

C.S.

Industries
(Pasture)

1926.

No.

98/26.

S of S Desp. 179/25

SUBJECT.

1925.

4th December

Previous Paper.

Nauru Phosphate.

Suitability for remedying deficiencies in Soil.

609/25.

MINUTES.

PA
14/5/28

- 1-5 Desp from S. of S. No 179 of 4 December 1925.
- 6 Telegram from S. of S. 27 Jan'y 1926.
- 7-13 Despatch from S of S. No 13 of 8th February 1926.

Extract from Governor's minute of 25th March, 1926 in M. P. 744/25.

It will be necessary to issue a special warrant under Head XIV. Experiments in application of minerals to pasture. The amount should include freight on limestone and also cost of consignment of Nauru phosphate which S. of S. has been endeavouring to secure: say £100.

.....

14 Copy of Special Warrant No 4/26.

U.S.

(7)-(13) Submitted.

2. It is possible that the 10 tons of Nauru phosphate dust, referred to may be on the "Fairwa" due from New Zealand with Sheep on 17th April.

3. Chief Inspectors of Stock should see this M.P. ?

Subsequent Paper.

H.C.S.

The attached telegram reporting shipment of phosphate has now been received from the Secretary of State.

2. Papers should go to Chief Inspector of Stock who should arrange to have the officers of the deputy told on expostionary point.
3. I shall require papers back again for a dispatch to S.G.S. also papers about time for Paraguay.

3 April 1926.

Telegram from Secretary of State 31 March 1926. 15.

H.C.S.

Note has been made re communication of these papers to Chief Inspector of Stock immediately he returns to Stanley. He will probably return here by the "Austral" on 12th inst.

2. In the meantime papers are allowed in connection with para 3 of H.C.S. minutes above.

3/4/26

H.C.S.

I have made a note on 6/6/25 that I intend to take up matters connected with report from Rowett Institute when in England & I do not propose to wait a dispatch.

3 May 1926.

Chief Inspector of Stock

10 tons of phosphate were received by the "Paroa", and arrangements made thro' the Colonial Engineer for its storage at the Naval Depot.

2. Please arrange to inspect it and for its despatch to Anson at the a suitable opportunity

3. Please note carefully para. 2 of Mr's minute of 3rd April

The Hon
Col Sec.

[Signature]
4/5/26

I shall inspect the phosphate stored at the Naval Depot & will despatch the 10 tons to Anson on the first opportunity.

Different experiments can be carried out on two or three sections of the farm & the results obtained reported upon later

As suggested by the Ministry of Agriculture & Fisheries (2) an experiment with lime in conjunction with the phosphate should also be carried out.

For Carter
C.S.O.
5/5/26.

16-24. Letter from Henderson & Macfarlane Ltd of 16 March, 1926.

28.
Submitted.

2. With regard to the settlement of Messrs Henderson & Macfarlane's account there is the question of a possible reduction in the amount charged for freight. Mr A. H. Dickson arranged with Messrs. Shaw Savill & Coy for a freight of 20/- a ton (Encl 9) whereas 60/- a ton has been charged.

3. In the circumstances it might be as well to write to Mr Dickson and request him to take up the matter of the overcharge with Messrs Shaw Savill, and thereafter to instruct the Crown Agents to pay Messrs Henderson & Macfarlane the amount of their account after allowance has been made for any reduction in freight which he may be able to arrange with Messrs Shaw Savill.

4. The balance remaining on S W. 4/26 (Encl 14) is insufficient to meet the amount of Messrs Henderson & Macfarlane's account as it stands at present.

A. H. D.

Dir/Secy

15 June 1926

Obj. Sect.

To the Correspondence on the Subject of this trial Shipment of Masera Phosphate unawaited from the Colonial Office, and as it was in a letter to that Department that Mr. Dickinson refers to his special arrangement with Messrs. Shaw Savill it would probably be better to write to the Secretary of State. Draft despatches herewith.

2. Will you please write to Messrs. Henderson and Macfarlane, acknowledge the receipt of their letter, and inform them that the question of freight charges has been referred to the Colonial Office with a view to representations being made to Shaw Savill Co. They should also be told that their account will be settled by the Crown Agents for the Colonies.

3. Hon. Pressure should see and note the correspondence regarding payment for the 10 tons of Phosphate.

25-30. Despatch to S. of S. No. 71. dated 18th June 1926. 16. VI. 26
31. Letter to Henderson & Macfarlane Ltd. 19th June 1926.

Hon. Ch. Treasurer.

Go see and write correspondence.

GRH/14

Off Sec.

22 June 1926.

Hon. Col. Sec

NOTED

M. Brairie Harkett

25.6.26

Despatch from S. of S. No. 36. dated 8th April 1926. 32-36.

P.P.

Submitted.

GRH/14

Off Sec.

10 Aug 1926.

Off Sec. We can await reply to desp. no. 71 of 18th June.

10 Aug. 1926.

Hon. G. Felton

To see correspondence

GRH/14

Off Sec.

1 Sept 1926.

Hon. Col. Sec.

We who are awaiting results of experiments cannot understand why some land was not prepared ready for use with the phosphate this spring. Is it too late yet to get on with it? There are still two months before the seed needs to be in, though the best results would have been obtained by breaking the ground before the frosts.

G. M. Felton
9/9/26

Hon. G. Bonner

Go see

GRH/14

for Ch.

29/11/26.

Mr. C. Lee.

Noted - shall be glad to hear
result of experiments - but consider
this phosphate too costly for extensive use in
the colony.

G. B. Bouverie

30/9/26.

f. 10. 11. 26

re 30. 9. 26.

37. Cutting from New Zealand Farmer
of 1st May 1926.

38-42. Despatch from S of S. No 92 of 9 Sept 1926.

1. I will let the Treasurer

see re 38 - 42.

2. I will ask the C. I. of Stock

to report what has become of the

phosphate. I understand that it is

still at the Naval Depot: in

such case the first opportunity should

be taken to transport it to the

Experimental farm for use there as and
then suitable. I presume that it can be properly
stored at the Farm?

3. On the return of the Farm
Manager to Stanley I will mention this
matter to him and ascertain any experience
or views he may have in regard to the
proposed experiment.

J.M.D.

16. 11. 26.

M.S. Suggested action approved,

~~J.M.D.~~
16 Nov 1926

(With reference to Mr G. J. Jackson's minute of 9th
September which I have just seen for the first
time I state here purely for record purposes
that the personnel for the Experimental Farm
i.e. the Farm Manager and Farm hand did not
arrive in the Colony from New Zealand until
4 days ago

~~J.M.D.~~
16 Nov 1926

Chief Inspector of Stock.

Please see for ~~reference~~ report and action
taken ~~and~~ accordingly.

J.M.D.

17. 11. 26.

A. G. Lee.

The Hon
Cabinet Sec.

owing to the lack of accommodation for extra men & for the supervision of the extensive work required before the manure could be sown it was not possible to economically carry out the work as originally intended

There is as yet no satisfactory place for storing manure at Anson & the 10 tons phosphate are still stored at Naval Depot & will I believe be safer there until suitable accommodation is available for it at Anson

T. C. C. S.
20/11/25

J. S.

Submitted. The phosphate may remain where it is for the present but the first opportunity should be taken to ship it out to Anson as soon as storage accommodation has been made ready to receive it.

26 Nov. 1926

26. 11. 26.

9. 12. 26

24. 11. 26.

29. 12. 26

9. 12. 26.

y. 2.

Storage accommodation is available
at Anon and the C. I. of Stock should arrange
for the shipment there of this Naasa phosphate
by the first opportunity - "Pleurus" early
next week January 3rd/5th ?

2. On inspection of the phosphate a
few days ago the Farm Manager at the Chief
Inspector of Stock expressed the opinion that the
consignment is generally in good condition with
the exception of a few bags that have "caked"
on account of moisture.

30. 12. 26

30 Dec. 1926

Chief Inspector of Stock.

Please note for a div record.

J. M. L. H.

G. G. L. Sec.

31. 12. 26.

The Genl

Col Sec

You spoke to me upon this matter the day before Mr. Flew's left for Anson & suggested that it should be a good opportunity to get the 10 tons of phosphate to Anson on the Flew's.

I recommended that the phosphate would be better left at Naval Depot until Mr. Ashworth could see his way clear to using it immediately upon its arrival at Anson.

We have both spoken to Mr. Ashworth since & I understand he also agrees that the phosphate should remain at the Naval Depot if possible until he requires it for sowing at Anson.

It is of course most necessary that the phosphate be removed from the Naval Depot as soon as possible & Mr. Ashworth might be able to make arrangements to sow it.

Chief Inspector of Stores.

Please note for action accordingly.

J. M. L. H.

Gy. Col. Sec.

31. 12. 26.

The Genl
C. S. Sec

You spoke to me upon this matter the day before ³¹ 7. Lewis left for Anson & suggested that it would be a good opportunity to get the 10 tons of phosphate to Anson on the Fleuret.

I recommended that the phosphate would be better left at Naval Depot until Mr Ashworth could see his way clear to using it immediately upon its arrival at Anson.

We have both spoken to Mr Ashworth since & I understand & he also agrees that the phosphate should remain at the Naval Depot if possible until he requires it for sowing at Anson.

It is of course most necessary that the phosphate be removed from the Naval Depot as soon as possible & Mr Ashworth might be able to make arrangements to sow it.

this autumn. The phosphate with
the exception of two or three bags is
in good condition + the bags that
are "caked" are only hard on the ends
projecting from under the stacks

T. W. Carter
O.S.S.
5/1/27



of. Submitt. Re phosphate to remain
at the hand bank for the present.
2. I will not lose sight of the
netts, however, and will get 27. 1. 27.

Just
7. 1. 27
P.
7 Jan. 1927

4
8 27. 1. 27
Le 8. 1. 27.

M. J. P.
13. 5. 28

COPY.

No.31611/25

(4) (9)

Downing Street,

26th October, 1925.

Sir,

I am directed by Mr. Secretary Amery to request you to inform the Minister of Agriculture and Fisheries that he has had for some time under consideration the possibility of improving the pasturage in the Falkland Islands, by measures designed to remedy the existing deficiency of minerals in the soil. As Mr. Wood is no doubt aware, sheep-farming is the principal industry of the inhabitants of the Falklands, and Mr. Hugh Munro's Report of which copies were sent to you in the letter from this Office of the 4th March, 1925 (5667/25) disclosed a serious deterioration in the number and quality of the sheep maintained in the Islands,

2. I am now to enclose, for perusal and return to this Office, a Report by the Director of the Rowatt Research Institute on the mineral deficiencies of the soil and pasturage in the Falklands. It will be observed that Dr. Orr has suggested the use of guano and bone-meal derived from ^{the} whaling industry in South Georgia; and enquiries are being prosecuted into the possibility of making use of the materials upon an economic basis. Difficulties of production and transportation, however, are likely to impede the adoption of remedied measures upon these lines.

