PAPERS

RELATIVE TO THE

RESURVEY OF THE MANUKAU BAR.

PRESENTED TO BOTH HOUSES OF THE GENERAL ASSEMBLY, BY COMMAND OF HIS EXCELLENCY.

WELLINGTON.

1869.

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PAPERS RELATIVE TO RESURVEY OF THE MANUKAU BAR.

No. 1.

His Honor J. WILLIAMSON to the Hon. E. W. STAFFORD.

Wellington, 21st October, 1868. SIR. I have the honor to direct your attention to the pressing necessity that exists for making an accurate survey of the Manukau Bar, which has shifted of late, with the view of preventing any

casualty to shipping frequenting that port.

From the observations of the captains of steamers trading to Manukau, it would appear that the South bank has so shifted as to render the leading beacons erected on the South Head dangerous; in fact, to observe the sailing directions would bring any vessel on the tail of the bank. Moreover, Captain Kennedy of the s.s. "Airedale," on his last trip, came out by a new channel, not laid down on the charts, which he reports as being a mile shorter, and smoother and deeper water, than the South Channel, now usually taken by steamers and sailing vessels.

I would suggest that as it is of the utmost importance to determine these points, the General Government should direct a survey of the bar at the Manukau Harbour to be made, and for this purpose employ the Colonial steamer "St. Kilda," or other steam vessel. Being outside the Manukau Harbour, this duty devolves upon the Colonial Government; but if you should require it, I would direct Captain Wing, Pilot and Harbourmaster at the Manukau, to assist in making the survey.

The Hon. Colonial Secretary, Wellington.

I have, &c.,
J. WILLIAMSON,
Superintendent of the Province of Auckland.

No. 2.

The Hon. E. W. Stafford to His Honor J. Williamson.

(No. 268.) Colonial Secretary's Office, Wellington, 23rd October, 1868.

I have to acknowledge the receipt of your Honor's letter of the 21st instant, calling the

attention of the Government to the alleged recent shifting of the Manukau Bar, and to the necessity of an accurate resurvey of it.

The Government has no vessel available at present for this service, but in order to lose no time in exactly ascertaining the present position of the bar, and in fixing the buoys and beacons accordingly, I have to request your Honor to be good enough to direct Captain Wing, the Pilot and Harbourmaster at the Manukau, to take the necessary steps at once to perform this service. The Marine Department will be instructed to communicate with Captain Wing on this subject, but he should not on that

account delay the necessary work.

The General Government will advance the necessary funds, and the expenses will be charged against the Province of Auckland, under the 27th section of "The Marine Act, 1867," which requires such expenses on account of harbours "or the approaches thereto," to be charged against the Province I have, &c., E. W. STAFFORD. in which such harbour is situated.

His Honor the Superintendent, Auckland.

No. 3.

Mr. Balfour to Captain Wing.

Marine Department, Wellington, 24th October, 1868. SIR,-The Colonial Government have instructed me to communicate with you on the subject of a resurvey of the Manukau Bar, with a view to making any changes which may be necessary in the positions of the leading marks, buoys, &c., the Hon. the Colonial Secretary having requested His Honor the Superintendent of Auckland to instruct you to make such survey without delay.

It is to be regretted that the "St. Kilda" has been detached on other services, and is consequently

unavailable for this work; at the same time, her considerable draft of water and small power render her inconvenient, if not unsafe, for bar survey work, and I should imagine that you will be able to procure a more suitable vessel on the spot—a light-draft paddle or twin-screw boat, of considerable power, would be much the most convenient style of craft for the work.

I am satisfied that no better arrangement could be made for the purpose of examining and buoying the new channel than has been done in intrusting it to your care, as your local experience will be greatly in your favour. I am not aware, however, whether you have been in the habit of making such surveys in the methodical manner which is necessary before the work can be laid down on paper, in a sufficiently accurate manner to stand the scrutiny of the Hydrographical Department of the Admiralty, and shall be glad to hear from you whether you can undertake to plot the new positions of the banks or not.

This, however, is not the most immediately necessary part of the work. The first thing is that you should make yourself and assistants thoroughly acquainted with existing channels, so as to be able to

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guide vessels through them safely; and, to that end, you should make any necessary changes in the position of the buoys and other leading marks, and send me an account of what you have done, to be published in the Gazette.

In the event of your requiring assistance in reducing the results of your survey to paper, I shall endeavour to make an early visit to Auckland myself, or to send a competent marine surveyor in my

Please let me hear from you on the subject with all convenient speed.

JAMES M. BALFOUR,

Captain Wing, Harbourmaster, Auckland.

Colonial Marine Engineer.

No. 4.

Mr. Balfour to the Hon. J. Hall.

