-wood in the town, and between it and the ponds, as a sanitary precautionary measure. I hope before long to have collected, through the kindness of the influential gentlemen of the place, all the information requisite for me to bring these and some few other contemplated improvements before the Governor's notice, in such a manner as may enable His Excellency to judge of their merit and expediency. In the mean time, I have examined the southern canal and advertised for tenders for the repair of the portion that is broken down, and made specifications and drawings for that purpose, in which I have not considered it necessary to depart from the principle of the Surveyor General's plan, being persuaded that had his intentions been faithfully carried into effect, the disappointment which this work has caused would not have resulted. The plan proposed by Mr. Martin, there can be no question, is an excellent one for such works generally ; but, under the circumstances of the colony, it appears to me hardly judicious to bring forward plans, however good in themselves, that inevitably incur an expenditure of so great an amount as to cripple efforts for improvements in other works that, for the general well being, ought to be simultaneously carried out, and in fact without which the benefit of the more finished and perfected work would be impeded. I have likewise examined Craig's Canal, but as I consider

it utterly useless, under existing circumstances, and find that the repairs required would almost equal in expense the making a new canal, I have ventured to depart from the letter of my instructions, and have not taken any steps towards its renovation. The burial ground I have set out, and advertised for tenders for the building of the wall and gate. Owing to the irregular placing of the graves I have been obliged to enclose a larger space by fifty feet in one direction than was contemplated. The "Horse Pond Wells" require clearing out, and the pond should be rough walled in, to protect it from the cattle, until some better receptacle for water shall have been devised ; but there is a decided objection to any considerable outlay on it, in its inconvenient distance from Mathew Town.

I have the honor to be, sir,

Your most obedient, humble servant,

THOMAS C. HARVEY, C. E.

The Honorable C. R. NESBITT,

Colonial Secretary,

&c.      &c.      &c.



R E P O R T  
ON  
INAGUA AND OTHER ISLANDS.

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THE Governor herewith sends to the House of Assembly two Reports, made out by the Out Island Civil Engineer, in the months of July and December, respectively, in the past year.

(Signed) A. BANNERMAN,  
Governor.

GOVERNMENT HOUSE, NASSAU.  
11th February, 1856.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
NASSAU, JULY 18TH, 1855.

SIR :

I have the honor to send you, for the information of His Excellency the Governor, my Report of the present state of the public works on the Out Islands, with such other information as my instructions required me to obtain.

The prosperity of Inagua depending entirely on the great natural advantage that it possesses in its superior Salina (which extends for miles, and from which

industry can, at a comparatively trifling outlay of time and labor, extract a remuneration hardly to be credited by those unacquainted with the value of such a salt pond as exists on this Island), it is self-evident that all public works commenced under the present circumstances, should have for their primary object the development of the resources of this mine of wealth, and the rendering its produce available to the greatest possible extent. Keeping this object in view, I have investigated the present state of the works on the Island, and have endeavored to discover from those most conversant with its affairs, what are the greatest difficulties that the salt proprietors have to contend with, and how far those difficulties may be met, or in any measure overcome, by the adaptation of the public works to their relief.

The most pressing difficulties appear to be—

The want of an easy and expeditious mode of conveyance for the staple commodity from the salt pond of Mathew Town.

The want of shelter for the salt whilst remaining there awaiting shipment, and—

The unsafe and precarious embarkation of the salt on board, often through a heavy surf, to the exposed anchorage where the vessels lie.

I beg to lay before His Excellency a plan for a boat dock, salt houses and railroad, that I believe would completely obviate these difficulties, and enable the whole Salina in due time to be cultivated without any local drawbacks; and I have the great satisfaction, in presenting these suggestions to the consideration of the Governor, of knowing that the

most influential proprietors on the Island perfectly agree in opinion with me, and see nothing of a chimerical character in the undertaking I would propose.

At the north extremity of Mathew Town there exists a small bay, inland of which a dock might be constructed, where vessels drawing eight feet of water could remain in perfect security, and be loaded without the slightest risk, and at very small cost of labor; as the rock is being excavated for the formation of the dock, I would advise, that it be used for the commencement of a breakwater at the southwest point of the bay--a spot where such a work may be hereafter most advantageously completed. On the sides of this dock, I would suggest, that the sheds for the warehousing of salt (so much desired by the proprietors, but objected to, when proposed to be built in front of the town), should be erected, as the more convenient situation, being close to the place of embarkation; and for the transportation of the salt to these warehouses, I would propose a railroad in a direct line from the pond, one end to pass through the salt houses, and the other to branch off around the pond, as the cultivation of the Salina is extended. Connected with this plan I would recommend near the salt houses, that large reservoirs should be made, partly excavated in the rock, to receive the rain water, which might be collected in great quantities from the roofs, which should be built with this object, and furnished with proper gutters for the purpose. If the water from these tanks were sold for a trifling sum, it would contribute essentially to the comfort of the inhabitants of the

town and neighborhood ; and this supply of pure water would not only obviate the distress often felt in dry weather, when the wells now trusted to are almost empty, but would prevent disease, which the sadly impure state of the water they are now compelled to use is so liable to produce.

Of the works already in operation at the salt pond, the dams, built to prevent the inundation of the fresh water, require repair, the recent continued rains having swelled the water to the north of the dams to a height that has injured them, and overflowed the adjacent keys ; and if this is not remedied, great damage may hereafter result to the cultivated pond below. I would recommend, to obviate this danger, that the dams be re-constructed and carried up one foot higher, and continued over the keys. And to protect that portion of the Salina north of the present dams, now commencing to be purchased and brought under cultivation, I would advise that a new dam be made across the Salina, half way between Craig's canal flood gates and the southern dams. Before long another canal to the sea will become necessary, and if it be constructed on the south side of the proposed northern dam, it could be made to fill a large space between the dams, as a reservoir for pickle to supply the pans around, as they become enclosed. This canal, if properly constructed, might also be made to furnish pickle for the whole of the remaining uncultivated Salina.

The road from Rocky Cay to the main road or East Avenue, which is set out but not commenced, is much called for, the ground on each side being un-

der cultivation, and the proprietors without a road for the conveyance of their salt from the deposits. The roads generally require much repair ; the East Avenue particularly should not be allowed to remain in its present unfinished state. A bridge is in course of construction on the East Avenue, for which I have furnished a plan and specification, at the request of the Salt Pond Commissioners, made to me through the Crown Commissioner.

Closely connected with the success of the working of the salt pond, is the subject of labor, the deficiency of which in Inagua obliges the proprietors to go to a great expense to procure laborers from Nassau and other places, who remain in the Island only long enough to complete their agreements, and having no inducement to settle, return to spend their earnings elsewhere—a species of absenteeism very injurious to the interests of the Island. I would humbly suggest, that if small grants of land, one quarter of an acre, or even less, were given to such as felt disposed to settle, it would give them a motive for remaining, and a local interest for the future, and their spare time, when the ponds are not worked, would be most usefully and profitably employed in cultivating the small plots of ground around their cottages.

The inhabitants of Mathew Town are very desirous to have a wharf near the centre of the town for the landing of passengers, &c. and I would recommend the point between Jib Bay and Commissioner Bay as the best suited for the purpose, as it offers great natural facilities. The space leading to this point would be an excellent spot for a market house.

Among the public works peculiarly needed on this Island, I must not omit to mention a lighthouse or light-staff upon the southeast point. Mathew Town is situated on the southwest shore, and the anchorage opposite being exposed, vessels cannot remain there during westerly gales, but must round the point I allude to, to obtain the shelter afforded on the southeast, where a reef extends for some distance, and on which rocks frequently occur ; two vessels were run aground on this spot about a month ago. A light on this point would answer the double purpose of security against this reef, and as a guide for those who might be compelled to shift their anchorage during darkness.

I have received communications from the Crown Commissioner, requesting my attention to the state of the prison, to the deficiency of water, and as to the best site for the erection of a sun-dial. In consequence I have visited and inspected the prison, but find it so unfit in every way for its object, that I can only recommend that another be built of stone, and in a more suitable situation ; the present building is without ventilation, no separate cells for female prisoners, and no security against escape for any ; and being situated in the principal street, it has become quite a public nuisance. The only remedy for the deficiency of water that appears at present to be feasible, is to construct a sufficient number of tanks and reservoirs for the preservation of rain water in a pure state ; and I would recommend that all the public buildings should have such attached to them, to insure a good supply ; and if all the possessors of

houses would follow the example being now set by several of the principal residents, of building tanks to receive the water from the roofs of their dwellings, the present distress would be alleviated. I have before mentioned that the distance of the Horse-pond wells from Mathew Town, and the necessarily impure state of the water found there, render them inadequate and unfit as a supply to be depended on. If they afforded a sufficient quantity of pure water, pipes might be laid down to convey it to Mathew Town, but the expense would be considerable, and reservoirs in the town promise a more efficient dependence ; but the Horse-pond should be cleansed and walled in, that the water may be preserved as pure as possible.

The church requires only the internal fittings up, expected shortly to arrive from New-York, to be made ready for Divine Service, which is at present performed in the schoolhouse ; but the grounds belonging to both require enclosing. Adjacent to these are several reserved lots, which I might perhaps be allowed to remark would be admirably adapted to the purpose, from their situation, should it be determined to build a larger Government House for the residence of the Crown Commissioner, and for a parsonage, should the original intention of appropriating one to that purpose be carried out. The present residence of the Crown Commissioner being close to the shore, might be advantageously converted into a Custom House and residence for the receiver of Customs.

Although, as I have said, the present circumstan-

ces of Inagua require, that the staple commodity of the place should be the paramount and more immediate object in every undertaking, still it is by no means the only resource of this favored Island ; for when it is taken into consideration, that it is situated in a latitude where the most luxuriant vegetation in the world is to be found, and that it possesses large tracts of rich prairie ground, and more hilly country towards the east, where miles of the best possible land for agricultural pursuits is found (and to which the proposed railroad would approach within two miles), and that close at hand there are two such good fertilizers of land as lime and salt—it becomes clearly evident, that it only needs a population who would take advantage of its resources to render it a very garden for productiveness. Amongst the resources of Inagua ought to be mentioned the cattle, horses, pigs and goats, that at present roam wild and little sought after, over the savanna that occupies the centre of the Island, and which might be with little trouble caught for food or labor. I have visited the savanna, and saw about twenty head of cattle which had been turned out there to graze, and they were in excellent condition ; and I have been assured that better beef can no where be met with than that produced wild in this country. I believe, judging from what I observed, there could be no exaggeration in saying that fifty thousand head of cattle might be pastured on the grass covering this extensive tract of land, and if leased, it would find ready tenants and yield a good revenue to Government.

There are also some valuable woods found on the



Island, some of which has been sold for forty dollars a ton.

I have visited Man-of-War Bay, and walked from thence to the savanna, and find, that if a barrier to prevent the incursions of the wild cattle were erected at this part, it might be carried in a straight line from Man-of-War Bay to Lake Rosa, a distance of about three miles, and that it would enclose about three miles by four miles in extent of prairie ground, covered at present with grass a foot high; this would afford ample pasturage for at least five thousand head of cattle, besides sheep, &c. On the savanna there are many ridges and clumps of trees, and making use of these, a worm fence might easily be constructed, or if a stone wall were more desirable, there are many spots in the direct route, covered with stone which might be used for the purpose. The advantage of this land so protected, to the well-being of Inagua is incalculable, for cattle might be turned out there in perfect safety; and I noticed several large natural reservoirs in the rock full of rain water, which would ensure a supply for the cattle. At present food is very dear, and often scarce, but with such pasturage, as this wall would secure, there need never be any scarcity of animal food; and perhaps it may be worth the attention of Government, whether a settlement located in this part of the Island, would not greatly tend to the developing of the resources of Inagua; the settlers to look after the cattle and cultivate the ground, and living themselves independent of the salt ponds, provide a regular supply for the market of Mathew Town, of beef, fruit, vegetables, corn, &c.

Man-of-War Bay, as its name denotes, is capable of floating large ships, the water being deep enough, in some parts close to the rocky shore, for vessels of a large size to come up. It may be premature even to hint at such an idea, but it would be so perfectly feasible to construct a large shipping dock within this bay for the protection and repair of steamers and other vessels, that I cannot refrain from just mentioning the possibility of Inagua possessing, at some future day, as its prosperity increases, a public work of such importance to the colony, and one that would so convincingly prove the value of its geographical position.

#### FORTUNE ISLAND, OR LONG CAY.

The public works on this Island, requiring more immediate attention, are:—The prison, the site for which has been chosen at such an inconvenient distance from Alberts Town, that I have not advertised for tenders, in the hope that, if possible, it may be changed to a situation of greater security. The spot at present fixed on is at some distance beyond the side of the pond opposite to the town, and they say it will be difficult to convey prisoners to such a distance, and insecure for the jailor on account of the loneliness of the place. The more desirable situation would be near the present lock-up house, between the pond and the sea.

*The Salt Ponds.*—At Alberts Town pond the canal requires repair, and the walls of the new portion to be raised two feet higher, with a good abutment at the outlet to protect the sluice gate, and the walls to

be well cemented on the inside and outside. The public road across the pond requires to be raised two feet higher, to prevent its being overflowed as it now is in wet weather, and the several roads crossing and leading to the pans should be supplied with trunks to conduct the rain water to the sea.

*Allen's Pond.*—There is a tolerably good inlet to this pond, but it requires a better outlet properly constructed and protected to run off the rain water quickly, and a dam is needed across the pond to protect the cultivated portion.

Conch divers pond canal requires the flood gate to be raised and a breastwork formed to protect it. Windsor pond is not yet under cultivation. Some of the pans in the different ponds of this island are in excellent order.

Divine service is held in the schoolhouse, which is in want of a new roof. The foundation of a church much larger than required was commenced and abandoned some time ago. The burial ground is unenclosed.

A building for the Crown Commissioner's Office is much wanted.

#### LONG ISLAND.

The works on this Island requiring attention and repair are—

*The Road from Chancery Pond.*—Instead of repairing this road, I would advise that a canal be cut to the sea from the pond, which would serve the double purpose of letting out the rain water and conveying the salt at a cheaper rate. The road is

very steep and rough, and would cost, to be properly repaired, as much as the making of a new road, and the annual expense of keeping it up would be considerable.

This Island has to contend with an unusual difficulty from its formation, which is much more hilly than the generality of salt islands; and these high districts cause an accumulation of water, which, unless the outlet to the sea be large enough to admit of its speedy removal, overflows the pans, and it has frequently happened that the produce of a season has been thus destroyed in a few hours. This, I apprehend, would be impossible with such a canal as I speak of. All the pans on this Island are in such very good order, that should the season prove favorable, much salt must be made.

The canal at Harbor Pond requires to be cut deeper and wider at the mouth, and a metal grating to be placed across the entrance at this spot, to prevent, as far as possible, injury accruing to the ponds from the fish.

The lessees are willing to co-operate with the Government in any plans for the improvement of these ponds.

The prison requires a new roof and other repairs, the expense of which will exceed the grant made by the Legislature.

A police office is much wanted.

There is a good church on the Island. The allotted burial ground requires enclosing. At present, graves are to be seen scattered about in all parts of the Island.

Labor is much wanted on this Island, and I would suggest that if a portion of the reserved ground in the vicinity of these ponds were given to such persons as would settle there, it would tend to the removal of this difficulty.

#### RUM CAY.

The canals on this Island require cleaning out, and in many places to be deepened. The sides should be walled up to prevent the earth from being washed into the canals, and the earth should be thrown back at least twenty feet from the edges. The inlet to the pond requires to be widened and the retaining walls repaired, and in some places rebuilt, the foundations not having been built upon the rock, and being otherwise defective.

A few movable barrow runs or small movable bridges are required to enable the proprietors to wheel their salt to the temporary deposits across the canal. Two of the small bridges need repair.

During the rains the pans are often overflowed, and many heaps of salt swept away. To remedy this evil, I would recommend that a dam be made on the outside of the cultivated pans in the main reservoir, with two sluice gates in it at least four feet high and twenty feet broad, extending the whole length of the pond now cultivated. Much loss has been sustained for want of this dam.

The main salt pond road requires repair.

The ground allotted for the deposit of salt should be re-arranged according to the number of acres of salt pond held by each lessee; at present it is very

irregularly laid out, and many have not room enough for the deposit of their salt, and some have no place at all.

The jail needs some slight repair.

There is no church or schoolhouse belonging to the establishment on this Island. Divine service is held in the police office, over the jail.

I may mention that the land in this Island is excellent, and cultivation might be much extended ; at present, corn, fruit, vegetables, and cattle are raised to some extent.

#### NORMAN'S POND CAY, EXUMA.

The salt pond on this Island is in a most excellent condition throughout, but requiring a good outlet on the east side to prevent the pans from being overflowed ; the present canal on the west side is not sufficient.