3. The arrangements are well known to the Ministry whereby the deposits of phosphate of lime at Mauru Island in the Pacific are being turned to commercial advantage by His Majesty's Government in conjunction with the Governments of the Commonwealth of Australia and New Zealand. It has occurred to Mr. Amery that there may be a possibility of utilizing Mauru phosphates for the improvement of the Falkland Islands pastures; and he will

be

COPY.

be glad to be acquainted with Mr. Wood's opinion on the following points:-

(a) Whether the nature of Nauru phosphate is such as readily to supply the elements at present lacking in the soil of the Falkland Islands pastures.

(b) If so, whether the application of crude phosphate from Nauru would be attended with the desired results. In this connection I am to observe that no plant for the conversion of the raw material into super-phosphate exists either at Nauru or in the Falkland Islands.

(c) If the reply to (a) and (b) is in the affirmative, what weight of phosphate per acre would be calculated to produce the most beneficial effect.

4. Should the replies to these enquiries appear to justify the further consideration of the possibility outlined, Mr. Amery will cause the question to be further looked into from the point of view of the probable cost involved.

I am, etc.,

(SGD.) G. GRINDLE.

THE SECRETARY,
MINISTRY OF AGRICULTURE AND FISHERIES.

COPY

T.G.4292

(2) (14)

MINISTRY OF AGRICULTURE AND FISHERIES,

10, Whitehall Place, London S.W.1.

11th November, 1925.

Sir,

I am directed to refer to Sir G. Grindle's letter of the 26th ultimo, No. 31611/25, on the subject of the improvement of the pasturage of the Falkland Islands covering a report on the mineral deficiencies of the soil and pasturage of the Islands by Dr. J. B. Orr, Director of the Rowatt Research Institute, Aberdeen.

The Ministry feels that in the absence of definite experimental evidence it can only indicate broadly the lines of treatment for the grazings in the Falkland Islands in order to meet the deficiencies in mineral nutrition. It appears that the chief deficiency is that of calcium. This would in part be met by the application of Nauru phosphate, but whether the Nauru phosphate would be effective alone or whether it should be used in conjunction with lime or limestone can only be decided by trial. The analytical evidence adduced by Dr. Orr would suggest that lime also must be supplied, but instances can be quoted from this country where phosphates alone have been more effective on soils possessing some kinship with those of the Falkland Islands. Again though the analyses reveal no great deficiency of phosphoric acid all our experiments agree as to the great improvements in the grazing value of such lands that are effected by phosphates of the Nauru type, and New Zealand experiments with Nauru phosphates confirm this.

THE UNDER SECRETARY OF STATE,

COLONIAL OFFICE.

The

The points raised in paragraph 3 of Sir G. Grindle's letter may therefore be answered as follows:-

(a) so far as can be seen Nauru phosphate is very suitable for the purpose of supplying elements which are at present lacking in the soil of the Falkland Island pastures but to this should be added the proviso that dressings of lime or limestone may also be required, a point to be ascertained by trial:

(b) Only the raw ground phosphate is required: it would be detrimental to convert it into superphosphate.

(c) 5 cwt per acre is recommended.

Nauru phosphate would be preferable to guano or bone meal and it would probably prove cheaper than basic slag.

I am etc.,

(Sgd) A.D.HALL.

DUPLICATE

5 10

FALKLAND ISLANDS

NO. 149



Downing Street,

4 December, 1925.

Sir,

With reference to previous correspondence on the subject of sheep-farming in the Falkland Islands, and to the Report on investigations made into the pastures of the Colony by the Director of the Rowett Research Institute, I have the honour to transmit to you, for your information, a copy of correspondence with the Ministry of Agriculture regarding the suggested use of Maura phosphate as a means towards remedying the mineral deficiencies in the soil.

2. Efforts are being made to arrange for the shipment of a sample of ground Maura phosphate from New Zealand to Port Stanley by the vessel on which will be conveyed the sheep referred to in your telegram of the 31st October. I shall inform you by telegram of the result of the negotiations to this end which are at present in progress.

I have the honour to be,

Sir,

Your most obedient,
humble servant,

(Signed) L. S. AMERY

GOVERNOR

SIR J. MIDDLETON, K.B.E., C.M.G.,

etc., etc., etc.,

To H. of AFR.
26th Oct.,
Fr. ditto
11th Nov.

TELEGRAM.

From The Secretary of State for the Colonies.

To His Excellency the Governor.

Dispatched : 27th January 1926. *Time*. 12.45 p.m.

Received : 28th January, 1926. *Time*. 10.35 a.m.

GOVERNOR

PORTSTANLEY

With reference to my despatch of 4th December 1925 it has not been possible to arrange shipment of phosphates few weeks vessel referred to. Despatch follows.

Secretary of State for the Colonies.

Downing Street,

24th November, 1925.

Sir,

I am directed by Mr. Secretary Amery to inform you that as a consequence of investigations which have recently been conducted into the sheep industry of the Falkland Islands, he is engaged in considering what measures can most effectively be taken to improve the pasturage of that Colony. The total area under pasture in the Falkland Islands amounts to nearly 2½ million acres and the number of sheep maintained in 1923 was approximately 650,000.

2. Mr. Amery is advised that the mineral deficiencies in the soil of the pastures could possibly be ameliorated by the application of raw Nauru phosphate at the rate of 5 cwt per acre. With a view to considering the possibility of inviting the Governor of the Colony to have the efficacy of this dressing tested on the Government experimental farm on East Falkland, he would be glad to learn whether it could be arranged for a sample of, say, ten tons of Nauru phosphate to be shipped to the Falklands for experimental purposes and, if so, what the cost would be.

He would also be glad to receive any observations which you may have to make on the matter generally, including (on the assumption that the exportation of phosphate from Nauru to the Falkland

Islands

Islands in large quantities could be arranged under the 1919 agreement) particulars as to (a) The price of phosphate f.o.b.Nauru (b) The approximate cost of freight from Nauru to Port Stanley.

I am etc.,

(Sgd) G.Grindle.

I have the honor to acknowledge the receipt of your letter (No. 2000/19) of the 20th December 1922 with reference to the proposals that might best be adopted to improve the arrangements for the phosphate supply and to the question of providing a road from the island to the coast for the purpose of transporting the phosphate to the coast as a part of the Government experimental work at Port Stanley.

Having read the report of Mr. J. G. ... of the Royal Research Institute, ... the results of the ... I am of the opinion that a ... of very ... phosphate ... would probably go far to obtain the desired ... in the phosphate of the island.

It is ... that the phosphate ... is not crushed finely enough to secure the best results when the material is applied direct to the soil ... the process of crushing a considerable quantity of phosphate ... that would be suitable for the purpose mentioned. I therefore telegraphed ... last month for the ... to be ... the ... to ... in the ... to ... of ...

The British Phosphate Commissioners.

2. Norfolk Street,
Strand.

London, W.C.2. 25th January 1926.

Sir,

I have the honour to acknowledge the receipt of your letter (No. 50860/25) of the 24th November last with reference to the measures that might most effectively be taken to improve the pasturage in the Falkland Islands Colony and to the question of providing, say, ten tons of ground raw phosphate from Nauru (or Ocean Island) for direct application to the soil as a test at the Government experimental farm at East Falkland.

Having read the report of Mr. J. B. Orr of the Rowett Research Institute, Aberdeen, on the properties of the soils in the Falkland Islands I am of the opinion that a top dressing of very finely ground phosphate of lime would probably go far to obtain the desired improvement in the pasturage of the Colony.

At Nauru and Ocean Island the phosphate exported is not crushed finely enough to secure the best results when the material is applied direct to the soil but in the process of crushing a considerable quantity of phosphate dust is collected that would be suitable for the purpose mentioned. I therefore telegraphed early last month for ten tons of phosphate dust to be sent from the islands to Auckland, New Zealand, in time for transshipment to one of Messrs. Shaw, Savill & Company's vessels

The Under Secretary of State,

Colonial Office,

Downing Street, S.W.1.

vessels that was scheduled to leave that port at the end of the current month (January) for the Falkland Islands. I had also arranged with Messers. Shaw, Savill & Company that they should charge a nominal freight of only 20/- per ton for the carriage of this phosphate from Auckland to Port Stanley. Owing, however, to a strike at Ocean Island and exceptionally bad weather at Ocean Island and Nauru the vessels chartered to carry phosphate supplies to New Zealand have not been able to load their cargoes in time to connect with the vessel leaving Auckland at the end of this month for the Falkland Islands. I am enquiring when the next vessel will leave New Zealand for the Falkland Islands and, if possible, will arrange for ten tons of phosphate dust to be shipped on that occasion. The estimated cost of this sample

Cost f.o.b. Nauru/Ocean Island ... say	25/-	per ton.	
Bags and bagging ...	" 12/-	" "	" "
Freight-Nauru/Ocean Island to Auckland	" 20/-	" "	" "
Transhipment in Auckland	" 10/-	" "	" "
Freight-Auckland to Port Stanley	" <u>20/-</u>	" "	" "
	87/-	" "	" "

If the test application of ground raw phosphate to the soil prove sufficiently successful to warrant the extensive use of this material it will probably be necessary and profitable to erect grinding machinery in the Colony in order that the phosphate may be imported in bulk instead of in bags.

If the Falkland Islands develop the importation of phosphate it will probably be necessary to ship the material direct from the source of supply instead of to New Zealand or other country for transhipment as I doubt if the vessels calling ordinarily at Port

Stanley

(8)

Stanley would carry phosphate, even in bags, in sufficient quantities. If a cargo of phosphates were imported and the quantity exceeded the immediate requirements of the Colony it should be noted that the material would not deteriorate by storage.

Important quantities of phosphate could not be shipped from Nauru/Ocean Island to the Falkland Islands without the assent of the partners in the Nauru Island Agreement of 1919, I assume, however, that the Governments of Australia and New Zealand would not oppose the shipment of an occasional cargo to that Colony but if objection were raised by these Governments there are other sources of supply.