Marine Department, Wellington, 9th November, 1868. Sir,-I have the honor to forward for your information the accompanying letter from Captain Wing, the Harbourmaster of Manukau. It will be observed-

The new channel seems to have been well known to Captain Wing, and is not the new discovery which the letter of His Honor the Superintendent of Auckland, I presume unintentionally, led me to

2. The channel being known, and signals even devised for it, there is no such pressing hurry for an exact survey of it; and indeed charts of such a harbour are little better than a delusion, as in all probability the channel will have shifted again before the corrected (?) chart is published. A certain amount of surveying ought however to be done, so as to give Captain Wing confidence in his knowledge of the changes taking place.

3. The buoys, beacons, and establishment generally, appear to be in a deplorable state; worse than I fancied when writing my Memorandum No. 177 c., of date 2nd November, 1868; and it is clear something must be done shortly, either to put matters straight or to close the port. I believe that it will cost not less than £200 to £300 to make the survey ordered, and put buoys, beacons, &c., on a

satisfactory footing again.

As soon as some necessary works have been attended to here, I propose, with your approbation, to visit Auckland and Manukau, with a view to ascertain exactly how matters really stand.

The Hon. the Postmaster-General, Wellington.

I have, &c.,

JAMES M. BALFOUR,

Manie Colonial Marine Engineer.

Enclosure in No. 4. Captain Wing to Mr. Balfour.

Harbour Department, Manukau, 30th October, 1868. SIR,

I have the honor to acknowledge the receipt of your letter dated 24th instant, in which you inform me that the Colonial Government has instructed you to communicate with me on the subject of resurveying the Manukau Bar, with a view of making any changes which may be necessary in the positions of the leading marks, buoys, &c.; also, that the Hon. the Colonial Secretary had requested His Honor the Superintendent of Auckland to instruct me to make such survey without delay.

In reply to the above, accompanied with your own remarks, I have to inform you that a fresh survey of the Manukau Bar is necessary to a certain extent to prove the soundings, which cannot be done with safety in an open boat, without having a vessel in attendance. The most urgent requirements are the extension of the beacon-ways at the South Head for readjusting the line of beacons to clear the south-east part of the Tranmere Shoal (which has grown to the south-east of late; also to clear the south-east part of the Tranmere Shoal (which has grown to the south-east of late; also to have all the buoys cleaned and repainted which is absolutely necessary for the safe guidance of shipping passing through the channels. The buoys at the entrance of the harbour are so foul that they will not show above water during the strength of spring tides, and will require the services of a suitable steamer to remove them for repairs and repainting. But as regards the buoys inside the harbour (which are also very foul), they can be attended to by a cargo boat. It will be necessary to have a few spare buoys to replace them, while the others are being cleaned and painted; also, all the beacons require painting, for the purpose of making them conspicuous, as well as preserving them.

The hiring of a steamer in the place of the "St. Kilda (as mentioned in your letter), for the purpose of moving and replacing the seaward buoys and otherwise attending to surveying, is a matter of further consideration, as there are no steamers about the Manukau that can be got for the purpose, and

further consideration, as there are no steamers about the Manukau that can be got for the purpose, and

will have to be brought from elsewhere,—most probably from Auckland.

As regards my undertaking to resurvey the entrance of the Manukau, so as to stand the scrutiny of the Hydrographical Department of the Admiralty, is a responsibility I do not feel myself qualified to Yet, at the same time, I do feel to have a thorough knowledge of the harbour, and would willingly assist any one you might please to appoint for the purpose. At present I have received no communication from His Honor the Superintendent of Auckland, on the subject of resurveying the Manukau Bar, as mentioned in your letter.

In your Notice to Mariners, dated 24th instant, referring to alteration of channel, Manukau Bar, there appears some misunderstanding as regards the notice given that the south bank at the entrance of the Manukau Harbour is reported to have shifted, so as to render it unsafe to enter on the line of the leading beacons on the South Head; also, as this line would now lead on the tail of the bank.

In reply to the above notice, I have respectfully to inform you that there is no bank at the entrance of the Manukau bearing the name "South Bank," as above quoted, and have to request that you will refer to the directions for navigating all the channels at the entrance of the Manukau, which were forwarded from me to your office some time back thorough the Provincial Government of Auckland, for your information and approval for publication, and which, I think, will be sufficient to show that your informant has confused the extending of the south-east part of the Tranmere Shoal, and called it the South Bank. The South Head beacons, as now standing in line, lead a fairway course between the outer shoals until within about two cables of the south-east point of the Tranmere, when, for the purpose of keeping deeper water, it is necessary to keep to the south-east until the beacons are open about three times their own width, which vessels are warned of by the pointing of the telegraph arm, until the North Shore beacons are brought in line, which will lead safe into the harbour.