In front of this small Island there is an excellent harbor of considerable extent, protected by a line of cays, the anchorage within which is very good. There are two channels by which ships may enter this harbor ; the deepest is that between the centre cay, named Adderley Cay, which directly faces Norman's Pond Cay, and the three rocks called the Three Sisters. To mark this spot, I would recommend that a beacon should be erected upon Adderley Cay, from whence it would be visible for a sufficient distance on the outside of these cays. Some time ago, a large vessel, that was afterwards wrecked, was seen driving past this channel in a heavy squall ; had this opening to safe anchorage been known, this vessel might easily have put in.

## ST. SALVADOR.

The jail at Arthur's Town is newly built, and of course in good repair, but the arrangement in placing a window between the cells, thereby enabling the prisoners to see and converse with each other, appears to me to be so objectionable, that I should recommend its being filled up. The jail at the Bight requires repair, for which a sum of money has been voted by the Legislature.

The soil of this Island is excellent, and produces fine pine apples.

The salt ponds are uncultivated.

## NEW PORTSMOUTH (ROCK SOUND.)

The wharf at this place, for which a grant has been made by the Legislature, is much wanted.

The road between Tarpum Bay and Rock Sound is almost entirely overgrown by the bush, and the sum voted by the Legislature for this work is barely sufficient for properly clearing the bush for a road twelve feet wide.

The burial ground is unenclosed, and the graves are very much exposed—some barely covered.

Having fully examined into the various modes adopted by the salt proprietors on the different islands for the working of the salt ponds, it appears evident to me that the system of working by shares is the one that, under the peculiar circumstances of these islands, affords the most satisfactory results. Exuma is the only Island amongst those that I have visited, that has a sufficient supply of laborers either for the salt works or for agriculture, and consequently

some mode of proceeding that will overcome this difficulty, must be devised before the islands can attain to anything approaching the remunerating productiveness of which they are capable ; and wherever the share system is fairly carried out, I have found that the proprietors are better off, and the laborers more happy and contented ; the interest that they themselves have in the success of the work, counteracts their roving and idle propensities, and thus secures to their employer at all seasons, the full amount of needed labor.

Another topic I am induced to allude to before I close my report, which I hope may not be considered irrelevant to its intention, viz : the great advantages that would follow from the establishment of a regular and speedy interinsular communication in the Bahamas. At present (and I can speak from experience), it is often uncertain, difficult, and even dangerous to go from one island to another ; but with a moderate sized steamer, most of these dangers, and all the uncertainty and difficulty would be avoided. The tides and currents run with fearful velocity through many of the passages and channels, amongst the rocks and islands ; a sailing vessel is often unable to resist their force, whereas steam would give a power of resistance that would make it comparatively easy to round the difficult points and avoid the dangerous rocks. The regularity and speed of steam would connect the islands so much more closely, that the produce of one might find a regular and certain market at others, and doubtless if such a vessel were fitted up for passengers, the intercourse would become



frequent and remunerative. The vessel that I should recommend for the purpose, would be a small iron screw steamer, drawing eight feet of water, fitted up for sailing, and constructed to burn either wood or coal. A draught of more than eight feet would not be advisable, on account of the shallowness of many parts of the route that it would be desirable for it to take. There is abundance of wood on the islands, and it would of course economise to use this for fuel, at the same time, that as it could be supplied at the different islands, the carrying the great weight of a large quantity of fuel would be avoided. A steamer of this size might also keep up a regular communication with some near port in the United States, and neither the original cost, nor the expense of keeping it up, would be very great.

Appended to this report will be found the estimates that I have drawn up of the proposed works, and I have no doubt they will approach very nearly, if not exactly, to the necessary sums ; but as I have not as yet had much experience of the local difficulties of the Bahamas, I beg to be understood as giving an approximate rather than a positive valuation. Every country has its peculiar advantages and drawbacks for and against the execution of public works, and experience alone can authorize an engineer in giving a positive estimate.

I have the honor to be, sir,

Your most obedient, humble servant,

THOMAS C. HARVEY, C. E.

## REPORT ON ATHOL ISLAND.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
NASSAU, N. P. OCTOBER 5, 1855.

SIR :

Agreeably to your Excellency's instructions, that I should examine Athol Island, with a view to its being converted into a quarantine station (for which purpose your Excellency has lately purchased it), and report on all connected therewith, I have proved the survey, and examined the situation and taken a few soundings, and I beg to state that it appears to be a peculiarly desirable locality for such a purpose as your Excellency has in contemplation. The Island being dry, free from swamps (for the two or three spots that from their low situation appear likely to be swampy at some seasons of the year might be easily drained), and rising in one part to a height of 30 feet above the level of the sea, would naturally lead to the conclusion that it must be a healthy situation, which opinion is confirmed by the testimony of those who have inhabited the Island for the last twelve years, and who consider it to be remarkably healthy. The soil is well adapted for raising fruit trees, of which there at present number about

300 of different kinds—oranges, pears, sugar apples, and in fact a specimen of almost every tropical fruit, as well as various vegetables. It has also the advantage of wells of excellent water.

The spot that I would recommend as the site for the proposed hospital, is nearly the highest point of land on the Island, about half a mile from the west end. Not very distant from this point is a well of excellent water, and another might be dug just at the foot of the hill.

There is a projecting rock at the southeastern side of the Island which would be admirably adapted for a wharf and coaling station; in a direct line in front of this rock the soundings were 9, 13, 16 feet, and along the southern side towards the west, they gave 12, 12, 11 and 10 feet, whilst from the point I allude to as good for a wharf, towards Cochrane's Anchorage, distant three and a half miles to the east south-east, the soundings were, 16, 14, 18, 17, 22 feet, &c. There is good anchorage within two miles of this east end of the Island. Her Majesty's ship *Barham*, drawing 20 feet 4 inches, anchored here in 1829, and rode out a very severe southwest gale without receiving any injury.

A large accumulation of sand attracted my attention opposite the Narrows, between the end of Hog Island and Athol Island, and induced me to investigate the various currents that run with considerable force through the passages amongst these islands and

the rocks and cays around, and I discovered, what I suspected to be the fact, that during the northerly gales these conflicting currents cause this deposit of sand to the south of these narrows, through which by far the greatest quantity of sand is driven, and which eventually must work down and injure the valuable harbor of Nassau. Could the various currents which now cause eddies and sand bores be brought to run through one channel, its volume of water, unimpeded by contrary currents, would, by its own force, deepen the present channel across this deposit of sand, and it appears to me that this object might be attained without difficulty by throwing a barrier across from Hog Island to Athol Island, for which purpose there is abundance of material close at hand; and this once done, the sand, instead of driving through the Narrows and accumulating on the bar of sand to the south, would be arrested on the northern side, and soon form a beach that would effectually and permanently fill up the passage, and the whole distance from the west point of Hog Island to the east point of Athol Island would be protected, and might be preserved free from all obstructions by the constant use of a dredging machine, which must before long be employed for the widening, &c. of the channels in the harbor.

Deepening the bar at the western entrance, filling up the Narrows at the east end, and the constant use of a good dredging machine, appears to me all that is requisite to make a most excellent harbor for Nassau.

Should these improvements be carried into effect, a lighthouse will be required at the eastern entrance

of the harbor, and I have marked an excellent site for one on the plan accompanying this report.

I have the honor to be, sir, your Excellency's  
Very obedient, humble servant,

THOMAS C. HARVEY, C. E.

His Excellency

SIR ALEXANDER BANNERMAN,  
Governor of the Bahamas,  
&c. &c.

I have also to state that there is a good channel from Salt Cay Anchorage, which lies  $\frac{3}{4}$  of a mile N. W. of the western end of Athol Island to the anchorage of Hanover Sound,  $\frac{1}{2}$  a mile to the N. E. of the centre of Athol Island, and that from thence the channel to Cochrane's Anchorage passes the eastern extremity of Athol Island. T. C. H.

## REPORT ON FIRE ENGINES.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
NASSAU, N. P. OCTOBER 29, 1855.

SIR :

Having been appointed by his Excellency, the Governor in Council, one of a committee to inspect the fire engines, and to report on their present state of efficiency or capability of improvement, I beg to state for the information of his Excellency, that I have examined No. 1 and No. 2 engines, and find that they are good engines of the kind, but quite inefficient in their present condition, for reasons which I proceed to explain. The above engines have a stroke of 8 inches, and a cylinder of 7 inches in diameter, and the power of this sized engine ought to give a discharge of 88 imperial gallons of water per minute, with 40 feet of hose of the diameter of the discharge pipe, and the proper complement of men to work it ; but the hose in use here is too small, and connected by nuts of different sizes, only one length to each engine having a nut the size of the discharge pipe, and consequently, should fire or any accident injure this first length of hose, the engine becomes useless for the time being ; whereas, if the nuts were all of one

size, the injured portion might be quickly removed, and the remaining lengths fastened to the discharge pipe by the second nut. The friction for each additional 40 feet length of hose increases the amount of labor  $2\frac{1}{2}$  per cent, and it is therefore highly necessary, in order that the utmost power of which a fire engine is capable be obtained, so to proportion the size and length of the hose and the position of the engine at a fire, that the least possible amount of friction may be produced; if not, its power and of course its usefulness, will be materially diminished on this account. Also, the hose ought to be exactly the size of the discharge pipe of the engine, the friction increasing as the size of the hose decreases; again, the height of the jet of water thrown from an engine depending upon the degree of condensation of air in the air chamber, it is imperative to the obtaining its utmost power, that an engine be fully manned. The complement of men for the engines in question, is 26 men to each. This number would probably be able to keep up the full discharge for about three hours, when they would require to be reinforced; but the efficacy of a good jet of water must entirely depend on its being directed to the exact spot required, and the power of throwing even a jet of 50 feet may be perfectly useless, if wasted through a short hose. For example, a jet of 50 feet of water, if it passed through a hose of 50 feet, conveyed by ladders to the top of a building adjoining one on fire, would from the pressure at that height throw an additional 20 or 25 feet, which being directed on the fire, might prove the saving of a building. This also shows the importance of all

engines being provided with good ladders. Again, an engine may become inefficient, or even entirely useless, from its not being air-tight, and unless the leathers between the plates &c. are preserved, in good condition, it is impossible for any engine to continue air-tight.

I would recommend for the repair of No. 1 and No. 2 fire engines, that all the leathers be renewed and well coated with a mixture of red and white lead, that new guide rods of the pistons be provided ; in their present state (one being broken and the other bent), they wear the cylinders unevenly, increase the labor, and cause them to leak ; that both engines be painted internally ; also, that the hubs of the wheels be smoothed and fitted with washers. The man ropes require to be differently placed, several accidents having occurred from their present position. I would recommend that they be brought through a thimble, in the centre of the tongue, between the two men guiding, and fastened to the axle-tree of the engine, and the handle of the tongue bent and made six inches longer, that the men guiding may have more power over the engine in turning. I beg further to recommend that each engine be provided with two lanterns, having reflectors of the kind and size used by the conductors of the railway trains in England ; also, with a light grapnel, chain and rope (one half the size in the crook, and much lighter than the large ones now in use) ; also, with 4 axes, 2 hose wrenches, and a supply of 6 lever handles, and a handcart or tender upon 2 wheels to carry the hose, buckets, &c. the engines at present being much en-



cumbered and impeded by carrying all the requisite implements to the scene of action. A fire bell near the police station, to mark in which direction a fire is seen, would be of great use, there being always some one there who could be on the alert to attend to it.

I have the honor to be, sir,

Your most obedient, humble servant,

THOMAS C. HARVEY, C. E.

The Honorable C. R. NESBITT,

Colonial Secretary.

&c. &c. &c.

## REPORT ON ANDROS ISLAND.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
NASSAU, N. P. NOVEMBER 1, 1855.

SIR :

Having lately returned from Andros Island, which I visited in order to make arrangements for the erection of a new prison, for which purpose a sum of money has been voted by the Legislature, I have to report for the information of his Excellency the Governor, that I have decided on a spot that appears to be the most eligible situation for the purpose, at Coakley's Town, Fresh Creek, and that tenders, &c. will soon be issued for the work.

Whilst at the Island, I visited a small settlement at Calabash Bay, and Nicoll's Town, on the east side to the north of the Island. The chief export at present is wood. Extensive tracts of pine trees exist in many parts, and ship timber, &c. is found in the interior ; but the want of roads renders it very difficult for it to be conveyed to the coast. Most of it is obliged to be carried on men's heads a distance of six miles, by a pathway which is cut for the season ; in a few places the creeks afford an easier means of conveyance. The quality of the tar extracted from

the pine trees of this Island is excellent, and found to be superior to that imported, and as the refuse of the trees would answer for the manufacture, it might become an article of export as well as the trunks of the trees, were there facilities of roads, &c. The charcoal made in the process of distillation per descensum, is very good, and might meet with a ready sale. The soil in many places has been much injured by the mode adopted for clearing the land, viz. : burning without first felling and removing the trees ; this of course, in rocky localities, has destroyed the soil, and many persons have left the neighborhood of Fresh Creek for the southern part of the Island, where they say the land is excellent. Near Nicoll's Town the soil is good, and fruit, corn, &c. raised ; also, a few head of cattle, which thrive very well. Myrtle wax is made on this Island, and sold for seven pence per pound ; this might also be made an article of export. The present mode on Andros Island of making this fragrant wax is very primitive, it being skimmed from the pot where the berries are boiled, by a piece of cocoa-nut shell, and strained through a sea fan encrusted with coral.

Fresh Creek runs many miles inland, and is navigable the first mile for vessels drawing nine feet of water ; the entrance is good, and affords safe anchorage.

There are several fresh water ponds in the interior, and many small streams of good water. In Conch Bay, near Nicoll's Town, there are two large deep submarine caverns, about ten yards from the shore ; immediately above these caverns the water is

perfectly smooth, and so clear that the interior of them can be plainly discerned to a great depth, but around the water is continually agitated. This apparent boiling up must be caused by some rising of the water through these caverns, either from springs at the bottom, or a stream from the fresh water ponds, which are above the level of the sea, through some subterranean passage. Not having any appliances to test the water at the bottom of the caverns, I cannot say with certainty whether it is fresh or not, but the water at the surface was not very salt. The temperature of the water was about the same as that some distance from the shore.

A few oranges and other fruits are exported, and the Island appears capable of raising abundantly all the tropical fruits and vegetables, and the sea and creeks abound with various fish, lobsters, crawfish, conchs and turtle.

At Coakley's Town there is a church, but no minister; a good government school at Coakley's Town, and another at Nicoll's Town, and a Baptist meeting at each.

No enclosed burial ground.

I have the honor to be, sir,

Your most obedient, humble servant,

THOMAS C. HARVEY, C. E.

The Honorable C. R. NESBITT,  
Colonial Secretary.

&c. &c. &c.

## REPORT ON HARBOR ISLAND.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
DECEMBER 13, 1855.

SIR :

I returned on Saturday last from visiting Harbor Island, a part of the northern end of Eleuthera, Spanish Wells, and the Bluff, and I beg to report for the information of His Excellency the Governor, the result of my examination of the public works, &c.

The proposed plan for the new prison at Harbor Island is not suitable for so large a district, and I have therefore delayed the commencement of the building until the contractor shall have received further orders. The district of Harbor Island, for which this prison is intended, contains 3200 inhabitants, and the average number of prisoners per month, for the last five months, has been nine (all but one being from Harbor Island); the proposed jail was to contain only two cells, each of the size of 9 feet 9 by 12 feet, so that as many as eight men, and often more, might have to be confined in the small space of 117 square feet.

The grant from the Legislature not being sufficient to make the required enlargement, and to repair St.

John's Church, I have been also obliged to delay this work ; whilst there I proposed a plan that I believe will considerably increase the accommodation in the church, and obviate the necessity of petitioning the Legislature for a further grant of money ; and when I left it was the intention of the rector to call a vestry to take the plan into consideration.

The burial ground is unenclosed, and the graves can scarcely be discovered from the confused and irregular mode of placing them ; more land will be continually required, if some better plan is not adopted. I suggested to the rector, that it would be advisable to call a town meeting to decide on some regular plan of proceeding for the future, to economise the space, and I have promised to forward them a plan for the proper arrangement of the graves.

The harbor is shallow but well protected, lying between the Island and Eleuthera ; were a good channel kept open across the bar, which extends from Dunmore Town to Eleuthera, large vessels might lie in perfect safety near the Eleutheran shore, opposite Dunmore.

Several vessels are in course of construction, one nearly completed of a hundred tons burden.

The town might be greatly improved by the building of a wall about 200 feet from the shore, in front of the town, across that part of the extensive harbor, where the sea has encroached in some places as much as ten feet on the front street ; the enclosed portion to be converted into a boat dock, with wharves and slips.

The inhabitants of Harbor Island cultivate small

patches of land on the opposite shore of Eleuthera, and roads are much needed on the latter Island to enable them to prosecute with success their agricultural pursuits.

One is much wanted from the landing place from Harbor Island to Pitman's Cove, the pathway at present used being very circuitous, rugged, and in rough weather impassable at the Narrows, over which a bridge ought to be built—the sea in tempestuous weather breaking violently through this gorge, and cutting the cove off from communication with Harbor Island.