At present the f.o.b. price of Nauru/Ocean Island phosphate (not phosphate dust in bags) would be about 25/-. I can only estimate the freight direct from Nauru/Ocean Island to Port Stanley but if a charter were made at a suitable time for picking up a following cargo in, say, the Argentine, a freight rate of 35/- per ton should be obtainable, in which case the cost of the phosphate delivered at Port Stanley should approximate to 60/-per ton.

I trust that the foregoing observations will furnish the information required by the Governor of the Falkland Islands.

Unless I am advised to the contrary I shall assume that it is the wish of the Secretary of State that ten tons of phosphate dust should, if possible, be sent by the next steamer leaving New Zealand after the present month for the Falkland Islands.

I am etc.,

(Sgd) Alwin L. Dickinson.

Commissioner.

C.2131/1926.

Downing Street,
6
February, 1926.

Sir,

I am directed by Mr. Secretary Amery to acknowledge the receipt of your letter of the 25th January relative to the proposed trial shipment of Nauru phosphate dust to the Falkland Islands, and to inform you that a copy of your letter is being sent to the Governor of the Colony for his information.

2. Mr. Amery will be obliged if you will endeavour to arrange for a shipment not exceeding ten tons to be made at the next opportunity. The cost of the shipment (including freight and transhipment charges) will be met, up to a maximum of fifty pounds, from the funds of the Falkland Islands Government.

I am,

Sir,

Your obedient Servant,

(Signed) G. BRINDLE

A.L. DICKINSON, ESQ., C.M.G..

DUPLICATE

13

FALKLAND ISLANDS.

No. 13



Downing Street.

8 February, 1926.

Sir,

With reference to my despatch No. 179 of the 4th December and to my telegram of January 27th, I have the honour to enclose for your information a copy of correspondence with the British Phosphate Commission regarding the possibility of supplying a trial shipment of Nauru phosphate dust for experimental purposes in connection with the pasturage of the Falkland Islands.

2. You will observe that the estimated total cost to the Colony of a trial shipment of ten tons will not exceed £50, and in view of the ultimate benefit which may be expected to accrue to the natural wealth of the Colony if the experiment should prove a success, I have not hesitated to inform the Phosphate Commissioners that a charge not exceeding that amount will, in due course, be met from Falkland Islands funds.

I have the honour to be,

Sir,

Your most obedient,

humble servant,

(Signed) L. S. AMERY

To Mr. Dickinson.
24th Nov. 25.

Fr. Br. Phosphate.
Cre.
25th Jan. 26.

To Mr. Dickineon.
Feb. 26.

GOVERNOR,

SIR J. GIDDLETON, K.C.M.G., C.M.G.,

etc., etc., etc.,

FALKLAND ISLANDS.

19 26.

No. 4

SPECIAL WARRANT.

J. Middleton,

Governor.

Date 30th March, 1926.

TO THE HONOURABLE

THE TREASURER.

Whereas it has become necessary, in the interests of the Public service, to incur certain Expenditure, not sufficiently^a provided for in the Estimates, as set forth in the subjoined Schedule,^b in anticipation^c of a vote of the Legislature^d and of the approval of the Secretary of State:—

^a to remain only in case of an excess on a vote.

^b to be struck out if complete authority has been obtained ^c or ^d if either partial authority has been obtained.

You are hereby, on my personal responsibility, authorized and required to pay from the Treasury the sum of ONE HUNDRED Pounds
----- Shillings and ----- Pence and to charge it to the Heads and Sub-heads of the Expenditure specified in the Schedule.

And for so doing, this, together with the proper Accounts, Certificates and Acquittances, shall be your sufficient warrant and discharge.

Schedule.

Particulars of Service.	To be charged to		£	s.	d.
	Head.	Sub-Head.			
To cover cost of limestone obtained from the Sociedad Expoltadora and phosphate from Nauru. M. P.'s 744/25 & 98/26.	XIV. STOCK.	7. Experiments in application of minerals to pasture.	100	0	0
Expended in connection with cost of limestone from Sociedad Expoltadora. M. P. 744/25.			35	9	6
Remaining for expenditure on Nauru phosphate.....			64	10	6

Signature of the Officer
submitting the Schedule
for Warrant.

A. E. Beattie,
Colonial Secretary.
for Chief Inspector of Stock.

Date 26th March, 1926.

(Special warrants are to be prepared in triplicate. One copy to be filed in the Office of the Colonial Secretary, one in the Treasury, and one to be furnished to the Audit).

General No. 14008

London No. 1223

Payable in LONDON

THE
CANTON INSURANCE OFFICE.
LIMITED.

Be it known that THE BRITISH PHOSPHATE COMMISSION

as well in their own name and as for and in the name and names of all and every other person or persons to whom the same doth may or shall appertain in part or in all doth make *Insurance* and cause themselves and them and every of them to be insured lost or not lost at and from

GEORGE KING & CO.,
SYDNEY, N.S.W.

CHIEF AGENTS FOR
AUSTRALIA AND NEW ZEALAND.

AUCKLAND to PORT STANLEY (Falkland Islands)

in the sum of Eighty pounds strg.

upon

GOVT. - 120 bags Phosphate (ground)
F.I.

Warranted F.P.A.

Amount Insured.

£80 :-----

Valued for the purpose of this Insurance at £ 80,

In the good ship or Vessel called the "TIROA" s.s.

whereof is Master (or whoever else with the approval of the said Office when practicable shall or may be master) beginning the adventure upon the aforesaid interest from the loading thereof on board the said vessel at as aforesaid and continuing during the time or voyage as aforesaid until landed including Risk of Craft to and from Ship.

In the event of the goods being carried beyond their port of destination or transhipped it is agreed to hold the Insured covered for such deviation in terms of this policy provided the Consignee gives due notice in writing to the Agent of the said Office at the port of destination of such overcarriage and pays an extra premium to be arranged for such deviation.

And it shall be lawful for the said ship in this Voyage to proceed and sail to and touch and stay at any Ports or Places whatsoever if thereunto obliged by stress of weather or for necessary purposes without prejudice to this Insurance.

The Adventures and Perils which the said Office is contented to bear and does take upon itself

Rovers Assailing Thieves Jettisons Barratry of the Losses and Misfortunes that have or shall come to the matter of this Insurance or any part thereof arising from Seizure Arrest Restraint or Detainment, and the Piracy excepted, and also from all consequences of hostilities (declaration of war). And in the case of any Loss or their Factors Servants and Assigns to sue labor and hard and recovery of the aforesaid subject matter of and prejudice to this Insurance to the charges whereof as the Sum hereby insured is to the whole amount said Office in recovering saving or preserving the aiver or acceptance of abandonment.

10 per cent. payable on each bale as if separately insured. Unless otherwise insured are warranted free from average unless general or the vessel or loaded a separate insurance. The said Office notwithstanding this warranty in any other ship or vessel or with ice or with any substance other than or forwarding for which they would otherwise be liable. Also to pay the ly lost in transhipment. Grounding in Onnals Harbours or Tidal Rivers damage or loss which may be proved to have directly resulted therefrom. It by insured be injured or destroyed by a General Average act any claim the the Ship Freight and Cargo. Freight is warranted free from Average it or Bottomry are warranted against absolute total loss of the ship only. total loss occasioned by absolute total loss of the vessel. In no case is the insured as such. King Vessels unless permitted by special warrants. interests herein covered prior in date to this Policy and in respect whereof answerable only for so much as the amount of such prior insurance may les under which such prior Policy may have been issued. e said Office after adjustment of the same. claim for Average will be paid under this Policy unless notice in writing of y at the Port of arrival previous to the survey. origin of or endorsed upon this Policy shall have the same force and effect as

s hereby hold itself bound to the Insured his or their ue performance of the premises in consideration of the Insurance at the rate of Ten shillings

London
Ltd., 23 Cornhill, London E.C.

the Agents of the Canton Insurance Office, Limited,

Office have subscribed OUR names for the sum insured.

15th day of March, 1926

and Date one of which being accomplished the others

HENDERSON & MACFARLANE LTD.

Handwritten signatures and initials

Agent

Premium

@ 10/-% 8: .
less 15% 1:3
6: 9
3
7: .d.

AGENTS
CANTON INSURANCE OFFICE, LTD

1924. **INSTITUTE CARGO CLAUSES (F.P.A.)** 1924.

- Warranted free of capture, seizure, arrest, restraint or detainment, and the consequences thereof or of any attempt thereat (piracy excepted), and also from all consequences of hostilities or warlike operations, whether before or after declaration of war.
- Warranted free of loss or damage caused by strikers, locked-out workmen, or persons taking part in labour disturbances, or riots or civil commotions. Should Clause No. 1 be deleted, Clause No. 3 is to operate as part of this Policy.
- Warranted free of any claim based upon loss of, or frustration of, the insured voyage, or adventure, caused by arrests, restraints or detentions of kings, princes or peoples.
- General Average and Salvage Charges payable according to Foreign Statement or per York-Antwerp Rules if in accordance with the contract of affreightment.
- Held covered at a premium to be arranged in case of deviation or change of voyage, or other variation of the risk by reason of the exercise of any liberty granted to the shipowner or charterer under the contract of affreightment, or of any omission or error in the description of the interest vessel or voyage.
- The risks covered by this Policy attach from the time the goods leave the shipper's or manufacturer's warehouse at the port of shipment, unless otherwise stated, and continue during the ordinary course of transit, including customary transhipment if any, until the goods are safely deposited in the consignee's or other warehouse at the destination named in the Policy or until the expiry of fifteen days from midnight on the day on which the discharge of the goods hereby insured from the overseas vessel is completed whichever may first occur. When the destination to which the goods are insured is without the limits of the port of discharge of the overseas vessel the risks covered by this Policy continue until the goods are safely deposited in the consignee's or other warehouse at the destination named in the Policy or until the expiry of 30 days from midnight of the day on which the discharge of the goods hereby insured from the overseas vessel is completed, whichever may first occur. Transhipment if any, otherwise than as above, and/or delay arising from circumstances beyond the control of the assured, held covered at a premium to be arranged.
- Including transit by craft, raft and/or lighter to and from the vessel. Each craft, raft, and/or lighter to be deemed a separate insurance. The assured are not to be prejudiced by any agreement exempting lightermen from liability.
- The Assured are not to be prejudiced by the presence of the negligence clause and/or latent defect clause in the Bills of Lading and/or Charter Party. The seaworthiness of the vessel as between the Assured and the Assurers is hereby admitted and the wrongful act or misconduct of the shipowner or his servants causing a loss is not to defeat the recovery by an Innocent Assured if the loss in the absence of such wrongful act or misconduct would have been a loss recoverable on the policy. With leave to sail with or without pilots, and to tow and assist vessels or craft in all situations, and to be towed.
- Warranted free from Particular Average unless the vessel or craft be stranded, sunk, or burnt, but notwithstanding this warranty the Assurers are to pay the insured value of any package or packages which may be totally lost in loading, transhipment or discharge, also for any loss of or damage to the interests insured which may reasonably be attributed to fire, collision or contact of the vessel and/or craft and/or conveyance with any external substance (ice included) other than water, or to discharge of cargo at port of distress, also to pay landing, warehousing, forwarding and special charges if incurred for which underwriters would be liable under a policy covering Particular Average.