I would feel extremely obliged if you would pay a visit to the Manukau at your earliest convenience, as you would then be able to see the necessary harbour requirements much more satisfactorily than I can describe in this reply. The work contemplated is of an urgent and expensive nature, and, under those circumstances, it is very desirable that I should be guided under your direction and authority.

James M. Balfour, Esq., Colonial Marine Engineer, Wellington, New Zealand.

I have, &c., THOMAS WING, Harbourmaster.

No. 5.

Mr. Balfour to the Hon. J. Hall.

Resurvey of Manukau Bar.

Marine Department, Wellington, 21st November, 1868. SIR, I have the honor to forward herewith a tender from the Managing Director of the New Zealand Steam Navigation Company to supply the s.s. "Ladybird" for the resurvey of Manukau Bar, at the rate of £30 per day when under steam and £25 per day when not under steam (i.e., £25 per day for detention during bad weather).

I had requested a tender to do the work with the "Storm Bird," but there was some difficulty about the insurance of that vessel, and the tender has been sent in for the "Ladybird" at the same rates as the "Storm Bird" would have been offered for.

The tender is reasonable under all circumstances, but the cost of the survey would be probably not under £300 at these rates, thus increasing the probable cost of getting the Manukau Harbour service into decent order to £450 or more.

Before accepting this tender or coming to any decision in the matter, I beg to recommend that I be authorized to write to Captain Wing, asking him on what terms he could get a suitable steamer at Auckland, especially as the "Ladybird" draws more water than I should wish for a vessel to be I have, &c.,
JAMES M. BALFOUR, employed on any such service.

The Hon. the Postmaster-General, Wellington.

Colonial Marine Engineer.

Enclosure No. 5.

Mr. W. Bishop to Mr. Balfour.
New Zealand Steam Navigation Company (Limited),

Wellington, 21st November, 1868.

In reply to a verbal inquiry received from you, I beg to offer the s.s. "Ladybird" for the use of the Government officers who are to resurvey the bar and to remove and replace the buoys in Manukau Harbour on the following terms, viz.:-

Payment to be made at the rate of £30 per day while under steam, and £25 per day while not under steam; any day upon which steam is got up by order of the officer in charge of the service to count as a day under steam. Payment to commence from date of vessel's arrival at Manukau, and to cease on completion of service. The time of engagement to be not less than ten days. Any officer going from Wellington to pay the fare usually charged to Government officers. Officers and men to be rationed at the providore's rates.

> I have &c., W. BISHOP,

J. M. Balfour, Esq., Colonial Marine Engineer.

Managing Director.

No. 6.

Mr. R. J. CREIGHTON to Hon. E. W. STAFFORD.

Superintendent's Office, Auckland, 2nd December, 1868. SIR, Herewith I have the honor to transmit, for the information of the Colonial Marine Engineer, a copy of a letter from the Harbourmaster at the Manukau, reporting an inaccuracy in the notice which appeared in the New Zealand Gazette of the 31st October last, with respect to an alteration in the channel of that bar.

I have, &c.,

R. J. CREIGHTON,

The Hon. the Colonial Secretary, Wellington.

For the Superintendent.

Enclosure in No. 6.

Captain Wing to His Honor J. WILLIAMSON.

Harbour Department, Manukau, 10th November, 1868. SIR. I have the honor to report for your Honor's information, that the notice given in the New

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Zealand Gazette, 31st October last, from the Marine Department, Wellington, dated 24th October, 1868, respecting alteration of channel, Manukau Bar, is in a measure incorrect as regards the name of the shoal and otherwise as being unsafe to enter on the line of the leading beacon on the South Head; and as the notice has a tendency to confuse mariners when approaching the harbour, I have written to the Colonial Marine Engineer at Wellington to draw his attention to the subject.

I have, &c.,

THOMAS WING,

His Honor the Superintendent, Auckland.

Harbourmaster.

No. 7.

The Hon. E. W. STAFFORD to His Honor J. WILLIAMSON.

(No. 312.) STR.

Colonial Secretary's Office,

Wellington, 12th December, 1868.

I have to acknowledge the receipt of your Honor's letter No. 145, of the 2nd instant, transmitting a copy of a letter from the Harbourmaster at Manukau, stating that an inaccuracy had occurred in the notice from the Marine Department, in the New Zealand Gazette of the 31st of

The Colonial Marine Engineer, to whom I referred your Honor's letter, states that the notice in question was almost a verbatim copy of your letter No. 2713, of the 21st of October, which called the attention of the Government to the incorrectness of the sailing directions for the Manukau.