A bridge across the Narrows would require to be 90 feet long, and to be built at an elevation of 30 feet above high water; but it could be used at all seasons, and would make the cove more habitable; at present, not even in cases of severe sickness, can they procure advice or help during bad weather. The expense of this road would be moderate.

A road has lately been opened from Bridget Point, across Eleuthera, towards Spanish Wells; this road should be extended over the hill to the harbor of Harbor Island, that in rough weather, when rounding Current Point is dangerous, there might be the power of signaling to Dunmore for boats to cross the harbor; this road would enable the inhabitants of Dunmore and Spanish Wells to attend to their plantations on both sides, and to ship their produce in all weathers. Even since the opening of the present road, a few houses have been built, and plantations made, and they are rapidly extending; corn, arrow-root, cassava, potatoes, yams, beans, peas, &c. are

already growing luxuriantly nearly the whole extent of the road.

The planting of cocoa-nut trees has latterly engaged the attention of the people of Harbor Island, but not to anything like the extent it might be profitably carried.

Spanish Wells is a small island with a well protected harbor for vessels drawing about six feet of water. The inhabitants number 350, almost all white; they depend on their plantations in Eleuthera, on wrecking, and fishing, for support; they also raise a number of pigs, and make fishing twine and straw hats from the palmetto leaf. They have ten fishing smacks and two wrecking schooners belonging to them.

There is a small church built of wood, and a Wesleyan chapel, and there is a good public school. The burial ground, from being unenclosed is in a sad state, the graves washed out by the sea, and rooted up by the pigs that run about the town, till bones can be seen on the beach and about the burial places on the ridge.

The Bluff is a headland of Eleuthera—no harbor. The inhabitants, 300 in number, are all black, with the exception of an old white resident and his family, a Mr. Kelly, who owns lands several miles in extent. The settlement is in a valley, at a short distance from the point of land called the Bluff, and the houses so entirely surrounded by fruit trees, that they are hardly visible.

There is no wrecking from this place, and the people devote themselves to agriculture. They are



extending cultivation, and planting rapidly ; almost all the tropical fruits may even now be seen there, and many vegetables; 500,000 oranges, 1000 bunches of bananas and plantains, besides other fruits, and arrow-root, cassava, &c. have been shipped this year, and many trees werestill full of fruit, which was sold, but awaiting shipment.

A road is much wanted from this settlement to the one from Harbor Island to the Cove ; at present, both are mere winding paths ; but if one were made to join the proposed road to the Cove, it would pass through much good land.

Well water here is particularly good, pure, clear, and sparkling, in consequence of the rock being so firm and hard ; there is no better anywhere in the Bahamas. The inhabitants of this settlement are industrious and orderly. About sixty able bodied men turned out, and in two days cleared all the roads and streets.

A large swamp close to the settlement extends to the current, and is found to be unhealthy, not being salt enough to prevent malaria ; I had not time to examine thoroughly as to the feasibility of draining it, or admitting the sea water.

Small boats are built here ; four were on the stocks when I visited the place.

There is a small church and a Wesleyan chapel ;

no enclosed burial ground, the graves very irregularly placed, and some hardly to be seen or recognized.

Royal Island is about  $3\frac{1}{2}$  miles long and very narrow ; the harbor is excellent, about 1 mile long, and a  $\frac{1}{4}$  of a mile wide ; vessels drawing 12 feet of water can enter at any time and lie there in perfect safety ; it is much frequented by vessels from Nassau and Harbor Island. The "Skip Jack," surveying vessel, and other vessels of the surveying squadron, have anchored inside.

The Island has some pasture land on it, and a few pines, and corn, peas, potatoes, and yams are raised. There are a few head of cattle, and pigs and poultry. It is occasionally resorted to by invalids from Nassau and other places.

I omitted to mention in my report on Andros Island, the necessity of a road from the north of that Island to Nicoll's Town, and from thence to Fresh Creek ; the great importance of this road may be understood, when it is considered, that vessels might be built at the latter place, at a very moderate price, if there were means of conveyance for the abundance of wood suitable to the purpose, that is found at a short distance inland ; and at the same time, that it would open a rich and valuable tract of land, that would be speedily cultivated.

I am anxious to bring forward the imperative neces-

sity that exists for roads throughout the Out Islands, to render the endeavors of the inhabitants successful, who now painfully feel the difficulties that surround them in every effort they make towards agriculture, which efforts, if encouraged, would soon develop the many and great resources of these favored islands.

I have the honor to be, sir,

Your most obedient, humble servant,

THOMAS C. HARVEY, C. E.

The Honorable C. R. NESBITT, Esq.

Colonial Secretary,

&c.      &c.      &c.

## LETTER ON SALT POND LABOR.

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The Governor herewith lays before the House of Assembly a communication from the Out Island Civil Engineer, on the subject of a deficiency of labor, particularly as connected with the salt ponds, and offering some suggestions on this important question.

(Signed)                      A. BANNERMAN,  
Governor.

GOVERNMENT HOUSE, NASSAU,  
26th March, 1857.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
FEBRUARY 18, 1856.

SIR :

Knowing the deep interest that your Excellency takes in the prosperity of the Out Islands of this colony, and the well being of their inhabitants, and that you consider the progressive improvement of the various salt ponds and Salinas to be of vital importance to this prosperity, I venture to trouble you with this letter, to lay before your Excellency a few remarks on the subject of salt pond labor,

on which I imagine the question of remunerative or non-remunerative salt works in these islands to hinge.

The improvements required in the works themselves, and in the modes of transfer for the salt, though very important, are still subordinate to the first imperative necessity of providing a sufficient supply of labor, for without this, increased cultivation and improved crops would only add to the difficulties and embarrassments of the proprietor, instead of advancing his prosperity, and improving the revenue of the colony. Since my arrival in the Bahamas, I have visited most of the more important salt islands, and during the examination that I have made of the different salt works, I have been everywhere impressed with the importance and value of the salt resources of these islands, and at the same time equally impressed with the imperfect development of these resources, owing to local disadvantages, and chief among these disadvantages I would rank the want of efficient labor, the want of a laboring population on each Island, attached and interested in the well being of the Island on which they dwell, by the strong ties of home; for your Excellency will, I think, agree with me, that a class of wandering laborers, attracted merely by the hope of gaining money, and easily tempted by the same hope to wander further, must retard rather than advance the prosperity of a thinly settled country; strongly feeling that this is the great drawback to the improvement of the Out Islands of the colony, I would humbly suggest for your Excellency's consideration,

a plan that appears to me likely to meet, and in a great measure to overcome this difficulty. At present, there are no inducements to lead laboring people to take their families to places where it is hardly possible for them to obtain lodging, and where food is very expensive, and consequently the system adopted is for laborers from Nassau or elsewhere, to bind themselves to work for a few months in the year, at the ponds of the different salt islands, and then to return to their homes with the earnings, that for the good of the islands should be spent where they are gained ; and of course, under such circumstances, the wages are often exorbitantly high, and become a ruinous tax upon the salt proprietors, whilst at the same time, this influx of roving strangers, has a demoralizing effect on the more stationary population. But my conviction is, that many persons would thankfully settle on the Out Islands, if a small portion of land were given to them, on which they could build a home for their families, with the certainty of employment, and the comfort of independence, which would both be theirs if these lots were secured to them by the Government. I would suggest that a certain number of acres should be appropriated for the laborers in the salt works, in proportion to the size of the salt ponds on each Island ; say for Inagua, ✓ 100 acres, situated between Mathew Town and the salt pond, on the main road, to commence one quarter of a mile east of the town ; for Long Cay, sixty ✓ acres on or near the Government reserved ground round the ponds ; for Long Island, forty acres on or near the Government reserved ground round the

ponds ; for Little Exuma, fifty acres on or near the Government reserved ground round the pond ; for Rum Cay, 100 acres of the reserved Government ground round the pond, and so on for all the cultivated ponds ; for the as yet uncultivated Salinas, a proportionate number of acres in their vicinity to be reserved for future appropriation, the whole to be divided into equal portions ; a quarter of an acre to each man would be perhaps the most judicious size, binding the settler to build and live on it for three, and not to sell it under twelve years.

The proposed allotments for the laborers on the ponds, will not interfere in the slightest degree with any previously appropriated Government land, or with individual property. The enclosed sketches will show your Excellency the situation of the above named lands, plans of which I am prepared to give in extenso whenever they may be required. As the success of this plan developed itself, and the many advantages possessed by these islands became known, would it not follow in these days of emigration that many would be attracted by the hitherto little appreciated resources of the Bahamas, and induced to choose it as the land of their adoption?

I have the honor to be, sir, your Excellency's

Very obedient, humble servant,

(Signed) THOMAS C. HARVEY, C. E.

His Excellency

SIR ALEXANDER BANNERMAN,

Governor of the Bahamas,

&c.

&c.

&c.

On motion of Mr. T. W. H. Dillet, (April 14th, 1857), Resolved, that a message be sent to his Excellency the Governor, respectfully requesting His Excellency to forward to Her Majesty's Government the views of the Out Island Civil Engineer, on the subject of granting lands in the vicinity of the salt ponds, to promote the permanent settlement of persons on the Out Islands, and to desire the concurrence of Her Majesty's Government thereto.

May it please your Excellency, the House of Assembly respectfully request that your Excellency will forward to Her Majesty's Government the views of the Out Island Civil Engineer on the subject of granting lands in the vicinity of the salt ponds, to promote the permanent settlement of persons on the Out Islands, as expressed in the report of that officer laid by your Excellency before the House, and to request the concurrence of Her Majesty's Government thereto.



R E P O R T  
ON  
ABACO AND OTHER ISLANDS.

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The following message from His Excellency the Governor, was delivered by the Secretary of the Colony to the House of Assembly, March 31st, 1856.

Although the termination of the session is at hand, the Governor thinks it may be advantageous that the accompanying report of the Out Island Civil Engineer should be laid before the Assembly, with the view of its being printed for publicity in the Bahamas ; and the Governor will thus have the opportunity of forwarding to the Secretary of State the whole of the reports presented by the Civil Engineer, in order that they may have wider circulation in the United Kingdom.

A. BANNERMAN,  
Governor.

GOVERNMENT HOUSE, BAHAMAS, NASSAU,  
March 31st, 1856.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
MARCH 29, 1856.

SIR :

Having lately returned from visiting Abaco, several of the adjacent cays, and the Grand Bahama, I

beg to report for the information of His Excellency the Governor, that I have examined the public works on these islands, and the localities suitable for others, and find that for the new lock-up at Cherokee Settlement, there is a good site on Crown Land, in an elevated and healthy situation, not far from the public school ; and at Hope Town, Great Harbor, Little Guana Cay, where a lock-up is required, an eligible site has been left for the purpose near the harbor.

At New Plymouth, Green Turtle Cay, I have entered into a contract for raising and repairing the present prison, and for building a wall round the grounds. At the settlement at Eight Mile Rock, Grand Bahama, the lock-up consists of one cell. I would recommend that an additional building with two cells should be erected near, and that the present one cell be reserved for solitary confinement.

Large quantities of valuable timber grow on Abaco ; forests of pitch pine run nearly the whole extent of the Island, and dogwood, madeira, horseflesh, buttonwood, ironwood (black and white), and cedar are found in abundance. The maho tree is also growing in many parts of Abaco, and on some of the neighboring cays ; it grows in swampy places, and the inner bark makes an excellent and strong rope, that is found to last a long time, even under water. There are several good harbors for small vessels on different parts of the coast, and it is tolerably well off for fresh water, there being many ponds, and a number of large and very deep holes in the rock, which form good natural reservoirs, full of excellent water. Among the pine forests there are

patches of most excellent land, and extensive tracts of flat land in various parts of the Island, that might be made available for pasture. Large quantities of fruit are grown and exported annually.

The Island is so overrun by wild hogs, that it is very difficult to protect the plantations and gardens from their depredations.

At Cherokee Settlement the inhabitants are nearly all white, and live almost entirely by fishing, and the produce of their plantations. Some vessels are built here ; three or four were on the stocks when I left ; one, a schooner of fifty foot keel. There are belonging to this place six fishing smacks and sponging vessels. The sound and harbor are well protected, and vessels drawing six feet of water may ride in safety. They annually ship from this settlement about 600 head of turtle.

The houses are all built of wood, and have a general look of neatness and cleanliness. The water, obtained from wells sunk in the sand, is tolerably good.

The burial ground is unenclosed.

Formerly, a clergyman used to visit this settlement, and the church service was read during his absence by a person appointed by him ; the congregation was about twenty.

There is a large Wesleyan chapel, and a good Government school. A police office is much wanted.

At Spencer's Bight there are many fine plantations of pineapples, oranges, &c. ; about 17,000 oranges were shipped from this place last year, and a good supply of pineapples, &c.

At Marsh Harbor, another agricultural district,

there are about 120 inhabitants, chiefly white. Oranges are here extensively cultivated; 48,000 were shipped from one plantation last year, and sold for ten dollars per 1000. Guano has been tried for manuring the orange orchards, and been found to answer admirably. Last year 333,000 oranges were shipped from this place. There are wells of excellent water in the rock.

Throughout Abaco the planting of orange trees is very much on the increase, and the raising of pineapples is entered into with much spirit. It is a commonly received opinion that this fruit can only be profitably raised on a peculiar kind of soil, i. e. a red clayey loam, to which they give the name of pineapple land, but experience has proved at Abaco that this is one of the many mistaken notions, that for want of investigation and trial, so often gain ground and check advancement. They have raised the Spanish pines, the Matanzas, and the Baraco, in all kinds of soil, and even in the cracks of the rocks, where sufficient depth of earth had accumulated. The Baraco is found to be the most profitable variety, producing a very large firm pine of good flavor, that keeps longer than any other, and is sold a shilling a dozen dearer than any other sort. The broad thick long leaf is free from prickles, which is a great advantage, for the laborers who work in the pine fields suffer severely from the wounds caused by the sharp prickles of the generality of pineapple leaves. I may mention that the leaf of all the different varieties of the pineapple, produces a strong silky fibre that is more easily worked than the manilla hemp.

Attention has been much turned in England lately, to the discovery of vegetable fibre that might be used for the making of paper and other manufactures, the present material for which is likely to become unequal to the increasing demand. Many plants growing in the Bahamas are suited for the production of such fibre, and might be most useful in various manufactures. The manilla plant is being cultivated at Abaco, and is found to grow very luxuriantly. It is raised from suckers, and may be cut about the fourth year; sooner than that, the fibre is not sufficiently strong. Banana and plantain grow on this Island to a great size, where the bush has been burnt; these also yield a good fibre. The silk grass, they have planted; this is similar in appearance to the manilla, but the fibre is much finer. The bamboo, growing wild, produces coarse fibre.

Tons of these various fibre might be exported annually from the Bahamas. If there was a manufactory for making it, abundance might even now be supplied from different parts of the Bahamas; and many would enter into the cultivation of fibrous plants, were they assured of means of disposing of the produce, which a central depot at New Providence might afford them.

Manilla fibre is sold at New-York for 300 dollars per ton. The manilla, silk grass, and bamboo will grow well upon poor land, and might be planted upon exhausted pine fields. I have been told by the proprietors of pine fields, that the planting of manilla would pay better at Abaco, than the planting of pines sold for 2s. 6d. per dozen.

✓ Sugar cane is also raised on Abaco, and many of the adjacent cays, and found to grow as well as at Cuba, or any other West India Island.

HOPE TOWN, LITTLE GUANO CAY.

✓ The inhabitants number 320 white, 13 black. They have plantations on the main land of Abaco, and on the cays named Matelot, Great Guana, Angels, Lovers, Quarters, Loo and Scotland, and the produce of these, and fishing, form their chief support. They say cattle cannot be raised upon this Island on account of some poisonous herb, which grows there. The soil is a sandy loam well adapted to raising potatoes. The water from the wells is not very good, but they have several large and well made stone tanks attached to their houses to preserve the rain water. The harbor is excellent and deep, but vessels drawing more than eight feet cannot enter, even at high tide, on account of the bar. They are building wharves in front of the town, which will greatly benefit the place, and I would suggest that the same plan be continued in front of the site which is reserved for a lock-up, and that a strip of land twenty feet wide on one side of this reserved lot, be appropriated for a slip for hauling up vessels for the use of the inhabitants. Several vessels are building; one about eighty tons burthen, built almost entirely of Abaco timber, is intended to trade to New-York with fruit. The shipwrights are in the habit of making copper spikes and nails for their vessels, from the old copper and copper bolts taken from wrecked vessels. The

houses here are nearly all of wood, and the town very irregularly built, the main street being only twelve feet wide. The Government school appears particularly good; the children orderly and cleanly. There is a Wesleyan chapel, but no Church of England service. The burial ground is unenclosed.