F.C. & S. clause.

Strikes, riots and civil commotions clause.

C/A clause.

Deviation clause.

Warehouse to warehouse clause.

Craft, &c. clause.

Bill of Lading, &c. clause.

F.P.A. clause.

AGENTS

General No. 14008

London No. 1223

Payable in LONDON

THE
CANTON INSURANCE OFFICE.
LIMITED.

We it known that THE BRITISH PHOSPHATE COMMISSION

as well in their own name and as for and in the name and names of all and every other person or persons to whom the same doth may or shall appertain in part or in all doth make Insurance and cause themselves and them and every of them to be insured lost or not lost at and from

AUCKLAND to PORT STANLEY (Falkland Islands)

in the sum of Eighty pounds strg.

upon

GOVT. - 120 bags Phosphate (ground)
F.I.

Warranted F.P.A.

GEORGE KING & CO.,
SYDNEY, N.S.W.

CHIEF AGENTS FOR
AUSTRALIA AND NEW ZEALAND.

Amount Insured.

£80 :-----

Valued for the purpose of this Insurance at £ 80,

In the good ship or Vessel called the "TIROA" s.s.

whereof is Master (or whoever else with the approval of the said Office when practicable shall or may be master) beginning the adventure upon the aforesaid interest from the loading thereof on board the said vessel at as aforesaid and continuing during the time or voyage as aforesaid until landed including Risk of Craft to and from Ship.

In the event of the goods being carried beyond their port of destination or transhipped it is agreed to hold the Insured covered for such deviation in terms of this policy provided the Consignee gives due notice in writing to the Agent of the said Office at the port of destination of such overcarriage and pays an extra premium to be arranged for such deviation.

And it shall be lawful for the said ship in this Voyage to proceed and sail to and touch and stay at any Ports or Places whatsoever if thereunto obliged by stress of weather or for necessary purposes without prejudice to this Insurance.

The Adventures and Perils which the said Office is contented to bear and does take upon itself in this voyage are—of the Seas Fire Pirates Rovers Assailing Thieves Jettisons Barratry of the Master and Mariners and of all other Perils Losses and Misfortunes that have or shall come to the Hurt Detriment or Damage of the subject matter of this Insurance or any part thereof arising from the Perils of the seas. (Warranted free of Capture Seizure Arrest Restraint or Detainment, and the consequences thereof or any attempt thereat, piracy excepted, and also from all consequences of hostilities or warlike operations, whether before or after declaration of war.) And in the case of any Loss or Misfortune it shall be lawful to the Insured their Factors Servants and Assigns to sue labor and travel for in and about the defence safeguard and recovery of the aforesaid subject matter of this Insurance or any part thereof without prejudice to this Insurance to the charges whereof the said Office will contribute in proportion as the Sum hereby insured is to the whole amount at risk and the Acts of the Insured or of the said Office in recovering saving or preserving the property insured shall not be considered a waiver or acceptance of abandonment.

Wool is warranted free from particular average under three per cent, payable on each bale as if separately insured. Unless otherwise stated hereon in writing all other Goods and Merchandise herein insured are warranted free from average unless general or the vessel or craft be stranded sunk or burnt such craft or lighter being deemed a separate insurance. The said Office notwithstanding this warranty to pay for any damage or loss caused by fire or by collision with any other ship or vessel or with ice or with any substance other than water and any special charges for warehouse rent re-shipping or forwarding for which they would otherwise be liable. Also to pay the insured value of any package or packages which may be totally lost in transhipment. Grounding in Canals Harbours or Tidal Rivers not to be deemed a strand but the said Office to pay any damage or loss which may be proved to have directly resulted therefrom. It is hereby stipulated and agreed that should the property hereby insured be injured or destroyed by a General Average not any claim the Insured is entitled to make in respect thereof by way of Particular Average or Total Loss shall be subject to the deduction of the sum payable to the Insured by the other contributing interests of the Ship Freight and Cargo. Freight is warranted free from Average unless General. Profits Commissions and Advances on Freight or Bottomry are warranted against absolute total loss of the ship only. Live stock is warranted free from all loss or damage except total loss occasioned by absolute total loss of the vessel. In no case is the said Office liable for Deck Cargo or Freight unless specially insured as such.

The passage through Torres Straits is prohibited for Sailing Vessels unless permitted by special warranty. If any other insurance shall have been made upon the interests herein covered prior in date to this Policy and in respect whereof the risk shall have commenced to run the said Office shall be answerable only for so much as the amount of such prior Insurance may be deficient respectively altogether of the terms and warranties under which such prior Policy may have been issued.

Claims for all Losses or Averages shall be payable by the said Office after adjustment of the same. In the event of damage occurring during the voyage no Claim for Average will be paid under this Policy unless notice in writing of the same has been given to the said Office or its Agents if any at the Port of arrival previous to the survey.

Any condition inserted by the said Office upon the margin of or endorsed upon this Policy shall have the same force and effect as if it were inserted in the body hereof.

AND THE SAID OFFICE is content and does hereby hold itself bound to the Insured his or their Executors Administrators or Assigns for the true performance of the premises in consideration of the sum paid or promised to be paid to it for this Insurance at the rate of Ten shillings per centum.

Claims under this Policy payable in London
by Messrs. Matheson & Co. Ltd., 23 Cornhill, London E.C.

In witness whereof we the Agents of the Canton Insurance Office, Limited, by virtue of a Power of Attorney from the said Office have subscribed OUR names for the sum insured in Auckland this Twelfth day of March, 1926
To one Policies of the same Tenor and Date one of which being accomplished the others to be void.

HENDERSON & MACFARLANE LTD.

Herby *Director*
Agent



TELEGRAM.

From The Secretary of State for the Colonies.

To The Governor.

Dispatched : 31st March..... 192 6 *Time.* 11.50

Received : 1st April..... 192 6 *Time.* 10.25

With reference to my despatch of 8th February No. 13 phosphate shipped in s.s. "Tairoa" sailing from Wellington 26th March due to arrive Stanley about 13th April despatch follows.

COPY

15th March, 1926.

Messrs. A. S. Paterson & Co. Ltd.,
Agents: Shaw, Savill & Albion Co. Ltd.,
AUCKLAND.

Dear Sirs,

We enclose, herewith, cheque for £33: -: -, being freight on 10 tons Phosphate shipped per "Tairoa" to Falkland Islands.

We understand that the freight agreed on in London for this consignment was 20/- per ton, and we are paying at the rate of 60/- per ton, plus 10%, subject to adjustment being made later at the rate agreed on.

Yours faithfully,

ADDRESS: TELEGRAMS
"ASPIRANT," AUCKLAND

18

Auckland, 11th March 1928

Messrs Henderson & Macfarlane Ltd
Maritime Bldgs Quay Street

In Account with A. S. Paterson & Co., Limited

Agents for **Shaw, Savill, and Albion Company, Limited**

Credit Note

By Brokerage on
Phosphates per 1/2 Tonnage
£ 30-0-0

5%

£ 1-10/-

E. & O. E.

A. S. PATERSON & CO. LTD.

Auckland, 192

No. A 8652

Received from MR. MESSRS. Henderson Macpherson & Co.

Thirtythree pounds

shillings pence

p.p. A. S. PATERSON & CO. LTD.

W. Somerville Cashier

DIS.

CASH

TOTAL

DIS.	CASH	TOTAL
	33	33



ADDRESS TELEGRAMS:
"ASPIRANT," AUCKLAND.

Auckland,

12th March 1916 ⁹⁸

Messrs Henderson Macfarlane & Co. Ltd.
Quay St.

(19)

In Account with A. S. Paterson & Co. Ltd.

MERCHANTS AND COMMISSION AGENTS,

Agents for Shaw, Savill, & Albion Company, Ltd.

Bright Note.

To Brightons

120 Sacks Phosphate	10 ⁷ 60 ⁷	30
Freight	10 ⁷ 0 ⁷	3
		<u>£ 33. —</u>

Shipped per S.S. Tairua

RECEIVED PAYMENT
WITH THANKS
13 MAR '26
A. S. PATERSON & CO. LTD.
Dunedin

E. & O. E.

SHAW, SAVILL & ALBION CO., LIMITED.

HEAD OFFICE: 34 LEADENHALL STREET, LONDON, E.C.

Agencies throughout New Zealand and Australia.

NEW ZEALAND HOMEWARD BILL OF LADING—WOOL and GENERAL CARGO.

No. 12

Shipped in apparent good order and condition by

Hendersson & Macfarlane Limited

for conveyance by

TAIROA

the Steam Ship

Whereof is Master for this present voyage

Auckland N.Z.

the following Goods, viz.:

120 sacks Nauru Phosphate

With liberty to proceed via Falkland Islands

being marked and numbered as in the margin, and to be delivered (subject to the exceptions and conditions hereinafter mentioned) at the ship's anchorage from her deck (where the ship's responsibility shall cease), at the PORT OF Port Stanley, Falkland Islands (or so near thereto as she may safely get always afloat), unto Falkland Islands Government or assigns.

Freight for the said Goods to be paid in cash without deduction at the rate of Sixty shillings per ton of 20 cwt.

on gross weight as per margin, plus ten per cent. primage, payable in Port of Shipment, in British sterling or equivalent. Ship and/or cargo lost or not lost. Average, if any, as per York-Antwerp Rules, 1924.