It is not suggested that the notice should be recalled and amended, and there appears no necessity for that being done, as the notice is only intended as a caution, and the Marine Engineer is about to visit the Manukau for the purpose of examining the approaches to the harbour.

I have, &c.,

His Honor the Superintendent, Auckland.

E. W. STAFFORD.

No. 8.

The Hon. E. W. STAFFORD to His Honor J. WILLIAMSON.

Colonial Secretary's Office, Wellington, 20th January, 1869. SIR. Adverting to my letter No. 268, of the 23rd of October last, on the subject of a resurvey of the Manukau Bar, I have the honor, at the request of the Postmaster-General, to enclose copies of a letter, dated the 12th ultimo, and of its enclosure, from the Colonial Marine Engineer, on the subject of the

estimated expense of that resurvey. As the expenditure on the proposed work would be by law a charge on the Province of Auckland, the Government will be glad to consider any remarks or suggestions relative thereto, which your

Honor may wish to offer.

His Honor the Superintendent, Auckland.

I have, &c., E. W. STAFFORD.

Enclosure in No. 8.

Survey at Manukau.

Marine Department, Wellington, 12th December, 1868. SIR.

I have the honor to forward herewith a tender recently received from Captain Wing, for chartering the "Halcyon" for survey purposes at Manukau, which, I regret to report, is much less favourable than I had anticipated.

Captain Wing proposes that she should be engaged for one month certain; but of this eight days must be deducted for passage to and from Manukau, leaving say twenty-two days (including Sundays) for actual service.

For this he proposes to charge expenses, £10 per day (for the thirty days) hire, and coals, so that the expense will be somewhat as under:—

One month's expenses as per his statement	$ \begin{array}{ccc} \pounds & s. \\ 230 & 0 \end{array} $	d. 0	
Hire, thirty days at £10	$ \begin{array}{ccc} 300 & 0 \\ 187 & 10 \end{array} $		
	£717 10		

$$\left. rac{\pounds717 \ 10s.}{22}
ight\} = \pounds32 \ 12s. \ \text{fully per day}.$$

The "Ladybird" has been offered for £25 per day when steam is not got up, and £30 when steam is got up; the hire to date from the arrival at Manukau, and to cease when the work is done. These terms are certainly much more favourable to the Government, especially when it is considered

that the New Zealand Steam Navigation Company only stipulate for ten days' certain employment.
On the other hand, the "Halcyon" would, I believe, be fully the most suitable boat of the two for the work, as she is staunch, of light draught, and worked by a twin-screw, making her especially handy. I do not say Mr. Wing's offer is too high, though more than I anticipated; but the whole estimate

OF THE MANUKAU BAR.

of the cost of survey must be revised, especially as I have little doubt that Captain Wing's estimate of the time required may be correct. The estimate must, therefore, stand somewhat as under:—

					£	s.	d.	
Hire of steamer			•••	•••	 720	0	0	
Extra hands (at least)					 150	0	0	
Overhaul and repair of twen	ty-two	buoys in	harbour,	at, say, £4	 88	0	0	
Overhaul of two outer-buoys					 50	0	0	
Survey materials, &c., say					 50	0	0	
					£1.058	0	0	

But there are so many contingencies which I cannot foresee (having never been at Manukau), that

it would be only proper to put down the cost of the work at about £1,200.

I am unable to advise as to the necessity or propriety of expending so large a sum upon this work, but my own feeling is against doing so. Seeing that the bar does shift, and is known to do so, and that the Harbourmaster is apparently always aware of its condition, and able to guide vessels in or out safely, the need for a resurvey is very problematical.

I should, on the whole, recommend that tenders be taken for shifting, repairing, painting, and replacing the buoys; for putting the beacons and signalling gear in good order, and for doing everything necessary to the safe navigation of the harbour, with the exception of resurveying the bar.

Should you consider that, on this occasion at least, a survey should be made, I beg to recommend that I be permitted to take Mr. Woods with me (I expect him from the West Coast immediately), as, were he there, I should be able to attend to other work which equally requires looking after, as well as to go with ms sufficiently often to see that he does the work well and thoroughly. By this arrangement, also, I should learn to form an opinion as to the reliability of his surveys elsewhere.

Mr. Woods' salary would be quite saved by the greater expedition with which two persons could do the work. Two days saved would nearly cover his pay.

I have, &c.,

The Hon. the Postmaster-General, Wellington.

JAMES M. BALFOUR, Colonial Marine Engineer.

Sub-Enclosure in No. 8. Captain WING to Mr. J. M. BALFOUR.

Captain Wing to Mr. J. M. Balfour.

Onehunga, 26th November, 1868.