#### MAN-OF-WAR CAY.

There are several settlers on this cay. The soil is good, but on account of the want of fresh water, cattle cannot be reared; goats thrive well. The families support themselves by the corn and vegetables they cultivate and occasionally sell, and by fishing. Fish and turtle abound inside the reef. There are several large well built stone tanks for the preservation of rain water.

#### NEW PLYMOUTH, GREEN TURTLE CAY.

It is here that the greatest number of the vessels belonging to the Bahamas are built; the shipwrights are excellent workmen, and with the advantage of the finest woods for the purpose, so near at hand, they might compete with any part of the world had they good models; as it is, their vessels are well built and strong. They are at present building one seventy-seven feet keel, and others of smaller dimensions. A wrecked barque was also being repaired inside the harbor. The harbor is shallow, but well protected. A very bad custom prevails of throwing the ballast from boats, and refuse from the town into the harbor,

which is already very shallow, and serious injury will result if this is not checked. A slip for the hauling up of vessels to repair, might be very advantageously constructed on the side of this harbor, and no doubt it would be the means of saving many wrecked vessels, now obliged to be abandoned, from the want of means to have them repaired. New Plymouth numbers about a 1000 inhabitants, mostly white, who support themselves by wrecking, and the produce of their plantations on Abaco and the adjacent cays. They have forty boats for fishing, and twenty wrecking schooners.

The houses are generally very well built, some of stone, and nearly all of them provided with large well cemented stone tanks to preserve the rain water. The public wells are dug in the sand, and the water is slightly brackish. Some cattle have been raised and fattened, and I am told equalled any in America ; but owing to some undiscovered cause, the animals have generally, after getting into very fine condition, rapidly fallen away and died. I am inclined to attribute this to their not possessing properly formed receptacles for preserving the water free from the sand, which appeared to me to be impregnated with lime, and as the cattle are allowed to tread this into the otherwise excellent water, it may account for their suffering when the water becomes low. There is good pasture near Black Sound, and Cocoa Bay. I would wish to direct attention to a swamp of nearly an acre in extent, at the extremity of the town, which may prove very injurious to the health of the inhabitants, if permitted to continue in its present



state. It was divided into lots, and sold upon condition, that if it was not filled in by a certain time, it should be forfeited. The purchasers have abandoned their lots, finding the expense of filling them up fully equal to their value, and the land is again in the hands of the Government. Feeling that it is of great importance that this swamp should be got rid of, I venture to suggest, a sa feasible plan for overcoming the difficulty, that it be again divided into lots, and a street twenty feet wide be run through it, the lots to be given in fee to whoever would fill them in within eighteen months from the date of gift. Many would gladly accept these terms, and the fear of epidemics arising from this undrained land would be removed.

There is no Church of England service. A large Wesleyan chapel. The burial ground here is enclosed.

I may just mention the names of the principal cays that lie to the east and to the north of Abaco and the Grand Bahama, some of which are inhabited, and all under cultivation ; they produce excellent corn, potatoes water melons, &c. : Fiddle, Crab, Man Jack, Ambergris. On this cay there is no fresh water ; Powell's Cay, very good fresh water from holes dug in the sand ; good pineapples can be raised on this cay ; Spanish Cay, no fresh water ; Hog, Pensicola, Allen's, Guineaman's, Umbrella, Moraines, Fish, Papaw, Carter's, Stranger's, Double-breasted, Grand and Walker's Cay.

## THE GRAND BAHAMA.

All the settlements are on the south side of the Island, and their plantations run from the east to the west point. There are no good harbors on this side, but on the north, vessels lie under the lee of the cays.

Hawk's Bill Creek runs across the Island, dividing it to the south, excepting where there is a bank of sand and low mangroves which close it in. Were this bank cut through for about 100 yards, and a few feet of rock also cut through, a place of refuge for vessels would be formed on this side, and the tides would eventually clear a channel through the mangroves and accumulated mud. Near this spot is Eight Mile Rock Settlement, where there is no public road, only a very winding path through private property. To obviate the great inconvenience felt in consequence, I would suggest that each land owner should give up a strip of land, thirty feet wide, to the south of his plantation for a road, in consideration of the same quantity being given to him on the north side of his property. The proprietors are very desirous to obtain this road, and those to whom I spoke expressed their willingness to make this exchange.

They raise cattle and horses to some extent, and cultivate corn, potatoes, &c. There are abundance of fish, lobsters, and turtle ; of the latter, they caught last year about 280 loggerhead, 300 green, and 40 or 50 hawk's bill. The loggerhead when salted or pickled will keep as well as pork.

The inhabitants of this Island and the cays around, only need encouragement to induce them to enter

largely into the business of catching and preserving the turtle, which would soon increase, and might become a profitable trade.

There are seven wrecking vessels and two schooners belonging to the Grand Bahama. For the fortnight before I visited it, there had been some fifty sail of wrecking vessels cruising about the great wrecking ground near Sandy Cay. On this cay there is good water. On the north side of the Grand Bahama is some sponging ground ; the best sorts obtained there, are the sheep wool, boat, and velvet sponges.

There is a good stone church and a Baptist chapel at Eight Mile Rock settlement, and a very good public school.

The burial ground is unenclosed.

Since visiting Abaco and the Grand Bahama, I am more than ever convinced of the imperative necessity that exists for steam communication to be introduced in the Bahamas, if the many and varied resources of its numerous islands and cays are ever to be developed for the support of the inhabitants, and the general prosperity and advancement of the colony.

The great variety of productions in the Bahamas, when considered as a whole, would, if there existed an interinsular steam communication, become available for all, and the cultivation of the land and development of many valuable resources, would speedily follow the power of obtaining a sure market. At present some cays are, at times, absolutely destitute of the very necessaries of life ; whilst at others, perhaps not many miles distant, there is a superabundance of the very articles required. The inhabitants

fear to incur the expense of agriculture, curing of fish, turtle, &c. feeling that no opportunity may offer for sending the produce of their labor to Nassau, or elsewhere. They are not wealthy enough to run the risk, and such pursuits are abandoned, greatly to the injury of the whole country through which the produce of every part would circulate, were there regular and certain means of communication and transfer.

I append to this report the estimates for the proposed works.

I have the honor to be, sir,

Your most obedient, humble servant,

THOMAS C. HARVEY, C. E.

The Honorable C. R. NESBITT, Esq.

Colonial Secretary,

&c.      &c.      &c

## L E T T E R

ON

## RENTAL OF SALT PONDS.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
APRIL 8, 1856.

SIR.

Your Excellency having favorably received my letter of the 18th February, regarding the appropriation of a portion of land for the benefit of salt pond laborers, with a view to mitigating the difficulties of the lessees of the salt ponds, I am encouraged to trouble you again, to lay before you some further remarks, which I am anxious should obtain your Excellency's consideration. They appear to me important, bearing as they do on the three points that I believe include the causes of all the disadvantages from which the lessees of salt ponds suffer, and all the discontent that prevails amongst them. The first of these, viz.: the want of efficient labor, I have already fully entered into in the above named letter, and the two I would beg now to call your Excellency's attention to, are the unfavorable results of the present mode of rental, and the unscientific manner in which

salt pond property is laid out. The present system of selling salt pond by competition, appears to be fraught with many disadvantages, and to act most detrimentally on the interest of the proprietors now, and for that of the colony ultimately. The upset price at present is about £1 10s. an acre; this is high, too high for those who are most likely to come forward as purchasers; and the lots being put up at auction, often are raised to a much higher sum; in fact, to a fictitious value, that cramps the energy of beginners, who having to incur immediately the expense of enclosing, making pans, and all the preliminary steps towards salt making, at once fall into arrears for their rent, and thus commence with difficulties which may be overcome before long, should they be so unusually fortunate as to have a succession of fine productive seasons, but which must remain to clog their efforts, or become insurmountable, should adverse weather retard or frustrate their efforts. Discouragement ensues; they fear to risk more on improvements, and their only chance of even small remuneration is found to consist in the plan of charging the pans moderately, and raking directly a thin layer of salt is formed; but this plan obliges a constant provision of labor, and only those who adopt the share system have any chance of making it answer. Many persons also consider this thin charging of pans a bad plan, and will not follow it. When it is remembered that these salt ponds are situated in islands that are generally very thinly inhabited, and chiefly by the humbler classes, who cannot always command in these lonely districts even the common necessaries

of life, it is self evident that to induce a higher class of purchasers to settle, there must be at least a hope of certain return, and present moderate expense ; for few will venture, when the first outlay is almost sure to involve them in difficulties ; and to those who having some capital, these drawbacks would not prove insurmountable. The want of those comforts to which they are accustomed, would deter from settling, the general well being of all being so crippled and uncertain. A moderate and fixed price for all Salina, would, I believe, obviate much of the present difficulty, and prove an inducement to many to labor in so ultimately profitable a business.

It appears to me that £1 5s. per acre would be a fair rental for uncultivated Salina. The average cost of putting an acre under cultivation being £25, adding 6 per cent. interest, i. e. £1 10s. to the £1 5s. rental for uncultivated Salina, would give £2 15s. as a fair rental for cultivated pond ; and should the fee simple be granted, it appears to me that the fixed price of £20 an acre would, though moderate, prove the most remunerative, so many more would be tempted to purchase ; for before the full value of the salt islands can be at all understood, they must be systematically worked with all the proper arrangements for transfer, protection, and due amount of labor. At present it is only here and there really well worked pans are to be seen, and even these have no protection against the weather during making, or when made ; but could anything like a general system be brought about with all possible improvements, made to bear on the cultivation and for the protection

of the staple commodity of the Bahamas, the change in the prosperity of the whole, and the revenue of the colony would, I apprehend, be far beyond anything we could at present venture to predict.

It should be borne in mind that the process of salt making in the Bahamas is not by artificial means, but by solar evaporation ; and the agents to be employed should be well considered, in order that the arrangements may be suitable to the powerful means called into action.

The sun and wind are laborers of mighty power, and can with the same facility work miles as acres ; and it were therefore wise so to arrange matters that miles should be prepared for their operations, and instead of allowing the space to be closed up by restrictions and difficulties, high prices and expensive labor, everything should be done to encourage the rapid cultivation of unappropriated Salina. The fixed price should be moderate, the management simple, and the labor as easily attainable as possible ; for, unfortunately, the rain, so beneficial in the generality of agricultural districts, brings speedy and certain destruction to this, and requires to be vigilantly watched and guarded against. At present no means exist of averting the direct evil of heavy showers, except alertness in raking and housing the salt the first moment it is ready. That greater security might be gained, I feel sure, by means of shifting or glass roofs to cover the making pans ; and if each proprietor had a small portion of his pans so secured against storms, a certainty would be obtained for that portion, and thus a moderate return being assured to him for



his outlay, he would be better able to bear adverse seasons. A more moderate and fixed rental would in some measure equalize the resources of the salt proprietors, and a more systematic arrangement would naturally follow, to the advantage of all. The other point to which I would call your Excellency's attention, is the unscientific manner in which the ponds are generally laid out. Due consideration has not been given to the local peculiarities of the various Salinas, and rarely are the outlets for clearing the ponds proportioned to the circumstances of their situation; and consequently any unexpected increase in the violence of a storm, may endanger the labor of a whole season. Almost all the floods, &c. that have in many islands threatened ruin, might have been provided against by judiciously made canals and dams, and proper outlets to the sea.

Perhaps nowhere would the superiority of locomotive transfer over that of common roads be more apparent than in the salt islands, where every improvement for lessening manual labor is of so much importance. Were a regular system of roads laid down with a view to their eventually having railways constructed on them, a great boon would be bestowed on salt proprietors; for it would be easy so to arrange for them to traverse a Salina, that every allotment should have the advantage of one by which its produce could be speedily conveyed to a place of safety; for all such railways should be connected with sheds close to the place of shipment for housing the salt. With such roads once made, and sheds ready to receive the salt, all the waste now incurred from the

common influence of exposure, amounting to from 20 to 30 per cent. and the still more serious accidents occasioned by floods, which often carry away heaps from the temporary deposits would be entirely avoided.

If land for the purpose of building sheds were given to those who would erect them according to an approved plan, it might induce many to enter into the undertaking ; and I imagine that if the housing and conveying of salt were undertaken by private companies, it would lighten the difficulties of the lessees, who might be protected from exorbitant charges by a fixed scale.

Hoping that your Excellency will pardon my having trespassed thus long on your time,

I have the honor to be, sir, your Excellency's  
Very obedient, humble servant,

THOMAS C. HARVEY, C. E.

His Excellency

SIR ALEXANDER BANNERMAN,

Governor of the Bahamas,

&c.      &c.      &c.

## R E P O R T

ON

## ELEUTHERA AND OTHER ISLANDS.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
NASSAU, N. P. AUGUST 2, 1856.

SIR:

I have lately returned to Nassau, after an absence of many weeks, during which time I visited nearly all the southern islands; and I beg to report, for the information of his Excellency the Governor, that I inspected the public works, and the sites of those proposed to be shortly commenced on each island; and then rode or walked throughout, where it was possible to do so, or went from settlement to settlement by sea, when impracticable by land, with a view of collecting such information of interest connected with the several islands, as I felt might give me a more perfect knowledge of the locality and exigencies of each.

## ELEUTHERA. GOVERNOR'S HARBOR.

A grant has been made for the prison so much required here, but it is not yet commenced. From the unavoidable proximity of this building to the

principal street, I would recommend a wall to be built round the lot. The population is about 900, and the cultivation of the pineapple the principal occupation of the inhabitants. They ship between 50,000 and 60,000 dozens in the course of the year; their plantations are increasing, and they are planting orange trees rapidly, of which also they have shipped a small number. Corn, potatoes, and other produce are also cultivated. Water here is often bad, and so scarce as to be purchased at a high price; it is obtained from wells on the north side of the Island, and when heavy rains occur, these wells are covered by water. They are shallow, and the cattle have access to them.

There are some valuable woods on this Island; amongst them prince wood, which somewhat resembles rose wood and might be used for furniture; it is dark and very hard. The bark yields a yellow dye, which the settlers in some places use to color lime wash for their dwellings; it gives a very good yellow tint.

There is some pasture land on the north side, and in a valley that runs for about seven miles, from James' Point to Palmetto Point. An inexpensive road might very easily be made to connect these two points, and such a road is much desired by the inhabitants. The road to Governor's Harbor from the other side of the Island, needs much repair. I would suggest that proper wells should be dug at the extremity of this road, where good water might be procured at all times. Cattle are raised in the neighborhood of Governor's Harbor, and goats thrive well

on the small adjacent cays. There are two good harbors, one on each side of the neck of land which connects the cay, on which the greater part of the town is built, to the main land of Eleuthera. In both there is safe anchorage for large vessels.

A good church, a Baptist and a Wesleyan chapel, and a public school. The burial ground is on a sandy ridge near the sea, and requires to be fenced in.

#### SAVANNA SOUND SETTLEMENT.

In this settlement there are about 350 inhabitants employed in raising pines, oranges, corn, peas, potatoes, &c. The number of orange trees planted is rapidly increasing. There is good land and abundance of pasture in the neighborhood. There are about 400 goats.

There is a good, extensive harbor, in some parts two fathoms deep; and over the bar in the channel, which is composed of sand and grass, there is ten feet of water. The houses are mostly built in the valley. The water is at times very bad, owing to the cattle having access to the wells, which are most inconveniently placed at a considerable distance from the town in the savanna.

The savanna extends about  $3\frac{1}{2}$  miles. I would recommend that a good public well be dug in a more convenient locality, and that it be properly protected from the cattle. A road is much wanted from this place to Tarpum Bay, to give facilities for the cultivation of land.

Last year about 3,000 bushels of salt were sold from the very good salt pond that exists here.

There is no church or public school at this settlement ; a Wesleyan chapel.

The road to the savanna settlement is very difficult to find on the west side. It would be advisable for a beacon to be erected at a place called New Path, on that side of the Island, to mark the shipping place.

#### GLENELG SETTLEMENT. TARPUM BAY.

The inhabitants here number about 500, who are chiefly engaged in the cultivation of fruit and vegetables. About 25,000 dozen pines and a few thousand watermelons are raised yearly. They possess some fifty plantation boats. Good water is obtained from wells sunk in the rock. There is a church, but no resident clergyman ; a good government school, and a Wesleyan chapel. The walls enclosing the church lot require repair, and the burial ground to be enclosed. It is at present in a very bad state ; parts of coffins, and even of grave clothes, may be seen on the beach. A road from this place to New Portsmouth has just been opened. Another road is much wanted for the benefit of those towards the eastern side of the Island, who are extensively engaged in cultivating pineapples, and have no road ; in consequence of which, the only way that a number of proprietors have the power of transporting the produce of their fields to the seashore is, by the laborers carrying them in baskets on their heads—a laborious and expensive mode, and at the same time one so tedious that the delay it occasions in loading a vessel, often obliges much fruit to be cast aside. Such drawbacks as these naturally dispirit the cultivator and retard

the extension of pine cultivation, which, considering that this fruit obtains its utmost perfection in the Bahamas, is to be deplored.