A With liberty to substitute any other or succeeding Steamer and also with liberty either before or after proceeding towards the port of discharge to proceed to 1 and stay at, and/or return to any ports or places whatsoever (although in a contrary direction to, or out of the route to or beyond the said Port of Discharge) once or 2 oftener, in any order, backwards or forwards, for the purpose of dry-docking (even with cargo on board), or loading or discharging cargo, coal or passengers, or for any purpose 3 whatsoever. The Steamer may proceed via a Port or Ports in Australia and/or Suez Canal and/or Batavia and/or Colombo and/or Port Said and/or any Mediterranean and other 4 Continental or U.K. ports; or via Cape of Good Hope, and/or Durban and/or Capetown and/or other African Port or Ports, or via Cape Horn or Straits of Magellan, or Panama 5 Canal and/or any ports or places in America or Islands off the coast thereof. All the said liberties, exceptions, and conditions shall apply (any warranty, implied term, 6 custom or rule of law to the contrary notwithstanding) although the vessel may have deviated from the contract voyage, and although such deviation may amount 7 to change or abandonment of the voyage, all such deviations being deemed within the voyage intended, and nothing in this Bill of Lading, whether written or printed, 8 or implied therefrom, shall limit or affect the provisions of this clause; also with liberty to tow and be towed, and to assist vessels in all situations, and to deviate for the 9 purpose of saving life or property; also to sail with or without pilots, and to carry cargo and live stock on deck. The port of discharge for optional cargo must be 10 declared before the Steamer's arrival at the first optional port, and failing such declaration the Steamer may elect to discharge at the first or any other optional port. 11

B The ship has the right to drydock before the loading or discharge is complete and with cargo on board and to suspend the loading or discharge during the time so 12 occupied. The Consignees or their Assigns must be ready to take delivery immediately on Steamer's arrival at discharging port, berthed or not berthed, and must so continue 13 ready and receive their Goods as fast as steamer can deliver. On Consignees or their Assigns failing to take delivery of the said goods within the time and at the rate 14 aforesaid, the said Goods, the Shippers, the Consignees, the owners of the Goods and the Holders of Bill of Lading shall be jointly and severally liable to pay the vessel 15 on demand demurrage at the rate of 6d. per gross registered ton per day or portion of a day during the delay so caused; such demurrage to be paid in cash day by day 16 to the Master or Agents; and if the demurrage is not so paid, and/or if in the opinion of the master (whose decision on the subject will be absolute and binding on all 17 parties) the discharge of this and/or other cargo cannot be effected without undue detention, the Steamer shall have liberty to overcarry this and/or other undischarged 18 cargo to another port at Merchants' risk and there deliver, in which case the rate of freight is to be increased by a reasonable rate from the intended to the actual port 19 of discharge, alternatively the Master or Agents may at their option at any time, either at the port of discharge or the port to which the Goods may be overcarried, land 20 and warehouse the Goods, or discharge them into a stowship or hulk, or into lighters, or on to a wharf, as is customary at the risk and expense of Consignees or their 21 Assigns, but no obligation is imposed upon Master or Agents to follow this course. These stipulations override any conditions otherwise stated on this Bill of Lading if 22 inconsistent therewith. 23

C The Carriers (which expression throughout includes the Owners, Charterers and Master of the above and any other carrying steamer) shall not be accountable 24 for the condition of Goods shipped under this Bill of Lading, nor for any loss or damage thereto, whether arising from failure or breakdown of machinery, insulation 25 or other appliances, refrigerating or otherwise, or from any other cause whatsoever, whether arising from a defect existing at the commencement of the voyage, or at 26 the time of shipment of the goods or not, or from detention; and Steamer shall be at liberty to jettison the whole of the Goods, or any part thereof, if considered 27 necessary on account of decomposition or otherwise. 28

D The Steamer has the right to discharge by day or night, but if the Consignees require delivery before or after usual hours they shall pay any extra expense 29 incurred in consequence. 30

E The Act of God, the King's Enemies, Pirates, Robbers or Thieves by Land or Sea, Arrests or Restraints of Princes, Rulers of People, War, Riots, Strikes, Lockouts, or other Labour Disturbances, 31 or delay or hindrance caused directly or indirectly thereby; and loss or damage resulting therefrom, or from any of the following causes or perils are excepted, viz.:—Insufficiency in packing, or in 32 strength of packages, loss or damage from coaling on the voyage, rust, vermin, breakage, leakage, drainage, sweating, evaporation or decay, or from the leakage or flow of or from contact with the 33 urine, manure water, or drainage from animals carried on the said ship or from their stalls however caused or otherwise howsoever; injurious effects of other goods; effects of climate, insufficiency 34 of ventilation, or temperature of holds; risk of craft, of transshipment, and of storage afloat or on shore; fire on board, in hull, in craft, or on shore; rain, hail, snow, frost or ice; explosion, 35 barratry, jettison; collision, whether with another ship or any other obstacle; stranding, lying upon or touching the ground; perils of the seas, rivers or navigation of whatsoever nature or kind, and 36 howsoever caused; any accidents to or defects latent or otherwise in hull, tackle, boilers or machinery, refrigerating or otherwise, or their appurtenances (whether or not existing at the time of the 37 goods being loaded, or the commencement of the voyage) or insufficiency of coals at the commencement or any stage of the voyage provided reasonable means have been taken to provide against 38 such defects and unseaworthiness, and any other cause beyond the control of the Carriers. Accidents, loss, damage, delay or detention from any act or default of the Egyptian Government or the 39 administration of the Suez Canal, when proceeding via Suez Canal, or of the Argentine Government, when proceeding via Cape Horn and River Plate are also excepted. It is expressly agreed 40 that all the exceptions and liberties in this Bill of Lading shall equally apply to any other Vessel into which the goods are shipped. 41

F The Carriers are not to be responsible for faults or errors of navigation. 42
G The Carriers will not be accountable to any extent or under any circumstances whatsoever for gold, silver, bullion, specie, jewellery, watches, clocks, precious stones, precious metals, bank notes, 43 or securities for money, bills of exchange, silks, furs, paintings, sculptures, or other works of art, nor in the case of other goods beyond the value of £5 per cubic foot, nor exceeding £100 for any one 44 package, unless the value thereof shall have been declared at the time of shipment, and the bills of lading signed with a declaration of the nature and value of the goods appearing thereon, and extra 45 freight in respect of same agreed upon and paid; nor for loss, injury or detention of packages intended for different Consignees, but made up into one package, unless the contents and value of each 46 separate package be given before shipment, and freight paid accordingly; nor for damage to showcases, glass, glassware, chinaware, or earthenware, or other fragile merchandise, of any description, 47 from whatsoever cause arising. The Carriers are not liable for delays in delivery of optional cargo, or arising from inaccuracies or absence of marks, numbers, or addresses of goods. 48

H Specie deliverable in London will be landed at a port in England, and conveyed to the Bank of England at the Carriers' expense, but at Merchants' risk. All liability of the Carriers is to cease 49 as soon as the specie is delivered on the Steamer's deck. 50

I The Carriers shall not be responsible for correct delivery unless each package is distinctly, correctly and permanently marked by the shipper before shipment, with a distinctive mark and number 51 or address, and also with the name of the Port of Delivery, which last must be in letters not less than two inches long. In case of obliteration of such marks, numbers or addresses, or of the same not 52 being sufficiently distinctive to enable the Agents of the Ship to identify the goods, the said Agents will make as fair an allotment of goods to this Bill of Lading as is under the circumstances 53 practicable, and the goods so allotted shall be accepted by the Consignee in full discharge of the liability of the Steamer or her Owners or her Charterers thereunder. 54

J The Carriers shall not be liable for any delay in delivery or damage caused thereby to any particular portion of cargo which cannot be delivered until other cargo is discharged, or which 55 cannot be delivered without risk or injury, or damage to other cargo, or for any other reason. 56

K The Carriers are at liberty to tranship and to carry the said goods to their Port of Destination by the above or other Steamer or Steamers, Ship or Ships, either belonging to the same or other 57 persons, proceeding by any route, and whether directly or indirectly to such port, and in so doing to carry the goods beyond the Port of Destination, and to land and store the goods at any port or 58 place, either on shore or afloat, and re-ship and forward the same, either by land or water, at the Carriers' expense, but at the risk of the owners of the goods. 59

L If chemicals, liquids, or other goods of a dangerous or damaging nature are shipped without being previously declared or arranged for, they are liable upon discovery to be thrown overboard, 60 and their loss, as well as any loss or damage to the ship or cargo, or to any person or interest whatsoever, will fall upon the Shippers and Owners of such goods. Double freight will be charged on 61 all goods not correctly described. 62

M All fines and expenses or losses by Detention of Vessel or Cargo, caused by incorrect or insufficient marking of the package, or by incomplete or incorrect description or weight (or any other 63 particulars required by the authorities at the Port of Shipment or delivery) either upon the packages or the Bill of Lading, shall be paid by the Shipper or Consignee of the goods, or the holder of 64 this Bill of Lading. 65

N Any expense incurred by the Carriers in repairing insufficient or damaged packages is to be borne by the owners of the goods, and the Carriers are not to be liable for pilferage of contents of 66 such packages, all risk of lighterage for any purpose to and from the steamer or during the transshipment shall be borne by the owner of the goods. 67

O In case of quarantine, the goods may be discharged into quarantine depot, hulk, or other vessel, as required for the Steamer's despatch. Quarantine expenses upon the goods, of whatsoever 68 nature or kind, shall be borne by the owners of the goods. 69

P In case of the blockade or interdict of the Port of Discharge, or if the entering of or discharging in such port shall in his sole discretion be considered by the Master unsafe by reason of war or 70 disturbances, or other reasonable cause, the Master may land the goods at the nearest safe and convenient port or place at the expense and risk of the owners of the goods, and the Consignees shall take 71 delivery at such Port or Place. The Carriers' responsibility shall cease when the goods are so discharged into proper and safe keeping, the Master giving immediate notice of the same to the 72 Consignees of the goods, so far as they can be ascertained, but the Carriers' lien on the goods under this Bill of Lading shall, notwithstanding their discharge, remain good until discharged by payment. 73

Q The Carriers shall have a lien upon the said goods shipped hereunder for all freight, advance freight, charges, dead freight, demurrage, lighterage, expenses, damages, or average and other 74 charges which the goods or the Shippers or Consignees thereof are liable under this Bill of Lading. 75