Your letter of the 21st instant, referring to the hire of the steamer "Halcyon" for surveying and buoying purposes at the Manukau, came to hand by Captain Kennedy of the s.s. "Airedale," and in reply I have to offer the service of the "Halcyon" and crew, for the purpose above mentioned, on the following terms:—The twin-screw steamer "Halcyon" to be taken for one month certain at the rate hereafter shown. The time specified in your letter is too short, as I feel the work cannot be done under the ordinary run of weather about the Manukau. I may here mention that during rough weather outside the harbour, the "Halcyon" can be employed attending to the removal of buoys for repairs justide the harbour twenty-two in number.

repairs inside the harbour, twenty-two in number.

The hire of the "Halcyon" to commence from the day of leaving Auckland, or otherwise allow four days for making the passage to the Manukau, and an equal time also to be allowed for the return to Auckland, as there is no employment for her at the Manukau.

As regards a separate price per day while under steam (mentioned in your letter), I would prefer

that you would provide the coals, or in any way you may suggest, at the rate consumed.

The victualling of officers would be 3s. 6d. per diem, and the men 2s. 6d. each.

The attached memorandum will show the expenses of the "Halcyon" per month, and the sum required for the hire of the vessel. The work she will have to perform is attended with considerable risk and much rough usage.

James M. Balfour, Esq.

Colonial Marine Engineer, Wellington.

I have, &c., THOMAS WING.

Memorandum of Expenses, steamer "Halcyon."

								£	s.	d.
Master, pe	r month				•••			25	0	0
Mate								13	0	0.
Engineer								20	0	0
Chief stoke	er and as	sistant er	ngineer	• • • • • • • • • • • • • • • • • • • •				12	0	0
Stoker			•			***		10	0	Ø
Boy, coal t	rimmer				•••			4	0	0
Two seame		6					•••	12	0	0
Cook								8	0	0
Steward			•••	•••	• • • •			8	0	0
								$\pounds 112$	0	0
Provisions,	per mon	th			•••			37	10	0
Insurance			per cen	t. £1,500	(half valu	ae)		60	0	0
Oil, tallow				•••			• • • •	15	0	0
Wear and	tear, sail	s and rig	ging	•••	•••	• • •		5	10	0
		_	_		• •					
								£230	0	0

Average consumption of coal in twenty-four hours' steaming, about five tons.

The average consumption of coal, while surveying and buoying, would be about three tons per diem, at about £2 per ton.

The hire of the "Halcyon," clear of expenses, to be £10 per diem.

T. W.

No. 9.

Mr. Balfour to the Hon. J. Hall. Survey, &c., at Manukau.

(No. 402-c.)

Marine Department, Wellington, 8th March, 1869.

I have the honor to report that when at Auckland last month, in accordance with instructions, I examined the whole Manukau establishment, making (at the special request of His Honor the Superintendent) a provisional report to the Provincial Government on the whole question of maintenance, a copy of which report I attach:

I was given to understand that the Provincial Executive were quite alive to the necessity of expending a considerable sum in order to put this harbour on a proper footing, but that there was a great probability that the Provincial Council would refuse to appropriate a sufficient sum for the

purpose.

SIR.

I had hoped that the Government would, ere this, have received some communication on the subject, as every day's delay will add to the cost of the work, by throwing it into a less favourable season, and I should recommend that the Provincial Government be requested to state definitely their

intentions with the least possible delay.

In the event of the Provincial Council having refused to appropriate a sufficient sum, it rests with the Colonial Government to take action under the 27th and 28th sections of "The Marine Act, 1867,"

unless they should decide to close the Manukau Harbour entirely.

I am clearly of opinion that there is no alternative between closing the harbour entirely, that is officially—of course any small local craft might use it without being piloted if the master thought proper—and expending a sum approximating more or less closely to the amount of my estimate.

As to the propriety of adopting either course, I am not prepared to advise. No doubt the present

trade of the port is very trifling, and it would be quite easy to work the Auckland mails via the East Coast, and the Taranaki mails by small steamers; but if the Manukau were closed, small steamers would require a heavy subsidy to run to Taranaki alone, and I cannot think it would be advisable to close what is after all one of the very best, if not the best harbour on the West Coast of the North Island.

In the event of the Government determining to put the Manukau establishment in order at the expense of the Province I should recommend that either the Province I should recommend that

expense of the Province, I should recommend that either the Provincial Government, or Captain Burgess, the Chief Harbourmaster, be intrusted with the supervision of the expenditure, as I have no

officer there who receives regular pay.

It does not seem strictly my province to make any comment on the salary allowed to the Harbour-master at Manukau; still, I cannot help remarking that every officer should be allowed sufficient to live upon in some proportion to his position, and £200 a year seems to be very poor pay for a man filling such an important position as Harbourmaster at Manukau.