## NEW PORTSMOUTH: ROCK SOUND.

The wharf at this place is proceeding satisfactorily. The population is 800, mostly engaged in the culture of the pineapple. 30,000 dozens have been shipped from this place in one year. They grow the San Bas, or St. Bartholomew, a few Spanish pines, and the scarlet pine, which ripens early.

The harbor is well protected. There are two wrecking schooners, three sloops, and many fishing and plantation boats belonging to the place.

A roadway is much wanted through the Island to the eastern side from this settlement. The prison requires repair. No church. A large Wesleyan chapel. A very good government school.

## DEVIL'S POINT, ETC.

There is a Salina and many plantations in the neighborhood of the Devil's Point.

At Bamboo Point there is the commencement of a Salina, and also several plantations near. The orange is partially cultivated. From Bamboo Point to the southern point of Eleuthera there are several creeks that afford shelter to small craft. Within the different bars which obstruct the entrances to these creeks, the water is from four to six feet deep. The depth of water over these various bars I found to be as follows: at

Robins' Creek, the first south of Bamboo Point, the water at low tide over the bar is one foot.

Deep Creek,  $1\frac{1}{2}$  miles further south, it is 2 feet.

Foley Creek, about 1 mile south of Deep Creek, about 1 foot.

Palmetto Creek,  $1\frac{1}{2}$  miles south of Foley Creek, 1 foot 6 inches.

Rocky Creek, 2 miles south again, 1 foot.

Sandy Creek, half a mile south of Rocky Creek, 1 foot.

Cawley Creek, 1 mile south of Sandy Creek, 2 feet.

At Miller's Settlement, 2 miles south of Cawley Creek, there is a cut into the pond.

From Robins' Creek to Sandy Creek they all communicate inland, and much salt might be procured by damming in portions of these creeks, the earth being retentive.

There are several settlements on the ridge from Robins' Creek towards the south, with plantations and cultivation around them, and excellent pasture in abundance east of the ridge. Orange trees are being planted everywhere, and pine cultivation extended. Very fine cattle was raised in this district formerly, and attention is again being paid to the raising of stock. There are about 500 inhabitants in this district, and they are fortunate in having an abundance of good water. A lot for a burial ground should be appropriated and enclosed at Skelton Settlement, opposite Rocky Creek, which would also be a good situation for a lock-up house, which is needed in that district.

At the Waterloo Settlement, inland between Pal-



metto and Rocky Creeks, the manilla plant grows very luxuriantly, some of the leaves measuring seven feet in length.

Some persons there intend to extend the cultivation of this useful plant. The valuable soap tree may be seen in perfection at this settlement. It bears an abundance of berries which answer for washing quite as well as soap, and being so useful it should be cultivated in every settlement. They use also for washing, in many places, the leaf of the bamboo, which is found in every island in the Bahamas. Myrtle berries, from which the wax is made, are abundant.

At Wemys' Settlement, below Rocky Creek, a Baptist chapel is being erected. At Waterloo Settlement there is a good stone schoolhouse, built by the inhabitants five years ago, but there is still no teacher.

Opposite the Hartford Estate, on the east side of the Island, and east of Sandy Creek, there is a reef harbor, and vessels drawing sixteen feet can enter it. It is named Butler's Bay, and the rocks that mark the entrance are called the Egg and Sugar Rocks.

A road is much wanted from Bamboo Point to the south end, and another from Palmetto Creek to Rock Sound. There is a road called the Queen's, partially opened from Deep Creek to Cawley Creek.

At the southern end of Eleuthera there are several Salinas which could be profitably cultivated.

From the southern point of this Island, not long since, a vessel was sent to Nassau laden with 500 baskets of land crabs, each basket containing 250, which were sold at one shilling per basket. This is

considered a most wholesome article of food, when in season, by the inhabitants.

LITTLE ST. SALVADOR.

On this Island there is a good salt pond, but it is uncultivated. The country is hilly, with some pasture, and the soil is good and might be cultivated with profit.

ST. SALVADOR. ARTHUR'S TOWN.

The prison at this place requires a few repairs and a wall to enclose it.

The bridge or causeway should be raised and repaired. The pasture in this part is good, and many of the inhabitants turn their attention to the raising of stock. Corn, pineapples, oranges, &c. are shipped from this town, and pineapples especially are being increasingly cultivated, more land being taken up for the purpose.

✓ At Bennet's Harbor there are about 150 inhabitants, who live upon the ridge of the hill and are occupied in cultivating their plantations. On the east side of this ridge there is plenty of good land and fine timber. Cattle, goats, &c. are raised in this district.

There is an unimproved salt pond, which requires, before it can be profitably worked, a canal to the creek. Salt has been made in this pond. Over the sandspit at the mouth of the creek, there is about three feet of water, and on the inside of the spit vessels can lie in perfect safety in six feet of water.

*Good Hope Settlement* (opposite Alligator's Creek). The mouth of the creek is dry at low water. The land rises here unusually high for these islands.

*Bluff Settlement*.—The inhabitants number about 170. The Island becomes narrow at this part, not more than two miles across. Corn, potatoes, &c. are raised upon the white land in this district. The cultivation of pineapples is just beginning to engage their attention. A Baptist chapel at this place.

*Knowles' Settlement*.—The population about 60, who are engaged in agriculture. They cultivate corn, potatoes and pineapples chiefly, and are just commencing to plant orange trees. There is a Baptist chapel here.

*Bight Settlement, Pigeon Bay*.—About 350 inhabitants engaged in agriculture. Corn, pineapples, &c. are raised. Attention is paid to the raising of stock in this district. The inhabitants are building a church. There are two Baptist chapels and a Government school. The causeway and bridge on the main road north of the Bight requires repair, as also two bridges and causeways on the main road from the Bight to Port Howe. A road has been opened to Lake Gambia, which requires cleaning. Salt might be made round this lake, for it has been collected in very dry seasons on the edge of the lake. It extends to within two miles of Port Howe. It is deep in the centre, supplied by ocean holes. The length is about eight miles, and the width varies from half a mile to one mile. Along the borders of this lake the soil in

some parts is of a reddish clay, similar to that termed pineapple land. In other spots it is rocky. To make this lake available as a salt pond, it would be necessary that a canal of one mile in extent should be cut, emptying into Armbrister's Creek at Pigeon Bay.

Hawk's Nest Creek affords shelter for small craft.

*Devil's Point Settlement.*—A reef extends outside this point, but vessels can land cargo at French Bay. At this settlement the inhabitants number 260, who are engaged in cultivating corn, potatoes, &c. and in the raising of stock. Many persons here would cultivate pineapples could they obtain slips to plant.

*Frankfort Creek*, (to the east of Devil's Point). Here there is about three feet of water on the bar at low tide, and deep water within the bar, where small craft can lie in safety.

*Port Howe*, still farther to the westward, has a reef harbor, and large vessels can lie in safety within it. The Kangaroo man-of-war, Captain Hookey, anchored inside this reef. There is  $2\frac{1}{2}$  fathoms of water at low tide at the entrance. The next bay to the east is called Columbus Bay, and tradition makes this to be the spot on which the great Discoverer first trod the shores of the new world. The situation that has the honor of his name is a magnificent one, the land high, and open to the Atlantic Ocean. The beautiful estate of Miss Fontaine commands this fine view.

St. Salvador is more diversified with hill and vale than the generality of the Bahamas, and has the full

benefit of the healthy breezes from the Atlantic, being situated on the eastern side ; in consequence, the heat of these latitudes is greatly moderated, and the climate is more suited to a European constitution than any other, excepting perhaps the very northern islands, which possess many of the same advantages. As might be expected, it is by far the best agricultural Island, and very healthy. It is altogether a beautiful country, and one well calculated for English emigration. It possesses extensive pastures capable of raising a large quantity of stock, to which occupation the inhabitants turn their attention. The cultivation of the pine has latterly been much extended, and bids fair to become of great importance ; they grow to a large size, and are of fine flavor. The Spanish pine, which is devoid of prickles on the leaves, might be more profitably raised than any other sort in the very rich soil of this locality. The planting of orange trees also keeps pace with that on the other islands. The timber on St. Salvador is fine and large, and might be made a profitable branch of commerce ; madeira, mahogany, cassada, prince wood, braziletta, yellow wood, *lignumvitæ*, are found in almost every part, but in the greatest abundance on the east side. The cedar and the pine are not found on this Island. The palmetto plant, called from one of the uses to which it is applied, the "poor man's shingle," is found in abundance everywhere. There are three sorts of this plant, the silver top, used for making coarse hats and mats, the pond top, the best for fine hats, and the Spanish top, of which brooms are made. All the varieties are used for covering dwell-

lings, in the place of shingles or slate, and if properly put on, this sort of roof will last for ten or twelve years. It gives a pretty picturesque appearance on the outside and inside of the dwellings, as often not only the roof but the sides of the houses, are covered with this valuable leaf. Ropes for vessels, fishing tackle, hammocks, mats, and many other useful articles are made from the leaf. The palmetto grows in abundance on St. Salvador and in all the Bahamas. There are several trees that yield gum in large quantities, and the bark of others that are very little known, which answer for the tanning of leather. Button wood is to be met with everywhere, the bark of which makes an excellent tan.

The white population of St. Salvador is thirty-four.

#### CONCEPTION ISLAND.

On this Island there is a large Salina that is dry at low water, and might be made into an excellent salt pond. The creek is about twenty feet wide, and could be converted into a canal at little expense.

There is also a good harbor and shipping place.

#### RUM CAY.

The population of Rum Cay is about 900, of whom 42 are white, the greater number engaged in agriculture. There are two Salinas, Port Nelson and Carmichael's, and about 150 persons are employed on the salt works of the first of these. The canal that has lately been cut through the rock to the sea, to let off the rain water which had flooded the salt pond, gives them the hope of raking salt this year ;

it ought to be cut deeper, and flood gates are necessary. It would be still more advantageous, if it were widened five feet, that in case of a flood the rain water might be more speedily drawn off from the pond, and it would also then answer for the occasional thorough cleansing of the pond. Vegetable matter, when allowed to wash into the ponds, causes the pickle to become diseased. In proportion as the pickle is preserved pure, is the quantity of salt raked ; it is therefore evident that it is of great importance that all means should be used to prevent the injurious matter that is washed from the hills in heavy showers, from being carried into the ponds. They should be kept clean, and the canals in a condition to throw off as quickly as possible all extraneous matter, and this can only be done by well proportioned and well arranged canals, sluices, &c. A pond may be made completely useless for a time, by being surcharged with vegetable impurities. 450,000 bushels have been raked from this pond in one year when in a good state.

At the northeast side at Carmichael's, ten miles from Port Nelson, there is a Salina capable of being made into a good salt pond ; it is supplied by ocean holes ; there is no canal. The shipping place is not good. There is very excellent land and pasture on this Island. A few pineapples are raised, but the cultivation is not extensive, though the planting of fruit trees generally is progressing. Corn, potatoes, &c. are raised. There are about 600 head of cattle, 900 head of sheep, and a few goats ; on the north side there is an excellent turtle pond. This Island can

boast of the very rare advantage in the Bahamas, of roads ; two good ones run through the cay.

#### WATLING'S.

Numbers about 450 inhabitants, entirely engaged in agriculture ; 15 are white. There is very good land and pasture on this cay, and excellent cattle and sheep are raised here. Cockburn Settlement, at the Riding Rocks, is the largest on the Island, inhabited by about 150 ; the principal plantations are situated on the opposite side of the Island, from which they are divided by the lakes that run through the centre, and from not having a canal they are obliged to drag their boats over the strip of land to the lake, morning and evening. They are very anxious to have a canal cut, to enable them to attend to their plantations with less difficulty, and as this route is the only one across the Island, it would be generally advantageous.

There are several unimproved Salinas that in dry seasons produce salt. In the interior of the Island is a large lake, round which the land varies from one to one mile and a half in breadth from the sea ; a good road runs all round. A reef harbor at Sandy Point is the only one in the Island.

They have shipped as many as 33,000 oranges in one year ; fruit of all kinds might be raised in abundance on this Island.

A lock-up is much wanted at Cockburn Town.

There is a public school, but no church ; a Baptist chapel, no enclosed burial ground.



## FORTUNE ISLAND.

The inhabitants number about 350, of whom 15 only are white, engaged principally in salt making. Formerly cattle were raised to some extent, but not latterly.

The salt ponds are in good order, and in a forward state.

The main road across the salt pond should be continued to the front street on one side, and to the prison on the other, and if it were continued over the Island to the east side, it would be a great improvement and benefit to the Island, it being impossible to land on the west side during rough weather, with a westerly wind, and vessels are often obliged to land their cargoes on the eastern side.

Whilst I was at Fortune Island in June, two persons from a vessel bound to Trieste, were buried who had died of yellow fever. Fortune Island lies in the direct road for vessels going to England, or the States, from St. Domingo, and in case of sickness or a vessel becoming leaky, they often put in here, and some protection appears to be required to prevent the spread of fever. Would it not be desirable to have a hospital in which such persons could be received, that when these cases occur, contagion might be prevented?

## ACKLIN.

The population of this Island is about 370, and the chief occupation agriculture. It is a very productive Island, possessing excellent land and good

pasture, and fresh water. There are some 500 head of cattle on the Island. It is well wooded ; the principal varieties are the wild tamarind, dogwood, ebony, braziletto, and madeira. They were raking very good salt at Claret Cove when I was there. The Salinas are extensive and excellent. Besides the one named above, there is one at Abraham's Bay, and another at Salina Point. The salt pond at Claret Cove requires a short canal to be cut from it to the sea ; indeed, it cannot be profitably worked without, and I beg to call the attention of his Excellency to the urgent necessity that exists for this work.

On the southeast side of the Island, at Claret Cove, there is a good reef harbor and shipping place. At the eastern end of this cove the channel in the reef is twenty-two feet deep, and wide enough for a vessel to beat through. There is another good channel through the reef, twenty feet deep, immediately opposite the salt pond ; the anchorage inside this reef is good, and with but few heads. In several places on this Island the cotton plant is growing. I observed that the cotton was very fine and silky, with the staple two inches long ; it appeared to me to be the Georgia cotton.

#### INAGUA.

The quarantine laws that are about to be extended to Inagua, will be of peculiar benefit to this Island, situated as it is in the direct route from many southern ports, where visitations of yellow fever, cholera, &c. have latterly been almost annual. At present there is no impediment thrown in the way of

landing diseased persons, and no doubt the sickness that has prevailed there at times this year, may be attributed to this cause ; but there are other circumstances of a local nature, that may have contributed to increase the calamity ; and these call for immediate attention, and certainly should be remedied as speedily as practicable. The Button wood swamp, between the salt pond and Mathew Town, is of itself a fever engendering district, that should be at once drained. Drains also should be carried through some of the streets to the sea, that there may be no collection of water resting in any part. The wind, that is most prevalent, blows over the swamp before it reaches the town, and of course comes laden with its impurities, and thus brings the unwholesome taint of the pent up malaria, that rises from the swampy ground, and lurks beneath the uncleared bush, instead of the pure sea breeze. The tramway, and various other roads, that intersect this swamp, do nothing towards mitigating the evil, but rather aggravate it, by causing deeper deposits of water which have no exit, and can alone exhale by evaporation, which in some stages must be very deleterious. From the more than probable recurrence of this sad visitation, unless some speedy means are taken for lessening the local aptitudes for contagion, I would recommend as the quickest remedy to meet the emergency, that culverts be constructed underneath the roads, and a ditch be dug from the south extremity of the swamp to the sea, one quarter of a mile north of the salt pond canal outlet. Carrying out a good system of drainage and of clearing the bush, would, we may

hope, have a most beneficial effect in preventing disease, and this being done, there would be more certainty in the good to be effected by boards of health and quarantine laws, when such shall be established. The state of the water is another fearful cause of disease; the wells from which the greater number of the inhabitants procure water, are often in the foulest state, as many as fifteen head of cattle at a time tramping and wallowing in the horse pond, from which these wells are supplied. These are about to be enclosed by a wall to keep off the cattle; the horse pond should be thoroughly cleared out down to the rock, which would then become a good reservoir. A proper watering place for cattle should be made outside the enclosure, and two public wells also outside the enclosure, supplied with common chain pumps should be constructed, and the wells themselves covered in. This would prevent (what I myself saw), persons walking into the pond with the cattle and dipping out water not from the wells, which would have been bad enough, and into which they also got, but from the pond itself. One gratifying fact is attested by residents, viz: that the laborers working in the salt pond and breathing the air impregnated by the salt were free from fever. The great need of properly constructed tanks has been reported on before, and it appears to be so important that any delay should be avoided. I have entered into a contract for raising the dams and clearing the salt pond canal; the present canal being inadequate for the size of the salt pond, I would recommend that a new canal should be cut, with proper sluice gates,

at Gabriel's Cut, where they would have the protection of the reef. The present canal has only six feet for its outlet, but the one I propose should be thirty feet wide, which would permit of the rain water being expeditiously carried off from the pond. I examined the various situations that might be chosen as the site for the new prison, and the one I would point out as peculiarly adapted for the purpose, is on the sea shore, west of the northern extremity of the town.