R In cases where the ultimate destination at which the Carriers may have engaged to deliver goods is other than the above Steamer's intended Port of Discharge, the Carriers reserve the right 76 to forward such goods by rail or water. The Carriers act as forwarding agent only from that Port, and in all cases the liability of the Carriers on account of all goods is to cease as soon as the 77 goods are free from the Ship's Tackles. Goods intended for America to be marked with the name of Port of Shipment. Goods for Antwerp to be landed and received by the Corporation 78 appointed by the agent of the Steamer. Consignees paying all reception charges, and to be received in lots or parts of lots. Goods for Dunkirk, Bremen, or other Ports of Discharge to be taken 79 delivery of as soon as they can be discharged from the steamer, notwithstanding the custom of the port. 80

S The liability of the Carriers in case of any claim for which they may be responsible is in no case to exceed the net invoice cost, and it shall be a condition precedent to the making of any 81 claim for damage, that written notice be given before the goods leave the Steamer's side, and that all other claims shall be made in writing at the Port of Delivery within one month of Steamer's 82 arrival there, and failing compliance with these provisions all claims shall be deemed to be waived. 83

T All questions arising under this Bill of Lading shall be settled according to the principles of English Law. 84
U Nothing herein contained shall prevent the Carriers from claiming in the Courts of any country the benefit of, or derogate in any way from any statutory protection or limitation of liability 85 afforded to Shippers or Carriers by the laws of such country. 86

V Any difference in freight due to steamer on excess weight landed, corrected measurement or through incorrect description of cargo, to be collected from Consignees. 87
W Weight, measurement, contents, condition, quality and value unknown. 88

In Witness whereof the Master, Purser or Agent of the said Steamer hath affirmed to One Bill of Lading all of this tenor and date, one of which being accomplished the others to stand void. If required by the Carriers or their Agents, one of the Bills of Lading must be given up, duly endorsed, in exchange for the Goods.

Dated in AUCKLAND 11.MAR.1926 192

SHAW, SAVILL & ALBION COMPANY, LIMITED
A. S. PATTERSON & SONS, LTD.

AGENTS

GOVT 120 sacks Nauru Phosphate
F.I. (10 tons)

"Ship not accountable for bursting or decay of sacks or loss of contents occasioned thereby. The cost of any necessary rebagging to be borne by consignee."

WESTFIELD CHEMICAL WORKS DEPARTMENT.

D

2264

23 & 25 Albert Street, Auckland, Bln March 1926

Received from Messrs Henderson & Macfarlane Ltd.
the Sum of Fortythree Pounds
Fifteen Shillings Pence.

Gross 43: 15: -

Disct. _____

£ 43: 15: -

KEMPTHORNE, PROSSER & CO.'S
NEW ZEALAND DRUG COMPANY, LTD.
(WESTFIELD CHEMICAL WORKS)

[Handwritten signature]
ACCOUNTANT

TELEPHONE—ORDERS, No. 610
 OFFICE, No. A2505
 MR. STEWART, No. 200
 WORKS, No. 119

CODES USED:
 WESTERN UNION, BENTLEY'S, ABC (4TH & 5TH EDITIONS)

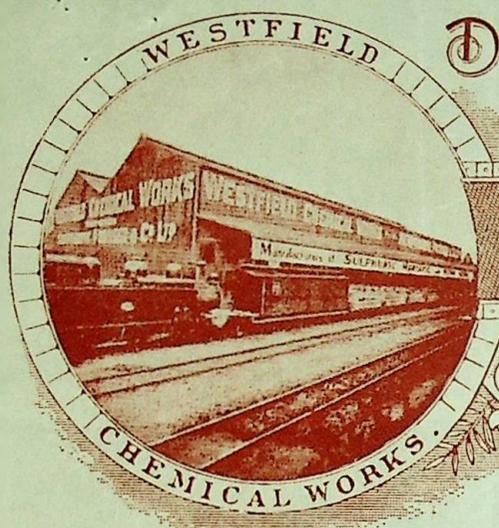
CABLE ADDRESS: "CREMATION"
 INLAND TELEGRAPHIC ADDRESS: "KEMPTH"

Messrs Henderson & Macfarlane Ltd.,

AUCKLAND.

11th March. 1926

PLEASE ADDRESS ALL COMMUNICATIONS
 TO THE MANAGER, AUCKLAND



Dr. to

KEMPTHORNE, PROSSER & CO'S

NEW ZEALAND DRUG CO., LTD.

OFFICE
 ALBERT ST.
AUCKLAND.

AND AT WELLINGTON CHRISTCHURCH & DUNEDIN

MANURE AND ACID DEPT

CHEMICAL MANURE WORKS WESTFIELD NEAR OTAHUHU

AA 385/197.

PLEASE REMIT OFFICE BOX 809, AUCKLAND

17176 Bags Tons Cwts. Qrs. Lbs. £ s. d.

120 Westfield Ground Nauru Phosphate. 10 - - - 4/7/6 £43 15 -

Per Rail to "Tairoa" Auckland.
 Shipped on Carters note.
 Receipt delivered to your Office.

marked GOVT F.I.

BRAND INVOICE CERTIFICATE—THE FERTILIZERS ACT, 1904 1908



	P ₂ O ₅		P ₂ O ₅		N.		K ₂ O	
	Soluble	Equivalent to Tri-Calcic Phosphate made Soluble by Acid	Insoluble	Equivalent to Insoluble Tri-Calcic Phosphate	Soluble	Insoluble	Soluble	Equivalent to Sulphate of Potash.
Westfield Ground Nauru Phosphate			36.50	80.00				
Unit Values			3/6					

MINIMUM PERCENTAGES.—We desire to draw attention to the fact that the Certificate above states the MINIMUM PERCENTAGES ONLY of the various ingredients as required by the Fertilizers Act, 1904. 1908

SPECIAL MANURES.—A very CONSIDERABLE PORTION OF SOLUBLE PHOSPHATE is present in these at time of mixing, but we cannot guarantee this solubility, as owing to the complex nature of the Manures the soluble Phosphate does not remain in that condition for any length of time—it reverts more or less NOT to the insoluble, but to the intermediate or Di-Calcic state, which, according to Professor Tanner, is even more valuable as a plant food than the soluble Phosphate.

KEMPTHORNE PROSSER, & CO.'S N.Z. DRUG CO., LTD.

AGENTS FOR—

British Phosphate Commission (Nauru-Ocean Phosphate)
Compagnie Francaise des Phosphates de l'Océanie, Paris
Comité Central des Armateurs de France
Comité des Assureurs Maritimes de France
New York Board of Underwriters
Canton Insurance Office, Ltd. (Marine)
London and Lancashire Insurance Co., Ltd.
Blue Funnel Line
P. and O., via the Cape Service
Pacific-Australia Line

UNION BUILDINGS

CUSTOMS STREET EAST

23

Auckland, 16th March, 1926

M The Department of Agriculture,

PORT STANLEY,

Falkland Islands,

in a/c with

Henderson & Macfarlane Ltd.

March	11	To Kempthorne Prosser & Co. Ltd.		
		10 tons ground Nauru Phosphate		
		as per invoice.		43 15 .
		<u>Charges:</u>		
		Bill of Lading	1 .	
		Insurance Premium	7 .	
		Freight & Primage	33:--: -	
		Less Brokerage on Freight	<u>1:10: -</u>	
			31 10 .	31 18 .
				<u>£75 13 .</u>

E. & O. E.,

Auckland, N.Z., 16th March, 1926.



ESTABLISHED 1842

SHIPPING, COMMISSION, INSURANCE
ISLAND MERCHANTS.
PEARLSHELL, COPRA, VANILLA ETC.

AGENTS FOR—

British Phosphate Commission (Nauru-Ocean Phosphate)
Compagnie Française des Phosphates de l'Océanie, Paris
Comité Central des Armateurs de France
Comités des Assureurs Maritimes de France
New York Board of Underwriters
London and Lancashire Insurance Co. Ltd.
Norddeutscher Lloyd
German-Australia Line
Blue Funnel Line
P. and O. via the Cape Service
Pacific-Australia Line

CABLE & TELEGRAPHIC ADDRESS—"CIRCULAR"
CODES—A1, ABC (5th Edition)
BENTLEY'S, WESTERN UNION
UNIVERSAL and 6 Letter Editions

per "Tairoa" at Wellington.*Maritime Buildings,**Quay Street,**Auckland, N.Z.*

16th March, 1926.

The Secretary,
Department of Agriculture,
PORT STANLEY,
Falkland Islands.

Dear Sir,

We beg to hand you, herewith, Invoice, Bill of Lading, and Insurance Policy for 10 tons (120 bags) ground Nauru Island phosphate shipped by us to your address per s. s. "Tairoa".

This shipment is under an arrangement made between the Colonial Office, London, and the British Phosphate Commission, Melbourne, and under instructions from the latter. We trust it will reach you in good order and condition.

The rate of freight arranged in London was 20/- per ton, but the local representatives of the Shaw Savill & Albion Co. declined to accept less than 60/- per ton, plus 10% primage.

We have paid this rate and advised the Shipping Co. concerned that we have done so subject to adjustment in London.

We are, Dear Sir,

Yours faithfully,

HENDERSON & MACFARLANE, LTD.

[Signature]
Director

26

ENCLOSURE TO FALKLAND ISLANDS DESPATCH NO. 71
of the 18th of June, 1926.

Union Buildings,
Customs Street East,
Auckland.

16th March, 1926.

The Department of Agriculture,
PORT STANLEY,
Falkland Islands.

IN A/c WITH HENDERSON & MACFARLANE, LIMITED.

March 11. To Kempthorne Prosser & Co.Ld.
10 tons ground Nauru
Phosphate as per invoice. 43.15.0.

Charges:

Bill of Lading	1. 0.	
Insurance Premium	7. 0.	
Freight & Primage	33. 0.0.	
Less Brokerage on Freight		<u>1.10.0.</u>
		<u>31.10.0.</u>
		<u>31.18.0.</u>

£ 75.13.0.

E. & O. E.

Auckland, N.Z. 16th March 1925.

Shipped on Carters note.

Receipt delivered to your Office.

(23)

ENCLOSURE Marked ~~LAND~~^{GOVT} LANDS DESPATCH NO. 71
F.I.
of the 18th of June, 1926.

11th March, 1926.

Messrs. Henderson & Macfarlane, Ltd.,
Auckland:

Dr. to :- KEMPTHORNE PROSSER & CO'S
NEW ZEALAND DRUG COMPANY LIMITED.

Albert Street,
Auckland.

(Please remit Office Box 809, Auckland).

335/197.

Bags.

120 Westfield Ground Nauru
Phosphate 10 Tons 4/7/6

£43.15.0.