The Hon. the Postmaster-General, Wellington.

I have, &c., JAMES M. BALFOUR, Colonial Marine Engineer.

No. 10.

MEMORANDUM for the Information of His Honor the Superintendent of Auckland. Manukau Harbour, &c.

Understanding that it is of moment that my report on Manukau Harbour, &c., should be in the hands of the Executive for consideration during the present Session of the Provincial Council, I shall give the result of my observations, &c., as shortly as possible for their information.

Any more formal report which I may make to the Colonial Government will no doubt be

duly forwarded for His Honor's information.

I have examined the signal station on the South Head, the leading beacons there and on the North Head, and the old pilot establishment on the North Head.

The beacons are all in good order, and either of those on the South Head can be adapted as a lighthouse at a small cost.

The traversing ways on the lower beacon of the South Head require to be lengthened a few feet, on account of the Tranmere Spit having lengthened.

The signalman's house is in a very incomplete state, not being lined at all; it would require to be lined, and at least one room should be added to it for the pilot's use when he is at the Heads.

A second smaller staff should be erected for signalling to vessels inside (and probably to Onehunga also), so as to diminish the number of signals required on the main staff, and so lessen the danger of mistake.

The pilot's house on the North Head is quite uninhabitable, and it would cost a very considerable sum to put it to rights. Moreover, the pilot and crew should now have accommodation on the South Head, so as to be able to communicate with the signalman, and to assist him on any emergency.

All doors and windows in the old pilot's house could be used again on the South side, as well as a part, at least, of the boarding, so that it would probably cost very little more to erect a new house on the South Head than it would to render the North Head dwelling habitable. Another strong argument in favour of the change to the South side is to be found in the fact that there is a sheltered cove where boats could land or put off in almost any weather, whereas the sea rolls heavily into the landing on the North side.

The buoys absolutely require to be lifted, overhauled, and painted; and another buoy is much wanted to define the new channel (between Emma Bank and Tranmere Shoal), but I understand that one of the buoys inside would answer for that purpose, and that a smaller buoy could be made to answer its present purpose well enough.

The most costly operation by far is the buoy shifting; but it cannot be longer delayed, as there would be great danger of the buoys going down at their moorings unless speedily repaired and cleared

of mussel and seaweed (even now they ride very deep in the water).

As for the rest of the work, I believe that Captain Wing's proposal to employ a carpenter as one of his boat's crew would effect a great saving, and the following estimate is based on the supposition that this is done. It is certain that such work could not be so cheaply done by contract, as the site is so distant and inaccessible.

	Signalman							£	
		•••	•••	•••	• • • •	•••	• • •	100	
	Chief boatman		•••	•••	. • • •		• • • •	84	
	Two hands at £72	•••	•••	•••	• • •	• • • *		144	
Pro	posed additional salar	ries ·							£328
2.10	To chief boatman, to		n same :	ag athora				16	
	A carpenter			erando en					
			• • •	•••		• • •	• • • •	100	
	Fourth hand at £5]	per montn	• •••			• • •	• • •	60	
77.	T	7	, ,						- 176
(b,)	Lining signalman's		pplying	water tar	ık, fittir	ig rain-g	atters,		
	adding one roor			****				50	
	Extension of beacon	ways						30	
	Signal mast for up h	arbour						50	
	Boatmen's house on	South He	ead					100	
	Signal staff for do.							15	
	Sundries, paint, nails	s. repairs	to boat.					$\overline{24}$	
	······································	-, <u>F</u>	,			•••	•••		269
(c.)	Hire of steamer for	shifting h	novs ab	out				550	200
(0.)	Cleaning, painting, a				ove in b	arbour et	£4	- 88	
	Do.	do.					J. H		
	Sundries	, uo.	one	outer buo	y		٠	50	
	Sundries	• • •	•••	•••	• • • .	• • •	• • • •	25	
									713

The estimated cost for a steamer, £550, is founded on an offer made to supply the "Halcyon" at £15 per day, exclusive of coals, which might bring the average cost up to £17 to £18 per day, and this for thirty days, which Captain Wing thinks would be the least time the work could be done in, would amount to £510 to £540.

Possibly better terms could be made for another vessel, but this offer of the "Halcyon" is the

most favourable I have been able to get yet.

It is very desirable that this work (of shifting the buoys) should be undertaken without delay, as, should it be put off till bad weather comes on, the time lost will greatly increase the cost. I believe that it would be cheaper to employ a steamer even for the inside buoys, as by so doing much time will be saved.

Auckland, Sth February, 1869.

JAMES M. BALFOUR, Colonial Marine Engineer.

No. 11.

Mr. Balfour to the Hon. J. Hall.

Manukau Harbour.