The wall for enclosing the cemetery is in progress, and the masonry is well done.

A road from Mathew Town to the prairie is much wanted. The lessees to obtain grass for their mules, are obliged to send their laborers to the prairie to cut it, and the only road thither being the one towards Lake Rosa, they have to go ten or twelve miles before they can get grass, and it is considered a day's work for two men to bring home a single load; now, a road by Smith Town, would enable them to cut better grass at a distance of only four and a half miles. I would therefore beg to call the attention of his Excellency the Governor to the road which I propose should be made to the prairie via Smith Town.

It would be of the greatest benefit towards developing the resources of Inagua, to have a road from one end of the country to the other. The interior of the country is at present almost a terra incognita, from the difficulty of pushing your way through the bush, and under the present circumstances (when to accomplish a tithe of the works that might immediately with great advantage to the colony, be started,

would be hopeless), perhaps I may be allowed to suggest for his Excellency's consideration a plan by which the all-important improvement of roads might be accomplished in some of the Islands without burdening the revenue, viz.: That any person or persons, who would undertake to make a road thirty feet wide, should be guaranteed a portion of land on one side of the said road as a remuneration.

I have not myself traveled through the interior, but I am informed from reliable sources that there is plenty of pasture and very excellent land in the centre of the Island, with no scarcity of fresh water, and that fine large timber of various kinds, such as madeira, yellowwood one foot in diameter, gumelemi, braziletto, lignumvitæ, &c. are met with in abundance. I may mention that yellowwood yields a gum often used by carpenters instead of glue, quantities of which might be obtained yearly from all the islands, and might become an article of export. The tops of the lignumvitæ are an excellent food for milch cows.

Throughout the Island there is abundance of pasture, and as I have mentioned before, natural reservoirs in the rock full of good water.

The cattle, since I was there last year, has much increased.

Sugar cane and the cotton plant both grow very luxuriantly on this Island. Many cotton plants are still to be seen. There are several varieties of cotton that have been raised in the Bahamas, but none appear to have answered better than the Georgia cotton, which is fine, of long staple, and yields more than any other. The Anguilla cotton gives about 80

or 90 lbs. for a day's picking. This sort becomes quite a tree; the cotton is coarse and not so long a staple as the Georgia, nor so good a bearer.

The Flyaway cotton is silky, with small and light pods, the staple very short.

The Bourbon cotton, which has speckled seed, is very inferior in quality.

There are many creeks around Inagua which might profitably be stocked with turtle.

#### LONG ISLAND.

The inhabitants number nearly 1,600, 218 of whom are white, mostly engaged in agriculture. The land of this Island is good, with abundance of excellent pasture, and the advantage of good water. The general aspect of the country is hilly and picturesque. There are many very good Salinas and salt ponds throughout. Several of the salt ponds at the north end are unimproved, but make salt. Armstrong Pond, 20 miles from the north end, is an excellent pond. At the ponds at Great Harbor there have been 60,000 bushels of salt made in one year. These ponds are in very good order; about 43 acres are under cultivation; the salt ponds are 87 miles in extent. On the south side of the Island, distant 18 miles from Great Harbor, there is a very extensive Salina, of which some 13 acres are under cultivation. There are about 100 inhabitants in this district.

Great Harbor, Clarence Town, is of a large size, and vessels drawing 20 feet of water can lie in perfect safety. It is well sheltered by the mainland, which is very high in this part, and by the adjacent cays.

The entrance to this harbor is marked by a small beacon not sufficiently conspicuous for the situation, which should be clearly pointed out that foreign vessels might enter at night, it being open sea on the outside, and the coast rocky. There are about 140 inhabitants at Clarence Town, Great Harbor, a church and government school, and a Baptist chapel.

This Island does not abound in timber. There are 2,000 head of cattle and 3,000 sheep, and many horses; corn, potatoes, &c. are raised and exported; also, 10,000 bunches of bananas and plantains, from the northern end of the Island.

Cotton has at times been grown here, the staple and quality of which is considered superior. The Island has a good road from the north to the south end. The bridges at Roker's, on the main road, about nine miles from the north end, require repair, as does also Deal's bridge, and Alligator's bridge, twenty miles from the northern extremity of the Island. A lock-up is much needed at the north. I would recommend for it to be built at Simm's Settlement, fifteen miles from the north end. There is a church at this settlement, and a Baptist chapel. At Deadman's Cay there is a settlement about twelve miles north of Clarence Town; here there is a small church and a Baptist chapel.

#### LITTLE EXUMA.

The population of Little Exuma is about 160, chiefly engaged in the working of the salt pond, which is an excellent one of 240 acres in extent, of which 60 acres are under cultivation.



The pond is in a diseased state, and entirely flooded ; much salt cannot be expected to be raked whilst it continues in its present diseased state. The turtle pond lies between it and the sea, and a good canal has been cut in the rock from the salt pond to the turtle pond, with a view of supplying it with water, or letting off a superabundance ; but as the turtle pond is much higher than low water, neither purpose is well answered. The water that has been let through from the turtle pond to the salt pond, has brought with it quantities of vegetable matter, which accounts for, and is the principal cause of the diseased state it is in ; and so long as this canal is used as an inlet to the pond, the same result is almost inevitable. I would recommend that it should be wholly used as an outlet for superfluous water, and to be efficient for this purpose it ought to be deepened ten inches at the mouth into the turtle pond, and from the turtle pond a canal should be cut as quickly as practicable to the sea. For the feeding of the pond with sea water, the old canal would answer if deepened from the mouth. Both this and the canal connecting the two ponds require each two properly constructed flood gates. The retaining walls require to be pointed inside and out, and the sand thrown away from the sides.

The prison at this place requires so much repair, that I would recommend for it to be sold, and for a lock-up house to be built in a more convenient and suitable locality.

There is no church, nor enclosed burial ground.

## GREAT EXUMA.

The inhabitants number nearly 2,000, principally engaged in agriculture ; cattle, horses, sheep and goats are raised here ; of the first, there are some 400 head ; many of the adjacent cays have been stocked with hogs, sheep and goats, but they have been destroyed in a grievous way by dogs. One proprietor had a stock of 300 sheep upon a cay, which were thriving well, and the whole of them have been destroyed by dogs ; but notwithstanding this disappointment, so profitable is the raising of sheep considered, that he intends to re-stock the cay. There are many instances of 20 or 30 sheep being destroyed in one night, not only on the cays, but on the mainland ; on some cays the whole stock of pigs have been destroyed in the same manner. Since the tax upon dogs in New Providence, numbers have been taken down to different small cays and turned adrift, a most pernicious and injurious practice, by which much valuable property is destroyed ; and these small cays, which are so admirably adapted for the raising of animals, are rendered utterly useless.

Throughout the Bahamas the numerous smaller cays might be made to supply all the markets of the colony, and much more, were they properly attended to. On numbers of them goats, sheep and pigs are found, and many still remain unstocked ; some of these abound with birds, and the eggs of most are good for food and innumerable ; turtle eggs are also found in great quantities on the sandy beaches. Corn, potatoes, and yams, plantains, bananas and other fruit are raised and exported from Exuma ; the land

is good, and there is plenty of pasture. Cotton was formerly extensively cultivated on this Island; the plant may still be found in all the islands, and even a few bales are now and then exported, but beyond this it has ceased to be regarded as an article of commerce from the Bahamas. Since the abolition of slavery, the want of labor has caused many of the resources of the colony to remain in abeyance, but should emigration ever flow towards these shores, they would again be called forth, and the importance of these productive islands be appreciated and more truly valued.

At Moss Town or Moreley's Hill, there are about 600 inhabitants in the district, and over 300 in the settlement. The plaiting the palmetto leaf is carried on here.

The public school here deserves notice for its good order, and the cleanly appearance of the scholars.

No church, only a small Baptist chapel; two burial grounds, both unenclosed.

A few miles north of Moss Town is a small village, inhabited by some 60 families, who are all employed on the fine estate called The Forest. Many head of cattle are raised here, besides corn, potatoes, &c.

A schoolhouse is being erected by the people.

North of this several miles is Steventon, a settlement containing 400 inhabitants. Cattle and sheep are raised in this district; also corn, potatoes, &c.

A lock-up is much wanted at this place; no church, a Baptist chapel; no enclosed burial ground; a public school here. There is a good road from the north to the south end of Exuma. The white inhabitants of

the two Exumas amount to upwards of 160. There are many good sheltered harbors between the cays and the mainland, and under the lee of several of the Exuma cays.

#### NORMAN'S POND CAY.

The salt pond here is in excellent order. More salt has been made at this pond this year, in proportion to its size, than at any other in the Bahamas; and this may be attributed mainly to the pickle having been kept in a pure state by the admission of water from the sea, to cleanse the pond thoroughly. In common with all other salt ponds, it has been deluged with rain during the year.

I am led to remark, from my examination of the different arrangements and working of the various salt ponds, that were the reservoirs and ponds thoroughly cleaned out once a year, by the free ingress and egress of sea water, at a time when salt is not produced, very much more salt would be raked.

The one great fault that I find in all the ponds, is that the size of the canal is not proportioned to the size of the pond, or the locality, whether hilly or flat, taken into account. After a severe storm, the weather often clears up for a few weeks, and it is of great importance that this time should not be wasted. A large outlet canal to free the ponds as speedily as possible from the rain water, would put them in a state to make pickle directly the weather cleared; whereas, now much time is lost before the superfluous water can be drained off. This cannot be done quickly with a narrow canal. Many of the canals

are of necessity long, and the tide rising only about three feet from low to high water, there can be but little time for the letting in and out of the water. Another important consideration is, that the canal should be dug to the proper level. The nearer the level of a canal can be made to assimilate with that of the low water level of the tides, the greater the benefit to be derived from it in the working of a salt pond, and in no one instance have I found the canals of a proper level.

I may here mention that dams to prevent any sudden overflowing of the pickle pans during heavy rains are of vast importance, for it often happens that floods have carried away large heaps of salt, from the want of proper dams between the reservoirs and the cultivated pans.

The prosperity of many of the Bahamas depending entirely on salt making, and that of the whole colony being affected by it, any improvement or work that appeared to promise a more regular return for capital invested than is at present obtained, deserves a trial; and as the protection of salt works by glass roofs, from the destructive storms so frequent in these latitudes, certainly holds out the hope (which nothing else yet thought of does), of accomplishing this end in a great degree, I venture to suggest to His Excellency the Governor's consideration, the expediency of covering in a small portion of salt pond with glass or wood, that the benefit to be derived from this expedient might be practically and thoroughly tested; and if (as I apprehend would be the case), this plan secured the producing a regular supply, it would

become apparent how far it would repay each proprietor to have a larger or a smaller portion of his pans so protected.

SHIP CHANNEL.

At the head of Exuma Sound, there is a channel through which most of the vessels coming to Nassau from the south and east must pass. On one of the cays known as Ship Channel Cay, there is a small beacon which is of very little use, as vessels have often to lie to in the sound all night for fear of missing the right channel. And there being very many dangerous passages through this range of the Exuma cays, I would beg to recommend strongly that a large suitable beacon be erected on the same cay.

I beg to append the estimates connected with the works referred to in this report.

I have the honor to be, sir,

Your most obedient, humble servant,

THOMAS C. HARVEY, C. E.

The Honorable C. R. NESBITT,  
Colonial Secretary.

&c. &c. &c.

L E T T E R  
ON  
Q U A R A N T I N E S T A T I O N  
(ATHOL ISLAND).

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GOVERNMENT HOUSE, NASSAU,  
FEBRUARY 19th, 1857.

The Governor herewith transmits for the information of the House of Assembly, the plan of Athol Island, with proposed quarantine buildings thereon, and estimated expense (as furnished by the Out Island Civil Engineer), and referred to in his opening speech.

(Signed)

A. BANNERMAN,  
Governor.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
AUGUST 26, 1856.

SIR :

In forwarding to his Excellency the Governor the plans and drawings for the proposed quarantine station on Athol Island, which I have prepared in accordance with the directions received in your letter of the 7th inst. I beg to state that I decided on adopting the plan of detached octagonal buildings,

after duly considering various other styles of building with reference to their adaptation to a hot climate, and to the peculiar requirements of a quarantine station, and being convinced that no other offers the same facilities for effectual ventilation, for the separation of infected persons from the uninfected, for security in gales, and for economy of space and material.

Thorough ventilation is secured by having either a door or window in each of the eight sides, so that from whatever quarter the wind blows, it may be admitted into the building, and by having a centre ventilator on the roof with internal valves, by which the amount of breeze allowed to circulate may be regulated and directed, as required, to, or from any side of the hospital; and also by having covered gratings in the floor through which the outer air may be admitted, when desirable to change the internal atmosphere by complete circulation throughout. Effectual separation of the healthy from the sick can hardly be insured in this climate under the same roof; and the object of a quarantine station appears to demand that a place of safety be provided for the healthy equally with a hospital for the sick, for most probably in every vessel condemned to quarantine, the greater number of persons on board may be uninfected, and to secure, as far as human means can, the preservation of such from the sufferings of yellow fever, cholera, or whatever the disease may be that brings the vessel under quarantine law, I would strongly recommend that the second large building in my plan should be erected as quickly as practica-



ble after the hospital, if they cannot be built simultaneously, for the reception of those as yet free from disease. I would venture to suggest that the same plan be adopted, should additional accommodation ever become necessary. A third, or even a fourth detached building being I conceive far more desirable than any addition to those already erected. My plan allows accommodation for twenty-five patients in each building, as large a number perhaps as ought to be allowed.

The octagonal form is the nearest approach to the circular that can be conveniently applied to dwellings, and consequently it can withstand storms of wind better than any other. Elongated surfaces of wall intercept the wind too much for exposed situations in tropical climates, for in proportion to their size is the danger from the violence of a gale. The narrow portion of an octagon that is exposed to the direct influence of the wind is too small for any accumulated power to bear upon it; the sloping sides from the opposed front offering no resistance to the wind, it glances off. A low octagonal building affords the utmost security that can be obtained above ground, even in a hurricane.

The octagon also, next to the circle, encloses the largest amount of space in proportion to the length of wall, and is therefore the cheapest form that can be obtained. The facilities afforded by the situation will enable the works to be executed at a moderate rate. Stone can be procured on the Island near the site, and there is good sea sand on the shore, that when thoroughly washed can be used for mortar.

There is also plenty of limestone, and wood that might be used for burning it, on the spot; timber for the building is all that would have to be brought from a distance. If I may be permitted to suggest the plan I have known to be adopted elsewhere in public work, viz. : that of prisoners being employed, the great expense, that of labor, would be so much lessened as to reduce the cost considerably below my estimate.

Instead of dividing the building by fixed, solid partitions, I would recommend jalousied screens, seven feet high, and long enough to reach from the walls to nearly the centre of the building; these could be placed as circumstances may require between the beds, so as to separate any number from the whole range, or be removed altogether in case of only a very few sick being in the hospital. Seats placed in the veranda would enable convalescents to enjoy the sea breezes, the moment recovered strength permitted of their leaving their beds.

The veranda round the hospital will prevent the possibility of humidity affecting the walls, and the flooring being raised three feet, with free ventilation beneath through semicircular gratings, and a drain round each building, all dampness must be prevented.

To avoid the possibility of impure exhalations, I would recommend that privies should be constructed on the south shore, where the water is deep, and the current rapid.

The quarantine officer's dwelling, and the offices I have likewise made octagonal, for the sake of economy

and uniformity of appearance, and as being also the most commodious.

The extreme simplicity of these designs will, I trust, meet his Excellency the Governor's views in regard to his wish, that the buildings for the quarantine station should be perfectly plain, and inexpensive.

I append estimates of the different buildings, and a list of the drawings sent in.

I have the honor to be, sir,

Your most obedient, humble servant,

THOMAS C. HARVEY, C. E.

The Honorable C. R. NESBITT,

Colonial Secretary.

&c. &c. &c.

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LIST OF DRAWINGS.

- A. Geometrical elevation of the hospital.
- B. Plan showing arrangements of beds, &c.
- C. General plan of the relative situation of all the buildings.
- D. Elevation of officer's dwelling.
- E. Plan of ditto.
- F. Elevation of kitchen and wash house.
- G. Plan of kitchen, showing the disposition of the boilers, &c.
- H. Plan of wash house.

On motion of Mr. T. W. H. Dillet, Resolved, that a message be sent to his Excellency the Governor, requesting him to furnish the House with copies of any letters or correspondence he may have received from the Out Island Civil Engineer, relative to the introduction of convict or other labor into this colony.

Ordered, that the following message be sent to his Excellency the Governor :

May it please your Excellency, the House of Assembly request that your Excellency will be pleased to lay before the House copies of any letters or correspondence your Excellency may have received from the Out Island Civil Engineer, relative to the introduction of convict or other labor into this colony.