Per Rail to "TAIROA" Auckland.

Shipped on Carters note.

Receipt delivered to your Office.

Marked GOVT
F.I.

ENCLOSURE TO FALKLAND ISLANDS DESPATCH NO. 71
of the 18th of JUNE, 1926.

HENDERSON & MACFARLANE, LIMITED.

Maritime Buildings,
Quay Street,
Auckland, N.Z.

Per "Tairoa"
at Wellington.

16th March, 1926.

Dear Sir,

We beg to hand you, herewith, Invoice, Bill of Lading, and Insurance Policy for 10 tons (120 bags) ground Nauru Island phosphate shipped by us to your address per s.s. "Tairoa".

This shipment is under an arrangement made between the Colonial Office, London, and the British Phosphate Commission, Melbourne, and under instructions from the latter. We trust it will reach you in good order and condition.

The rate of freight arranged in London was 20/- per ton, but the local representatives of the Shaw Savill & Albion Co. declined to accept less than 60/- per ton, plus 10% primage.

We have paid this rate and advised the Shipping Co. concerned that we have done so subject to adjustment in London.

We are, dear Sir,

Yours faithfully,

HENDERSON & MACFARLANE, LIMITED,

(Signed) Percy Butler.

Director.

The Secretary,
Department of Agriculture,
PORT STANLEY,
Falkland Islands.

FALKLAND ISLANDS.

No. 71.

30
GOVERNMENT HOUSE,

STANLEY.

18th June, 1926.

Sir,

With reference to your despatch No. 13 of the 8th of February on the subject of a trial shipment of Nauru phosphate dust for experimental purposes in this Colony, I have the honour to inform you that 10 tons of this phosphate were duly received by the s.s. "Tairoa" from New Zealand on the 17th of April, and that arrangements have been made to have the efficacy of this dressing tested at the Government Experimental Farm in due season.

in duplicate
2. With regard to the estimated total cost to the Colony of the trial shipment, which it was anticipated would not exceed £50, I enclose a copy of a letter received from Messrs. Henderson and Macfarlane, Limited, of Auckland, New Zealand, who are Agents for the British Phosphate Commission, together with a copy of the invoice which accompanied it. It will be observed that the estimated cost as given by Mr. A. L. Dickinson in paragraph 3 of his letter of the 25th of January has been exceeded by over 50%.

3. Mr. Dickinson states also in his letter that he had arranged with Messrs. Shaw,

Savill/

THE RIGHT HONOURABLE

L. C. M. S. AMERY, P.C., M.P.,

SECRETARY OF STATE FOR THE COLONIES.

21

Savill & Albion Company that they should charge a nominal freight of only 20/- per ton for the carriage of this phosphate from Auckland to Port Stanley, but it now transpires that the local representatives of the Shipping Company in New Zealand declined to accept less than 60/- per ton, plus 10% primage. Messrs. Henderson and Macfarlane report that they have paid this rate and advised the Company that it would be subject to adjustment in London.

4. In view of the express arrangement made by Mr. Dickinson it would appear that there has been some misunderstanding on the part of the Auckland representatives of the Shaw, Savill & Albion Company, and I venture to suggest therefore, that the London Office of the Company should be approached on the matter.

5. Subject to any reduction in the cost of freight which it may be possible to arrange with Messrs. Shaw Savill, I have the honour to request that instructions may be issued/

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issued to the Crown Agents for the Colonies to pay from the funds of this Colony at their disposal the amount of Messrs. Henderson and Macfarlane's account.

I have the honour to be,

Sir,

Your most obedient,

humble servant,

A. E. Beattie.

31

98/26.

19th June, 26.

Gentlemen,

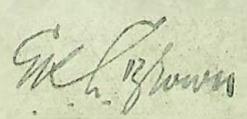
I am directed by the Acting Governor to acknowledge the receipt of your letter of the 16th of March, forwarding your account in connection with the shipment of Nauru phosphate dust by the s.s. "TAIROA", and to inform you that the question of the charge made in respect of freight has been referred to the Colonial Office with a view to representations being made to Messrs. Shaw, Savill & Albion Company regarding the freight rate which they agreed should be charged for the carriage of this phosphate from Auckland to Port Stanley.

2. I am to add that when this question has been settled your account will be paid by the Crown Agents for the Colonies.

I am,

Gentlemen,

Your obedient servant,



for Colonial Secretary.

Messrs. Henderson & Macfarlane, Ltd.,
Union Buildings,
Customs Street East,
AUCKLAND, N.Z.

THE BRITISH PHOSPHATE COMMISSIONERS.

2, Norfolk Street,
Strand,

London, W.C. 2.

26th March, 1926.

Sir,

I have the honour to refer to your letter (C.2131/1926) of the 6th ultimo, regarding the shipment of ten tons of Phosphate to the Falkland Islands for experimental purposes.

As explained in my letter of the 25th January last it was impracticable to send the phosphate dust from Nauru or Ocean Island in time for shipment by the steamer leaving New Zealand at the end of January for the Falkland Islands. As regards the next opportunity of shipping phosphate to the Falkland Islands the enclosed copies of telegrams exchanged by me with the Commissioners' Chief Representative in Melbourne will explain what has been done.

As no phosphate dust could be sent from Nauru or Ocean Island in time for shipment by the second steamer leaving New Zealand for the Falkland Islands it has been arranged, with your concurrence, that the fertiliser manufacturers in New Zealand supply ten tons of ground phosphate in bags at the price of £4. 7. 6. per ton f.o.b. the steamer at Auckland. This material will undoubtedly be

either

THE UNDER SECRETARY OF STATE,

COLONIAL OFFICE,

DOWNING STREET,

S.W. 1.

either ground Nauru phosphate or ground Ocean Island phosphate as the New Zealand manufacturers use practically none other.

The s.s. "Tairoa", carrying this material, left Auckland on the 11th inst. and is due to leave Wellington to-day. The voyage to Port Stanley occupies about 18 days and the material should be delivered there about the 13th proximo.

The delivered price of the material will be approximately -

10 tons of phosphate at £4. 7. 6. per ton	£43.15.0
Freight - 10 tons at 20/- per ton	£10.--

	£53.15.0

The price, which I understand you accept, is say, £3. 15. 0 in excess of the amount named in your letter under reply and about £10. 5. 0. in excess of the cost named in my letter of the 25th January last.

I understand that your Department will inform the Governor of the Falkland Islands Colony of the shipment of this material.

The Commissioners of this Board would be glad to hear in due course what results are obtained from the use of this material in the Colony.

I am, etc.,

(SD) ALWINR. DICKINSON,
COMMISSIONER.

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COPY OF TELEGRAMS EXCHANGED WITH THE COMMISSIONERS'
CHIEF REPRESENTATIVE, MELBOURNE, re SHIPPING
PHOSPHATE DUST TO THE FALKLAND ISLANDS.

From Melbourne 27. 1. 1926.

"Referring to your telegram 19th Shaw Savill endeavouring
"to arrange steamer call Falkland leaving New Zealand
"middle of March"-

To Melbourne 9.2.1926.

"Referring to your telegram of 27th Falkland Islands
"Have you any further news"-

From Melbourne 10.2.1926.

"Falklands Replying to your telegram our answer is 'No'
"Will cable you as soon as possible"-

To Melbourne 19.2.1926.

"Referring to your telegram 10th has steamer left for New
"Zealand with dust Can you state if March steamer calls
"Falklands"

From Melbourne 22.2.1926.

"Referring to your telegram 19th asked Nauru ship dust
"'Hartfield' but they could not arrange Doubtful whether
"Ocean Island shipping 'Crosshill' but will cable you
"again shortly understand probability March steamer
"calling Falklands have telegraphed for confirmation"-

From Melbourne 25. 2. 1926.

"Referring to your telegram 19th Referring to our
"telegram 22nd Agents advise a steamer probably leaves
"for Falklands about middle of March"-

From Melbourne 3.3.1926.

"If 'Crosshill' does not connect with March steamer
"buyers will supply 10 tons ground phosphate in bags
"£4.7.6. per ton f.o.b. Does Colonial Office accept"-

To Melbourne 4.3.1926.

"Referring to your telegram 3rd Colonial Office accept
"but understand ground phosphate will be fine enough for
"direct application land Please advise when steamer
"leaves with material for Falklands"-

From Melbourne 11.3.1926.

"Referring to your telegram 4th ground phosphate will
"be shipped 'Tairoa' Auckland 11th March She leaves
"Wellington 26th March"-

5

Downing Street,

C.7008/26

April, 1926.

Sir,

I am directed by Mr. Secretary Amery to acknowledge the receipt of your letter of the 26th March regarding the shipment of a trial consignment of phosphate dust to the Falkland Islands, and to inform you that he has notified the Governor of the Colony of the anticipated date of arrival at Port Stanley of the s.s. Tairoa carrying this material.

2. I am to confirm the undertaking already conveyed to you semi-officially, that the cost of the shipment (including freight) will be met from the funds of the Falkland Islands up to a maximum of £55.

3. A copy of your letter under acknowledgment and of this reply is being sent to the Colonial Government for their information.

I am, Sir,
Your obedient servant,

(Signed) G. GRINDLE.

A.L. DICKINSON, ESQ., C.M.G.

32

Reference to previous correspondence:-

A
1

Secretary of State's Despatch No..... of the
Governor's Telegram of the
31st March, 1926.



FALKLAND ISLANDS.

No.....36.....

DOWNING STREET,
8th April, 1926.

Sir,

I have the honour to transmit to you the
for your information, copies of the
papers noted below on the subject of the shipment of a trial
consignment of phosphate dust to the Falkland
Islands.

I have the honour to be,
Sir,
Your most obedient, humble servant,

THE OFFICER ADMINISTERING
THE GOVERNMENT OF THE FALKLANDS ISLANDS.

L. S. AMERY.

Date.	Description.
1926.	
26 March	From the British Phosphate Commissioners.
3 April	To -do-

Cutting from "New Zealand Farmer" of 1st May, 1926.
relating to Naserua Phosphates.

(3)

thoroughly scraped and scalded after using. The fact, however, remains that potash in some form has been proved to be a payable addition to phosphates. There is no doubt that kainit, on account of the high percentage of salt it contains, is valuable in far inland districts where there is no precipitation from the ocean, the drawback being the injury to the drill if care is not exercised.