STR, Marine Department, Wellington, 27th May, 1869. I have the honor again to bring the subject of Manukau Harbour before the Government, and to request instructions.

Since the date of my last report nothing has been done beyond calling for tenders for repairing the buoys: I believe, indeed, that a tender was accepted, but no further action has been taken, and the consequence of this delay is that the Tranmere Buoy, which cost some £150, has entirely disappeared, as I ventured to predict would be the case when I reported to the Superintendent of Auckland (copy of that report is attached to my report of the 8th March). The consequence is that it will cost not less than £200 more to put the harbour in proper order now than it would have done in February last.

At present the harbour is not safe, and the working staff is too small, and generally ill-managed; at the same time it is a difficult matter to interfere at all unless the management of the harbour be taken over once for all, as even the slightest interference would give rise to endless jealousies, and divided

responsibility is apt to engender carelessness.

The Colonial Government has a most undoubted right to put the buoys in order at the expense of the Province (Marine Act, 1867, sections 27 and 28), and this would also be the case as regards any repairs to the beacons; but there are no available funds to cover salaries, repairs to dwellings, and so forth—the pilotage and harbour dues (which can be retained in terms of the 49th section of the same Act) being quite insufficient.

At the same time I think it right to report that, in my opinion, the Colonial Government should

D.-No. 8. PAPERS RELATIVE TO RESURVEY OF THE MANUKAU BAR.

either take steps to get the whole establishment at Manukau placed on a more satisfactory footing, and that without delay, or else they should advertise the state of the port, and proclaim it (practically)

If this were done, the mail arrangements would require to be altered, and all Auckland mails sent up by the East Coast, as it would not be proper to make contract mail boats run to a closed port.

I am the more desirous of early instructions in this matter as the small harbour-light, which was ordered for Manukau Heads has arrived per "Memento," and could be erected very shortly, but I hesitate to take any steps to do so, so long as the harbour arrangements are so faulty and deficient.

I have, &c., J. M. Balfour,

The Hon. the Postmaster-General.

Colonial Marine Engineer.

No. 12.

The Hon. E. W. Stafford to His Honor J. WILLIAMSON.

(No. 147.)

Colonial Secretary's Office, Wellington, 22nd June, 1869.

SIR,-On the 21st of October last your Honor represented to the General Government the necessity of an immediate resurvey of the Manukau Bar, and offered the services of Captain Wing, Pilot and Harbourmaster at the Manukau, to assist in that survey, and on the 23rd of that month I had the honor of requesting that, in the absence of any available vessel at the disposal of the General Government, Captain Wing might be directed to take the necessary steps at once to ascertain the position of the bar and to fix the buoys and beacons accordingly. I also stated that the Marine Department would be instructed to communicate with Captain Wing on the subject, who, however, should not on that account delay the necessary work. I added that the General Government would advance the requisite funds, and that the expenses would be charged against the Province of Auckland under "The Marine Act, 1867."

The Colonial Marine Engineer forthwith placed himself in communication with Captain Wing on the subject of this survey, and on the 20th of January last I wrote to your Honor a letter, to which I have received no reply, transmitting, for the expression of your views thereon, a communication from Mr. Balfour on the subject of the estimated cost of the survey in question.

Mr. Balfour also proceeded to Auckland, and in February last, after personal examination, made at your request, a special report on the whole question of the Manukau Harbour and the pilot and harbour establishment there. No notice of that report seems to have been taken by the Auckland Provincial Government, except, it is believed, in the acceptance of a tender for the repair of certain Mr. Balfour now states that, in consequence of this delay, the Tranmere Buoy, which cost buoys. Mr. Ballour now states that, in consequence of this delay, the Tranmere Buoy, which cost about £150 pounds, has entirely disappeared, as he predicted in his report to your Honor, and that it will cost not less than £200 more to put the harbour in proper order now than it would have done in February last. He reports that the harbour is not safe, and that the working staff is too small and generally ill-managed. He adds that the small harbour-light which was ordered for Manukau Heads has arrived and could be erected very shortly, but that he hesitates to take any steps in the matter so long as the harbour arrangements are so faulty and deficient.

The maintenance of an effective harbour establishment at Manukau and of proper buoys there devolve on the Provincial authorities at Auckland; but the General Government, though not responsible for this neglected and dangerous state of the Manukau Harbour, which might at any moment cause a

lamentable loss of life and property, is bound to take every step in its power to obviate that fearful risk.

If, therefore, the buoys and beacons at the Manukau Bar and in the harbour are not placed in proper repair and at the requisite spots within a month from this date, the Government will cause the work to be done, and the cost charged to the Province of Auckland, under the 27th and 28th sections of "The Marine Act, 1867," and in the meantime a notice will be published in the New Zealand Gazette warning the public that the beacons and buoys at the entrance of the harbour of Manukau are not at

Should your Honor prefer that the General Government should at once have this work executed, the Government will, on receiving intimation from you to that effect, take the necessary steps for that I have, &c.. E. W. Stafford.