Ordered, that Messrs. T. W. H. Dillet, Rigby, Webb, and Bell, be a committee to carry the said message.

In reply to the Assembly's address, the Governor sends herewith two letters from the Out Island Civil Engineer, one dated 8th, the other the 18th November, 1856, on the subject of convict labor.

The Governor, before taking any steps on this important question, was desirous to obtain the opinion of her Majesty's Government, which he has not yet received. Should the House of Assembly entertain the question favorably, he would venture to suggest

that an address, expressive of the views of the House of Assembly, accompanied with Mr. Harvey's report, should be sent to the Colonial Minister, and the Governor will be very happy to forward it by the next mail.

(Signed)

A. BANNERMAN,  
Governor.

GOVERNMENT HOUSE,  
MARCH 19TH, 1857.

## LETTER ON CONVICT LABOR.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
NOVEMBER 8, 1856.

SIR :

In several of my reports and letters, I have pointed out to your Excellency the great difficulty and expense of accomplishing public works in this colony, arising from the want of efficient labor. There are many works not in themselves of an expensive character that would be of the greatest possible benefit, which cannot be undertaken solely from the impossibility of obtaining good and cheap labor; under these circumstances the expense of a common road, a wharf or such like, becomes exorbitant. My duty as Out Island Civil Engineer, has naturally brought this subject much under my notice, and feeling that it is one of vast importance to the prosperity of the Bahamas, and seeing no possible mode in which it can be met by any internal resource of the colony, I venture to trouble your Excellency with a few remarks on the only remedy that presents itself to my mind, one that appears to me would meet all the emergencies of the case; I allude to convict labor. The public works of the colony are, as your

Excellency is aware, in a very dilapidated and imperfect condition. The islands are scattered over a vast extent, from the most northern to Inagua, nearly three hundred miles, and none fully inhabited, and the peculiarly unenergetic character of the native laboring population forbids the expectation of any great works being achieved, even for their own immediate benefit ; to hope therefore, for sufficient labor from the inhabitants is out of the question ; and though there is much to induce emigration to the Bahamas, still even if this were encouraged and successful, it would not meet the difficulties of the case, as remuneration sufficient to repay the new settlers, would be open to objection on the score of expense, which the present state of the colony could not incur. The salt works on the various islands require, as I have before represented to your Excellency, a systematic improvement in their arrangement. A succession of adverse seasons, in some cases the unscientific mode in which the works themselves are constructed, and in others the entire absence of protecting dams, proper canals and sluices, have so lowered the receipts of the lessees, and crippled their efforts, that they cannot extricate themselves, and the salt pond revenue is not in a state for them to expect the Government to help them to the extent they require. Might not all these difficulties be met and overcome, could the Home Government be induced to send a limited number of convicts hither, who could be employed in repairing and constructing the public works for the benefit of the salt pond proprietors ?

I have already dwelt at large in my letters to your

Excellency, on the works required to improve the salt ponds, but I may here advert to the fact, that there is rarely, if ever, a season in which salt could not be made, if there were in operation the necessary means for speedily clearing the pans after rain, and for preventing floods by dams, ample canals and sluice gates that should at once carry off the water, and thus render it impossible to accumulate to a dangerous degree in any one spot. There are few days in these latitudes in which the process of evaporation is retarded by continuous rain, and could the pans be protected from, or speedily cleared of rain water, the sun and wind would soon remedy the mischief occasioned to the pickle by storms. Proper canals, &c. might ensure this result; but labor is so expensive that these required works are beyond the resources of the colony without long delays. Convicts could be employed in all those works with decided benefit to the country. There are throughout the Bahamas about 1000 acres in pans, and under cultivation, which may be estimated as one-fifth of the number of acres of Salina capable of profitable cultivation, and after the efficient working of the already cultivated pond had been secured by general protecting dams, wide canals, and so forth, what a field for convict labor would be open for Government in the bringing portions of the remaining Salinas into the same protected condition, for sale or rental. Ponds thus protected would no doubt induce many to become purchasers, and a large increase of revenue would be obtained by Government.

Roads through the various islands would be another



most advantageous employment of convict labor. These are wanted everywhere, and would open the internal resources of the agricultural districts. Valuable timber for ship building exists in abundance, particularly in Andros Island and Abaco, and pineapples, oranges and other fruits are raised in large quantities, but the want of roads checks the efforts of the inhabitants. The imperfect landing places of the Out Islands might be easily improved if labor was obtainable and moderate, and the harbors also might in many places be made very good ; perhaps none more loudly calls for attention than that of Nassau, which, from its situation and extent, is capable of being made an excellent naval station. All these improvements might be accomplished if convict labor was at the command of the Colonial Government ; and it appears from these considerations that there would be sufficient and continued employment for a limited number of convicts in the Bahamas.

With regard to the adaptation of this colony for such a purpose, it may be remarked, that it has great advantages in its comparatively short distance from England, in the security afforded by islands not very easy of access, in the command of soldiers to guard the convicts at work, in its superior healthiness to the West Indies, and last, though perhaps not least, in the power that any reclaimed convict would have of settling after the expiration of his sentence, or by ticket of leave for good conduct, into an honest laborer on some of the numerous cays, where he might with ease support himself, and send for his family if he had one, instead of returning to his old

haunts and temptations. These and similar considerations would perhaps prove the Bahamas to be more suitable for a penal settlement than the generality of the colonies.

I have the honor to be, sir, your Excellency's

Very obedient, humble servant,

THOMAS C. HARVEY, C. E.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
NOVEMBER 18, 1856.

SIR :

It gratifies me to find that the views I have taken, in my letter addressed to your Excellency, Nov. 7th, on the subject of convict labor as applicable to this colony, accord with your Excellency's opinion ; such being the case, I beg to add to what I therein stated, that portable iron lock-up and barracks might be readily transported for the use of the guard of soldiers, and the safe keeping of the convicts, from one island to another, and also that advantage might be taken of any of her Majesty's men-of-war cruising in the Bahama seas for that purpose.

I have the honor to be, sir, your Excellency's

Very obedient, humble servant,

(Signed) THOMAS C. HARVEY, C. E.

His Excellency

SIR ALEXANDER BANNERMAN,

Governor of the Bahamas,

&c. &c. &c.

It was moved by Mr. T. W. H. Dillet, (April 14, 1857), that a message be sent to his Excellency the Governor, requesting his Excellency to communicate to her Majesty's Government the desire of this House, that a limited number of convicts be sent to this colony, upon the same footing as convicts are sent to Bermuda; on condition that no convict be allowed to remain in the colony after the term of his punishment shall have expired, without the consent of the Bahama Legislature, in which shall vest the power of granting tickets of leave, for good conduct, to such convicts as they may deem eligible to be permitted to settle in the colony.

May it please your Excellency, the House of Assembly respectfully request that your Excellency will communicate with her Majesty's Government the desire of this House, that a limited number of convicts be sent to this colony, upon the same footing as convicts are sent to Bermuda; on condition that no convict be allowed to remain in the colony after the term of his punishment shall have expired, without the consent of the Bahama Legislature, in which shall vest the power of granting tickets of leave for good conduct, to such convicts as they may deem eligible to be permitted to settle in the colony.

## R E P O R T

ON

## LITTLE EXUMA &amp; OTHER ISLANDS.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
JANUARY 6, 1857.

SIR :

I beg to report, for the information of His Excellency the Governor, on the state of the public works, &c. on the Islands of Little Exuma, Ragged Island, and some of the adjacent range of cays: Fortune Island, Long Island, Rum Cay, Atwood's Cay, Mari-cuana and Inagua. I have very lately returned from visiting the above, and it was my intention to have also gone to Rock Sound, and to have visited more of the cays in my way, but contrary winds and boisterous weather precluded my doing so, without great delay.

## LITTLE EXUMA.

The salt pond on this Island is still in a diseased condition. The drainings of the land from a considerable distance to the eastward run into it. I have let the contract for building and repairing the east and west dams across the pond, which will protect

nearly the whole of the cultivated portion of the pond from the influx of drainage water. If a dam were constructed on the southern side of the pond, to connect the two already commenced, the main portion of the pond would be completely isolated from the shore. I have also let a contract for widening the northern canal and deepening it to the level of low water mark spring tides. The perfect draining of the pond will be secured by these means, and there is every reason to believe that all disease in the pickle will in consequence disappear; it will also insure a supply of pure water for the pond, and it will then only require from the lessees a proper management in the letting in and out of water to preserve the pond for the future in a healthy state. A very large salt shed has just been completed by one of the lessees, and another is in progress. The same proprietor is about to lay down a tramway from the centre of the pond to the sea.

The east and west dams, now undergoing repair, might have been preserved in good order, and the present outlay been avoided, had they been from time to time examined, and slight damages repaired as they occurred, and the present diseased state of the pond would also in a great measure have been prevented. All the dams in the Bahamas are constructed in a similar manner to those of Exuma, and I would suggest for the general advantage of all the salt ponds, that the possibility of incurring such expense be guarded against, for it increases in rapid ratio from a very trifling sum to a large amount; and I would recommend that the several canal keepers

should be employed to examine all the dams after every heavy rain, and to replace or repair any damage immediately; and that they should also keep the canals free from any accumulation of mud, &c. By doing this, much disease in the ponds would be prevented, and great after expense avoided.

A very good road runs from the east to the west end of the Island; sheep in good condition are numerous; and it produces corn, potatoes, &c. There are some very fine patches of corn. The water is very good; the public wells are cut in the rock, to the east of the town, in the low land.

There is no government flag staff on Exuma.

#### RAGGED ISLAND, AND ADJACENT CAYS.

The navigation of these islands is intricate and attended with much danger, in consequence of numerous rocky shoals and heads, and reefs running out from the land, and also from the fearful velocity of the currents through many of the passages. The first of the cays is called Water Cay, from good water being found there. On Flamingo Cay there is some good land, and the wild cabbage growing there, were it stocked with pigs, would support about 200.

Nurse Cay is about a mile in diameter, and the wild cabbage abundant.

Little Nurse Cay contains about eighty acres of land, and formerly the poor people of Ragged Island used to send their pigs to this cay for a few months to fatten on the wild cabbage that abounds on this, as on the others that I have mentioned. It would be a great boon to the poor of Ragged Island if two

or three of these cays were reserved by Government for the purpose.

Bonavist Cay is about 3000 acres in extent, and has some good land on it. I was informed that it was rented for three dollars a year.

Low Water, Harbor Cay, is stocked with sheep. It contains but very little good land.

Soldier Cay is also stocked with sheep.

Racoon Cay is inhabited by twenty-five persons. It has a salt pond on it of about ten acres; the salt raked averaging 18,000 bushels per annum. The land is good, and produces corn, potatoes, &c. The harbor or bay is  $1\frac{1}{2}$  fathom deep close in shore; it is open to the southeast.

Jim's Cay, about ten acres, is stocked with goats.

Ben's Cay, of the same size, also stocked with goats.

Johnson's Cay has been stocked with sheep several times, but they have always died off, it is supposed in consequence of feeding on some poisonous herb growing there.

Maycock's Cay, about 2500 acres. It has some very good land upon it, and plenty of excellent water; it was formerly stocked, but there are no cattle on it now, though it is suitable for all kinds.

Margaret's Cay, about 117 acres, has some very good land; there are fifty head of sheep on it.

Hog Cay, about 2000 acres of land, is only suitable for pasture, and is stocked with cows, goats, &c.; there is plenty of good water.

Little Ragged Island is about 120 acres. It has good water, and is stocked with 300 head of goats.

## RAGGED ISLAND.

The salt pond on this Island contains about forty-four acres. Half of it under cultivation, and the average raking of salt per annum 120,000 bushels. It is well laid out, but requires a short dam to preserve it from the drainings of the land. It is in a very healthy state, and reflects the greatest credit on the lessees. They have many difficulties to overcome in shipping their salt, and incur great expense. The anchorage is nearly  $4\frac{1}{2}$  miles from the pond, through a tortuous creek, and requiring to take advantage of the tides, so that very often they can only make one trip in a day, the fullness of the tides depending in that locality upon the wind. In boisterous weather they cannot round Salt Cay. These disadvantages might be obviated by cutting a channel three-quarters of a mile across the shoal in a direct line to the shipping place, which would enable them to ship salt in any weather, and shorten the distance  $1\frac{1}{2}$  miles.

The roads at present used are rough and steep, passing over the hill, and the salt has to be conveyed in baskets on the head to the wharves, where the barges are loaded, and have to await a full tide before the salt can be taken to the loading vessel. The roads could not be altered without incurring great expense. A railway might be easily constructed from the pond to the shipping place, but the size of the pond does not warrant such an expenditure.

The salt pond canal requires widening and deepening, and a new gate.

Ragged Island has about 160 inhabitants, princi-



pally engaged in the salt pond. The land is good, but little attention is paid to its cultivation.

There are sixty head of cattle, and a few horses.

A pound is wanted. They have been obliged to remove all the small stock to the cays, in consequence of there being few division walls on the Island. The late hurricane destroyed many cottages. The roof of the church was blown off, and the interior damaged. The public school house had the roof blown off, and the walls were slightly injured. The prison requires a new roof and repair to the doors. There is no enclosed burial ground. There is a Baptist chapel, and most of the inhabitants appear to belong to that persuasion.

There being no postal communication to this Island, it appears shut out from the rest of the Bahamas, and I was told they seldom hear from Nassau, except at intervals of two months.

A beacon is much needed on Hog Cay Point to mark the western entrance, and as a guide to vessels entering the harbor by the western channel. The flag staff which served for a landmark for vessels bound to Ragged Island, was blown down during the hurricane, and it would be advisable for it to be replaced.

#### FORTUNE ISLAND.

The road from Albert's Town salt pond to the front street is nearly completed. The canal outlet was damaged by the late rough weather, which prevented the contractor for the repair of the canal, beginning until lately on this work. I have let the contract for making a good cart road from the front street to the

prison, and from thence to the sea on the southeast side of the Island, a distance of  $3\frac{1}{2}$  miles. This road will be of great benefit not only to the lessees of the salt ponds, but to the inhabitants generally, it being impossible to load or unload vessels on the north side of the Island during northerly winds. Whilst these prevail, vessels are obliged to go to the anchorage at the southeast side, opposite which this road will terminate.

The salt pond is in tolerably good order.

There is no police or public office on this Island. A small shanty is rented at £12 a year for the purpose. A lot in a convenient situation, with a good substantial wooden house upon it, that has just undergone a thorough repair, might now be purchased for a moderate sum. It is in a healthy and elevated situation, sufficiently large to serve for a Crown Commissioner's residence, as well as for public offices. I would recommend its purchase.

The walls of the public school house are in an unsafe state. They are very much cracked, and otherwise defective, and are not worth repairing. The roof is thatched. The floor and internal fittings up would answer for another building, and I would recommend that one be erected in a more convenient and less exposed situation than the present, which is on a high sand ridge close to the sea, on the north side of the town.

A wharf is much wanted at Albert's Town, there being no other landing place than the sandy beach; and there is at present an opportunity of purchasing a strong hull of a large vessel which was wrecked last

year, and lies in an excellent position for a wharf, immediately in front of the town, on the north side. By filling this in with stone, and making a proper frame, &c. for it, it might be converted into a good public wharf.

#### LONG ISLAND.

The deepening of the salt pond canal in this Island, has already begun to show the great benefit to be derived from well adapted outlets, the water in the reservoirs having sunk lower than it has ever before been possible to reduce it; and when the canal is deepened to low water mark, the difficulty arising from the springs in the pans, now so injurious, and requiring so much watching and expense to remedy, will be overcome.

The lessee of the public pond has constructed at a great expense very high dams to protect the pans from inundation. By the widening and deepening of the canals, such high and expensive dams become unnecessary, in fact, positively injurious to the making of salt, by intercepting the wind, the powerful action of which upon the pickle is almost as serviceable in evaporation as the heat of the sun.

The lowering of the reservoirs will also get rid of another disadvantage from which the lessees suffer, viz.: the accumulation of fish, which they have found it impossible to destroy, not being able to empty their reservoirs sufficiently.

The outlet canal is still incomplete, and should be continued to the sea the width of the main canal, and be provided with two good flood gates.

The new roof, and other repairs to the Clarence Town prison, have just been completed.

The new police office will soon be completed. A wall is required on two sides of the lot, and a small gate in front to the street.

There is no Government flag staff.

#### ATWOOD'S CAY.

This cay is uninhabited, although there is some good land on it, and plenty of fresh water. There is an abundance of fish near, and turtle at the southeast end. There is an extensive reef harbor, within which the anchorage is good in any part for vessels drawing eight feet of water. The anchorage is also good close to the shore, on the north side of Quinquilla Cay, for large vessels, and through a channel in the reef on the east side of Quinquilla Cay vessels drawing twelve feet of water can pass. The western channel through the reef is eight feet deep. Between Quinquilla Cay and Atwood's Cay the soundings are fifteen, sixteen, and eighteen feet.