Farmers are waking up to the fact that if they are to maintain not only the health of their cows, but also their fertility, they must give them ample supplies of minerals in their food, not the least of which is potash, for it is just as necessary as lime. The greater the quantity of milk the cow gives the greater the necessity for supplying minerals in abundance, for not only has she to maintain her own frame, but she has to nourish the unborn calf also; and if we are to breed healthy and vigorous stock we must see to it that the calves are well born—that they come into the world with plenty of bone and constitution. Of course, the cow must have proteids and carbohydrates, but that is another matter. I am only dealing with one of the necessary minerals, namely potash.

Time to Apply.

Like phosphates, the potash may be applied at any time, for, as in the case of phosphate of lime, it does not leach away in the drainage water, the soil particles having the property of retaining it till the plants absorb it through the medium of the soil water. I saw it stated recently that, like phosphates, an overdose can hardly be given; that is not correct. It is quite easy to give too much, for there is such a thing as potash poisoning, just as is the case with salt—a necessary element in the food of human beings and animals—a certain amount of which is required to maintain health, but an overdose being poisonous. One can give a ton of bone-dust to the acre, which is just wasteful, as no crop could absorb such a quantity. The unused balance would do no

harm to land or crop, but half, or even a quarter, of that amount of high-grade sulphate or muriate of potash would injure the crop.

As a good deal of topdressing is done in the winter and early spring, this article will appear in time for such operations, and I would strongly advise the use of potash in some form, even if only for experimental purposes. For fruit growers and viticulturists potash is an absolute necessity, except, perhaps, on clay land already heavily charged with it naturally, but even then it is wise to experiment with it. It can be applied from now on to, say, September, the amount varying according to the size of the tree or the nature of the soil. For a small tree in full bearing 1lb of sulphate of potash would be ample, while 2lb would be a fair dressing for a larger one; this, of course, in addition to nitrogen, phosphates and lime.

Effect on Potatoes.

Quite recently I received the results of potash experiments on potatoes in various parts of England. Various measured plots were manured with different forms of potash in addition to other fertilisers. The heaviest return was from those manured with muriate of potash, which contains a higher percentage of pure potash than other forms. Next in order came the sulphate, and then kainit. In each case the yield was greater than on those plots which were given equal quantities of the other fertilisers, but without the potash. Very wisely, the trials were not made for quantities only; quality was also taken into consideration. In this the sulphate was immeasurably superior to the other forms, which, on being cooked, were dark coloured and sodden, while those grown with the sulphate of potash were white, dry and floury, and altogether superior. Precisely the same result was brought under my notice at Balfour, in Southland, where potatoes grown with kainit were absolutely unmarketable, the salt in the kainit, and the chlorine in the muriate being injurious to the tubers, as they promoted an excess of

water instead of starch. In the potato-growing districts sulphate of potash to the extent of lewt to 2cwt to the acre will be found profitable. Wine makers will also find that this particular form will give them a better quality of grapes, and a more quickly-maturing wine. One to two cwt per acre can be used according to the number of vines planted and their age. For mangels kainit is certainly the best form of potash; it is also suitable for cauliflowers, cabbage and other members of the brassica family.

Potash for Citrus and Other Fruits.

Fruit-growing is assuming such large proportions in the Dominion that the proper manuring of the orchards is a matter of the utmost importance. The cultivation of citrus fruits is largely practised in the Auckland province, and it is in this branch of fruit-farming that potash is of such importance, for it may truly be said to be the dominant manure for lemons and oranges. Mr. C.H. Scott, of Henderson, is one of the most successful lemon growers in the country, and in manuring he always uses potash, as he has found from experience that not only is the yield increased thereby, but the quality is greatly improved. Furthermore, citric acid is developed, and the skin of the fruit is smoother and of much finer texture.

The following composition of the dry substances in lemons and oranges will show that potash is the dominant constituent in each:—

ANALYSIS OF LEMONS.

	Per cent.
Organic matter	15.60
Potash	0.27
Phosphoric acid	0.06
Nitrogen	0.15

ANALYSIS OF ORANGES.

Potash	0.48
Phosphoric acid	0.08
Nitrogen	0.12

ANALYSIS OF APPLES.

Dry matter	14.96
Potash	0.24
Phosphoric acid	0.01
Nitrogen	0.13

Here, as in the case of citrus fruits, the extreme value of potash is apparent. It must be borne in mind that these analyses are of the fruit only; the tree also requires potash with other fertilisers to ensure vigorous growth in order to produce full crops of fruit. The subject of potash manuring for fruit alone, leaving out general farm crops, is so extensive that it is not possible to do justice to it within the compass of one article. I may refer to it in a future issue of the "Farmer."

Agriculture and Art.

Correctly speaking, the tilling of the soil is an art rather than a science, and it is an art in which the most capable and experienced cannot hope to attain perfection. The cultivation of the soil, and the maintenance of its fertility, is so much influenced by local conditions, and so intricate in details, that there is absolutely no hope that the hard and unyielding rules of science can ever be applied with unvarying success.

While we must not forget that science has aided the farmer, and will continue to aid him in many ways, yet we must also remember that the best rules which have been laid down as a guide to the farmer in cultivating the soil are simply the result of much practical experience and reasonable deductions. The idea that the rules of science could be applied to the cultivation of the soil without deviation was the cause of many costly mistakes in the days gone by. Many years ago, Jethro Tull laid down the rule that "Good cultivation is half manuring," and it is an axiom which science will never alter.

Feed is used in the animal's body for several purposes. In the young animal it is used for the building of new tissues and for growth. In the more matured cow it is used: (1) To repair tissue that is worn or broken down by exercise or work; (2) to furnish the motive power to keep the animal mechanism running; (3) to furnish the material for the manufacture of milk; and (4) an excess of food may be used for storing body fat.

POTASH FOR PASTURES.

Numerous experiments have shown that the use of Potash Fertilisers on grass land is distinctly profitable.

Potash manures not only increase the quantity of the herbage on a pasture, but also improve the quality.

This improvement is registered in greater stock carrying capacity, improved fattening tendencies and increased milk production.

More hay is secured from pastures topdressed with Potash and it is of superior quality.

A good illustration of the above statements was to be seen on Messrs. Fraser Bros.' Farm, at Seaward Downs, Southland, the past season:

The Fraser Bros. topdressed a grass paddock. Approximately one half the paddock received phosphates only and the other half phosphates and potash. The part receiving the potash as well as the phosphates showed a more vigorous growth and the clover content was much greater than with phosphates alone. The cows, when put on, grazed the potash portion right down and neglected the rest of the paddock.

Those farmers who have tried Potash on Pastures continue to use it.

NOW is the time to Topdress Pastures.

You are recommended to apply 1 to 2 cwt per acre of 30 per cent Potash in addition to phosphates. If Kainit is used, double the above quantity. If Sulphate of Potash, half the quantity.

Remember ! POTASH PAYS.

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COPY.

The British Phosphate Commissioners,
2, Norfolk Street,
Strand, London W.C.2.
7th July, 1926.

Sir,

I have the honour to refer to your letter No.C.7008/26, dated the 3rd April last and to previous correspondence exchanged regarding the shipment of ten tons of phosphate by the s.s. "Tairua" from Auckland to the Falkland Islands, and now beg to enclose Bill of Lading and Insurance Policy in respect of this shipment, together with debit note amounting to £54.13.0. for cost of the material and freight and charges thereon.

I am, etc.,

(SGD.) ALWIN R. DICKINSON.

Commissioner.

The Under Secretary of State,
Colonial Office,
Downing Street,
S.W.1.

COPY.

C.13636/26.

Downing Street,

16th July, 1926.

Sir,

I am directed by Mr. Secretary Amery to acknowledge the receipt of your letter of the 7th of July and to inform you that the Crown Agents for the Colonies are being authorised to pay to you the sum of £54.13.0. from Falkland Islands funds in respect of the shipment of ten tons of phosphate by the s.s. "Tairoa" from Auckland to the Falkland Islands.

I am, etc.,

(SGD.) G. GRIDDLE.

A.L. DICKINSON, ESQ., C.M.G.,

COPY.

39

C.15873/26.

Downing Street,

24th August, 1926.

Sir,

With reference to your letter of the 7th July and to previous correspondence regarding the shipment of a trial consignment of phosphate dust to the Falkland Islands, I am directed by Mr. Secretary Amery to transmit to you, for your observations, the accompanying copy of a letter received by the Government of the Falkland Islands from Messrs. Henderson and Macfarlane Limited, of Auckland, New Zealand, together with a copy of the invoice which accompanied it. You will observe that the estimated cost as given by you in paragraph 3 of your letter of the 25th January has been exceeded by over 50%

I am, etc.,

(SGD.) E.R. DARNLEY.

A.L. DICKINSON, ESQ.,

COPY.

THE BRITISH PHOSPHATE COMMISSIONERS

Norfolk Street,

2, Strand, London W.C.2.

27th August, 1926.

Sir,

I have the honour to acknowledge the receipt inst., together with a copy of a letter dated the 16th of your letter (No. 15873/26) of the 24th March last, from Messrs Henderson and Macfarlane Ltd., of Auckland, to the Secretary of the Department of Agriculture, Port Stanley, Falkland Islands, relative to a trial consignment of phosphate to the Falkland Islands.

I arranged with the Shaw Savill & Albion Co., in London that the rate of freight for this consignment should be 20s/- per ton and their representatives in Auckland were in error in charging 60s/- per ton.

The matter was adjusted in my letter of the 7th July last and the sum of £54,13,0. (not £75,13,0. set out in Messrs Henderson & Macfarlane's letter) has been correctly paid by you. In this connection I would refer you to my letter of the 26th March last.

I am, etc.,

(SGD.) ALWIN R. DICKINSON.

Commissioner.

The Under Secretary of State,
Colonial Office,
Downing Street, S.W.1.



42

Reference to previous correspondence:-

- Secretary of State's Despatch No....77. of the
Governor's

..18th June,....19..26.

$\frac{A}{1}$

FALKLAND ISLANDS.

No...92.....

DOWNING STREET,

.....9th..September,..1926..

Sir,

I have the honour to transmit to you the-
for your information copies of the
papers noted below on the subject of a trial consignment
of phosphate to the Falkland Islands.

I have the honour to be,

Sir,

Your most obedient, humble servant,

THE OFFICER ADMINISTERING

THE GOVERNMENT OF THE FALKLANDS ISLANDS.

L. S. AMERY.

Date.	Description.
1926.	
7 July.	From Mr. A. L. Dickinson, C.M.G.
16 "	To "
24 August	To "
27 "	From "