His Honor the Superintendent, Auckland.

No. 13.

His Honor John Williamson to the Hon. W. Fox.

Wellington, 2nd July, 1869.

I have the honor to acknowledge the receipt of your letter of 22nd June, 1869, No. 147, in which you refer to the correspondence that has passed between the Government and the Superintendent

of Auckland relative to the resurvey of the Manukau Harbour.

I am not disposed to question the accuracy of your recital, but I feel constrained to take exception to the fairness of your proposal, that the expense to be incurred in the resurvey of the Manukau Bar, miles outside the coast line and distinct from the Harbour of Manukau, should be charged against the Province of Auckland, under the Marine Act.

I am of opinion that no delay whatever should be allowed to take place in making an accurate resurvey of the Manukau Bar, and I have, therefore, to request that the Marine Surveyor be instructed to proceed forthwith to the Manukau and undertake this work; but I respectfully submit that the expense should be a Colonial and not a Provincial charge, inasmuch as it is properly a part of the coast survey, the expense of which is, in all cases, borne by the Colony.

The Provincial Government of Auckland has already undertaken the work of shifting and

replacing the beacons and buoys within the harbour and on the bar, in accordance with Mr. Balfour's

report, at a cost of over £800; and any expense that may necessarily be incurred resurveying the harbour proper, will be borne by the Province of Auckland.

I have likewise the honor to request that you will be good enough to instruct the Marine Surveyor to proceed to Hauraki Gulf, on the East Coast of the Province of Auckland, and make an accurate resurvey of the coast line, with the view of rectifying the Admiralty Charts of that part of the coast, which have been ascertained to be incorrect.

I have, &c.,
J. WILLIAMSON,
Superintendent.

The Hon. the Colonial Secretary, Wellington.

No. 14.

The Hon. W. GISBORNE to His Honor J. WILLIAMSON. Colonial Secretary's Office,

Wellington, 30th August, 1869. SIR,-Referring to your Honor's letter of the 2nd ultimo, on the subject of the resurvey of the Manukau Bar, I have the honor to forward herewith a copy of a Memorandum by the Colonial Marine Engineer, and to inform you that the view taken by Mr. Balfour is supported by the opinion of the

Attorney-General.

So soon as the resurvey of the Manukau can be commenced, the Government have no doubt that a satisfactory arrangement will be able to be made with the Provincial Government of Auckland as to I have, &c., W. GISBORNE. the apportionment of the charges.

His Honor the Superintendent of Auckland.

Enclosure in No. 14. MEMORANDUM by Mr. Balfour.

Survey of Manukau Bar.

1. The only enactment regarding marine surveys, that I am acquainted with, is the 29th section of "Marine Act, 1867," which runs as follows:—"It shall be lawful for the Governor to authorize to be made and completed all such surveys of any port, harbour, or coast line of the Colony as may be requisite for the safety of shipping, and all such surveys so made and completed shall be published by authority of the Governor by authority of the Governor.

2. There is nothing in the Act as to whether local surveys of harbours, &c., shall be charged

provincially or not.

provincially or not.

3. The question is, therefore, an open one, and may be decided on general principles. If the 29th section be read in the light of the two preceding sections (27 and 28), I should, however, say that such a survey as that of Manukau Bar should be charged provincially.

A. The proclaimed limits of the port extend to and include the bar.

B. The survey of the bar is only of use to vessels frequenting the port and crossing the bar.

No coasting vessel (not entering) would be at all benefited by such a survey.

4. The Act distinctly provides (sections 27 and 28) that all harbour-marks, buoys, and beacons, within the limits of any port or harbour, or the approaches thereto, shall be established and maintained at the cost of the Province within which such port or harbour is situated.

5. The same general principle applies here:—

- 5. The same general principle applies here:—

 A. Buoys, &c., within the proclaimed limits of any port, should be maintained by the
 - Province.

 B. All buoys, &c., which are only available or serviceable to vessels entering or leaving any interest of the approaches thereto," and port or harbour, may be logically considered to be within "the approaches thereto,"
- are, therefore, chargeable provincially.

 6. It is certainly difficult to draw a line in some cases, and I believe the public service would be benefited were all harbours administered by the General Government (as a branch of the Customs probably, so that lighthouses, harbour establishments, and marine surveys would be under one general control, the cost being defrayed from a common fund.

JAMES M. BALFOUR, Colonial Marine Engineer.

Wellington, 9th July, 1869.