#### MARICUANA ISLAND.

The settlement on this Island is at Betsy's Bay, on the west side, where there are 20 inhabitants, who are engaged in clearing and cultivating, and the produce is certainly as luxuriant as in any island of the Bahamas. Where the settlers had cleared, the ground was literally covered with peas, potatoes, eddoes, corn, &c. There is a tract not far from the settlement, of red land (termed pineapple land), nearly five miles in extent, of good depth and very rich.

About ten or eleven years ago, it is said, some of the finest pineapples in the Bahamas were raised here. The inhabitants have been offered a certain sale for any number they might raise, but they are not able to obtain slips to plant. There is excellent white land on the north side, near Curtis Creek, but vessels cannot venture on that side on account of the reef. The black and red land lie on the south side of the Island. There are several savannas of some extent, covered with grass two feet high, similar to that on the great prairie at Inagua, the proof of the fattening qualities of which we have in the excellent beef to be had occasionally at Inagua.

The timber is of large size, and among the varieties I saw, I may mention wild tamarind, madeira, horse-flesh, green and black ebony, stopper, cassada and *lignumvitæ*, and much ship timber, knees, &c.

There are several Salinas in the Island ; one on the north side, at White Hill, three miles long, and half a mile wide, situated close to the sea, but there is no shipping place on that side. A large quantity of coarse grained salt was to be had there last August. A cart road might easily be opened to a shipping place on the south side, should this salt pond be cultivated.

There is a reef harbor on the south side of the Island called Abraham's Bay, with two channels through the reef. The eastern one is about twelve feet deep, with good anchorage on the inside.

There is plenty of good water. The inhabitants cannot communicate with other islands, or sell their produce, excepting when a vessel happens to touch

there, for they have not a single boat on the Island. They would willingly cut ship timber to pay for a boat and sails. The settlers frequently form parties to obtain the wild hogs which are numerous. A quantity of wrecked material, timber, &c. was drifting ashore on the north side, when I was there.

The attention of many persons appears to be turned to Maricuana, for I have been applied to for information concerning it by several. I would suggest that it would be desirable for this fine Island to be examined, and a good site for a settlement chosen, to prevent settlers from fixing on an inconvenient or unhealthy spot.

#### INAGUA.

I have surveyed the land for the railway, &c. on the north side of Mathew Town, about to be commenced by a company from Jamaica. The establishment of this company, directing its attention solely to the conveyance of salt from the pond to the salt houses, and from thence to the vessels, must prove of the utmost service to the salt proprietors generally, and will be the means of enabling persons of small capital to embark in the salt making with success. As it is intended that branch railways shall be continued to the several allotments, I would recommend that a portion of land be reserved for the benefit of the public on the north side of the terminus of this railway, at Mathew Town, extending twelve chains inland from the sea, and six chains wide.

I also surveyed a lot near this railway on the sea side of Gregory Street, for the new prison.

The dams across the salt pond at Rocky Cay are being proceeded with. In common with almost all the other roads and dams, they were injured by the hurricane. The dam constructed by the Commissioners between these dams and Craig's has been injured and requires repair.

The road called North Avenue has been completed, and must prove a great benefit to the lessees of that part, and running as it does through the centre of the pond, it will also benefit those who shall hereafter become proprietors of the upper part of the Salina. It will form a continuous road with the East Avenue and the present road to Mathew Town.

The East Avenue still remains unfinished, which will be a great hindrance to the lessees in the conveyance of their salt from the pond the coming season.

Twenty wind machines were destroyed during the late hurricane, averaging a cost of £20 each. Many of the lessees can ill afford this loss, which will cripple their efforts for the next season, as, on account of the scarcity of labor, it will be very expensive to fill and clean their pans without machines.

The main canal was much injured by the hurricane; an account of which, and the proposed canal at Gabriel's Cut, &c. was submitted by me to his Excellency the Governor, Dec. 23d, 1856.

The wall of the burial ground is nearly completed.

The Crown Commissioner's Office was destroyed by the hurricane, and the material has been used in enlarging and repairing the residency, which was also injured; it is now in some degree more comfort-

able, and better adapted to its object than it was before the disaster.

I would suggest that the new building required for the Crown Commissioner's Office, and for the police office, should be raised, to admit of the upper room being used for the public library, which at present is kept in an unprotected little shanty near the beach. The additional expense would be trifling.

The slight damage occasioned by the hurricane to the prison, has been repaired. The keeper's house was much injured, but as the new prison is to contain a keeper's room, it is perhaps not worth while to repair it.

The Government flag staff has been repaired.

The church had the front door destroyed, the walls on the north side cracked, and some injury done to the plastering, which is being repaired.

A new canal keeper's house has been erected near the spot where the one destroyed by the hurricane stood.

#### RUM CAY.

I have let the contract for making a wide canal from the salt pond to the sea on the southeast side, to be cut to the level of low water mark spring tide; and also the contract for the clearing and widening of the boating canal with two branches. I would recommend that when the above contracts are completed, the boating canal should be provided at the ends towards the reservoir with sluice gates, that that canal should be used as an outlet and boating canal, and that the small canal on the north side of the pond communicating with the reservoir, should



be only used for feeding the pond, and repaired and constructed for that purpose ; and that the eastern canal be properly repaired and only used as an inlet or feeder to the reservoirs ; and that the wide canal just contracted for, be used solely as an outlet. When the pond can be isolated from the land to prevent any land drainings from flowing into it, the possibility of the ponds becoming diseased will be prevented. The prison has been repaired, and the burial ground enclosed by a stone wall.

The public road contracted for will soon be completed.

There is no house on this, and several other important islands, appropriated for the Crown Commissioners' residences, which must occasion great inconvenience to those gentlemen and their families.

There is no Government flag staff on this Island.

I subjoin the estimates for the works proposed in the above report.

I have the honor to be, sir,

Your most obedient, humble servant,

THOMAS C. HARVEY, C. E.

## REPORT ON HARBOR ISLAND.

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The Governor herewith transmits for the consideration of the House of Assembly, the accompanying document.

Report of Out Island Civil Engineer on Harbor Island, with explanatory statement, and estimates of public works required there.

(Signed) A. BANNERMAN,  
Governor.

GOVERNMENT HOUSE,  
NASSAU, 23D FEBRUARY, 1857.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
FEBRUARY 9TH, 1857.

SIR :

I have the honor to inform you, for the information of his Excellency the Governor, that I returned from Harbor Island on Thursday last, and that whilst there I saw the foundation for the new prison laid on the solid rock. A quarry has been opened in the prison lot, and the stone is of excellent quality. The

greater part of the timber for the building, in coming from America, was washed overboard during a gale, and the work must necessarily be retarded some months, to allow time for the arrival of that now ordered ; but the stone work was progressing satisfactorily when I left.

The contractors for the repair, improvement, and re-shingling of St. John's church, and for enclosing the burial ground, intend to commence the respective works next month. The church still requires a vestry and belfry, and the inhabitants, generally, are desirous to have a clock placed in some conspicuous situation for the benefit of the town and harbor, and would subscribe for the purchase of one, if there were a suitable situation for it. I would, therefore, beg to suggest, that an inexpensive tower or steeple should be erected at one end of the church, the lower part for the vestry, with the belfry above, in which the clock could be placed, and the whole, from the elevated situation of the church, would prove serviceable as a landmark for vessels

The two wharves in the harbor require repair, and to be extended farther out, as small boats cannot at present come up to them at low tide. The spot fixed upon for a market house appears well suited for the residence of a Crown Commissioner, being on a high bluff, overlooking the whole harbor, but badly adapted for a market. The food of the inhabitants being principally fish, I would suggest that a more accessible, and better locality would be, at the foot of the wharf at Gun Point, where also the refuse would be readily washed away—an important con-

sideration in a sanitary point of view. The wells on which the inhabitants of Harbor Island depend for their supply of water (almost entirely, there being but few small tanks in the town), are dug in the sand on the eastern beach of the Island, at a distance of nearly 700 yards from the front street, and the water having to be brought over a high hill in buckets is expensive, costing about two pence sterling a bucket. I would suggest that the quarry which is now opened in the prison lot be converted into a tank. The water might be sold for a halfpenny a bucket, which would repay the expense of making it. The church is not more than thirty yards from this quarry, and the site of the new prison is still nearer; these two buildings might supply the tank with rain water, if they were provided with gutters, &c.

A pound is wanted, and if the prison lot were enclosed, a portion of it might be reserved for that purpose, and the proceeds from the sale of the old prison and lot might go towards the building of the wall.

There are two fine schooners building at Dunmore Town.

There is a Government flag staff, but no flag.

The road from Governor's Bay to the bay opposite Spanish Wells is almost entirely overgrown, which causes great inconvenience both to the inhabitants of Harbor Island and Spanish Wells.

In walking through the Island, many medicinal plants were pointed out to me by the medical gentlemen of Dunmore Town, and upon Eleuthera, near Current Point, I am given to understand there are many more.

Land is being cleared for the purpose of extending the planting of cocoanuts. I observed the cotton plant in several places. Cattle were formerly raised on this Island, but from want of proper receptacles for reserving the rain water, they did not thrive, and the raising of them has been abandoned.

I append the estimates for the proposed works.

I have the honor to be, sir,

Your most obedient, humble servant,

(Signed) THOS. C. HARVEY, C. E.

The Honorable C. R. NESBITT,  
Colonial Secretary,  
&c. &c. &c.

L E T T E R  
ON  
THE TENURE OF SALT PONDS.

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The Governor herewith presents to the House of Assembly a letter addressed to him by the Out-Island Civil Engineer ; the subject to which it alludes may eventually become of vast importance to this colony ; it is the proposed conversion of the leasehold tenure of salt ponds into freehold. The Out Island Engineer states that much valuable information may be got from the Legislature, if this question is laid before them this present session.

The Governor, therefore, sends to the Assembly the letter of Mr. Harvey, and if the Assembly chooses to afford him any information, he will be happy to forward it to the Colonial Minister, along with other documents on the same subject, by the next mail.

(Signed)

A. BANNERMAN,  
Governor.

GOVERNMENT HOUSE,  
APRIL 2, 1857.

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OUT ISLAND CIVIL ENGINEER'S OFFICE,  
APRIL 2, 1857.

SIR :

Your Excellency having drawn the attention of the Legislature last year, to the important object of the

management of the valuable salt ponds of the colony, and alluded to the desire expressed by some of the lessees that the tenure by which they are held should be changed from the present leasehold to freehold, a proposition which your Excellency informed the Assembly had been favorably received by Her Majesty's Government, but that further information was required, I venture to trouble you with a few remarks on the subject. The Legislative Assembly now sitting contains many members capable of discussing the change of tenure in all its bearings, and were the question to be brought before them, much valuable and decisive information might be elicited. It is a subject of the greatest importance to the lessees of salt ponds, and one which if carried out with care, would certainly relieve the Government of much trouble, whilst at the same time it would create a greater interest in the Out Islands of the colony amongst the inhabitants generally. A large amount has been expended by the lessees upon the salt ponds, and much additional expense incurred, by the works for carrying on the salt making not having been properly constructed, or carried to a sufficient extent; these drawbacks may account for the rents being in so many cases in arrear. The change of tenure from leasehold to freehold would prove of the greatest benefit to the present proprietors, who have already expended large sums in bringing portions of their property into working order, and who would probably be thereby induced to settle permanently, and to introduce improvements that might perfect the system of salt making, they having the prospect of leaving

such improvements as a lasting advantage to their families, the change would in all probability also be the means of bringing much capital into the country, and a proportionate increase of revenue must of course follow. To ensure that the change of tenure should prove not only the boon to the proprietors, which your Excellency agrees it is likely to be, but also an equal advantage to the Government and country generally (for should the leasehold be converted into freehold, the arrangement will without doubt be effected upon such equitable terms as shall be approved of by her Majesty's Government), I would venture to suggest that it should be granted under certain conditions, such as—

1. That there should be a tax of one halfpenny per bushel upon the salt exported.

2. That all roads on the salt ponds, protecting dams and canals, should be executed by the Government, and ever after be kept in repair by the freeholders.

3. That they (the freeholders) should annually elect five of their number to examine and see that all such works are properly kept in order, and to control the arrangements made for the letting in and out of water to the ponds.

4. That there should be one canal keeper to each pond, to reside near the most important canal.

5. That all roads to and from the salt ponds should be considered as ordinary roads, and not as salt pond roads.

If this change of tenure were granted, it must prove a great boon to the salt proprietors, and if at



the same time small allotments in the vicinity of the ponds were given to such laborers as felt disposed to settle, thus securing a better supply of labor for the salt raking than at present exists, it could hardly fail to ensure a more prosperous state of things for the Out Islands, particularly if the question of convict labor for public works should be carried out for the Bahamas.

I have the honor to be, sir, your Excellency's  
Very obedient, humble servant,

(Signed) THOMAS C. HARVEY, C. E.

His Excellency

Sir ALEXANDER BANNERMAN,  
Governor of the Bahamas,  
&c. &c. &c.

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Mr. T. W. H. Dillet, from the select committee appointed on the 27th ult. to whom was referred His Excellency the Governor's message, with the accompanying documents, on the subject of convict labor, handed in the following report, which being brought up and read, was ordered to lie on the table:

The select committee, to whom was referred the message of His Excellency the Governor, transmitting certain documents relative to the introduction of

convict labor into the Bahamas, and the granting of lands to encourage the settlement of laborers on the Out Islands, having duly weighed and considered the importance of these subjects, beg leave to make the following report :

1. Convict labor.

The committee being fully aware of the wants and necessities of the colony, so far as concerns labor and the difficulty of procuring it, concur in the general sentiments expressed by the Out Island Civil Engineer, and the resident Justice and Crown Commissioner at Inagua, in their communications on the subject.

The committee is of opinion that the introduction of convict labor into the Bahamas, would prove of great benefit to the colony, and that the resources of the various salt producing and agricultural islands would be thereby developed, as it would enable public works of greater or lesser magnitude to be accomplished, which are at present prohibited from the want of available labor.

The committee would recommend the House to request Her Majesty's Government to send a limited number of convicts to this colony, on the same footing as at Bermuda ; conditioned, however, that no convict be allowed to remain in the colony after the term of his punishment has expired, without the consent of the Bahama Legislature, in which shall vest the power of granting tickets of leave for good conduct, to such convicts as they may deem eligible to be permitted to settle in the colony.

2. It appears to the committee that very great benefits would result from the granting of lands in the vicinity of the salt ponds to promote the permanent settlement of persons on the Out Islands; that these benefits would not only accrue to the salt proprietor, but would be the means of inducing a more industrious class of persons to take up their abode there. Many persons now engaged in the pursuit of wrecking, might also be induced to turn their attention to agriculture, and thus obtain a surer and less fortuitous mode of securing a livelihood for themselves and families.

Entertaining these views, the committee would recommend for the adoption of the House, that a message be sent to His Excellency the Governor, respectfully requesting His Excellency to forward to Her Majesty's Government the views of the Out Island Civil Engineer on the subject, as expressed in his letter to His Excellency, and at the same time to request their acquiescence.

(Signed)	T. WM. HENRY DILLET,
"	HENRY STEVENSON,
"	R. E. RIGBY,
"	D. S. FARRINGTON.

COMMITTEE ROOM,  
9TH APRIL, 1857.

The following resolutions were moved and agreed to by the House :

1. By Mr. Doyle :

Resolved, That in the opinion of this House it is most desirable that the existing leasehold tenure of the salt ponds in the Bahama Islands may be beneficially converted into freehold, as such a change is pre-eminently well calculated to produce extensive improvements in such portions of the Salinas as are at present under cultivation ; to cause other parts thereof to be brought under cultivation, and to induce the investment of a large amount of capital, and the profitable employment of much industrial labor ; to advantage, in many respects, the salt producing islands particularly, as well as the interests of the colony generally ; and that the terms of such conversion may be satisfactorily adjusted hereafter between Her Majesty's Government and the Executive Government of this colony.

2. By Mr. Nesbitt :

Resolved, That it is further the opinion of this House that there should be no limitation to the tenure (at present limited to twenty-one years), of existing leases in such salt ponds, while lessees who may prefer retaining their leases to converting them into freehold tenure, punctually pay the annual rates of rental specified in such cases.

Ordered, That the following message be sent to His Excellency the Governor :

May it please your Excellency: The House of Assembly herewith transmits to your Excellency two resolutions, this day passed by the House, in reference to the tenure under which the several salt ponds of the colony are at present held by the persons cultivating such ponds, and they respectfully request that your Excellency will transmit such resolutions to Her Majesty's principal Secretary of State for the Colonies, as expressive of the opinion entertained by the House on the subject in question.

Ordered, That Mr. Doyle, Mr. Stevenson, Mr. Farrington and Mr. T. W. H. Dillet, be a committee to carry the said message.

On motion, the House adjourned.