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MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 1399

Press
~~Mis.~~

103-04

Dated 5. 5

1868.

Not to be folded or roughly handled

12

*Proceedings of the Madras Government, Public Works Department,
5th May 1863.*

No. 103. Read the following Proceedings of the Government of India, in the Public Works Department, (Civil Works—Miscellaneous,) dated Fort William, 27th March 1863, Nos. 181/4 C:—

Supply of apparatus for Lighthouses in India.

Read the following Despatch from the Secretary of State for India, to the Government of India, dated 8th February 1863, No. 12.

1. I forward, for your information and guidance, counterpart of Articles of Agreement entered into with Messrs. Chance Brothers, for the supply of Lighthouse apparatus and stores that may be required for the Indian Lighthouses.

2. I request that any demands for stores for this service may be described, as far as possible, in the terms used in the Lists accompanying the Agreement.

ARTICLES OF AGREEMENT made the twenty-eighth day of November One thousand eight hundred and sixty-seven BETWEEN JAMES TIMMINS CHANCE of the Glass Works near Birmingham in the County of Warrick carrying on business there with Robert Lucas Chance Edward Chance Frank Chance John Homer Chance and Henry Chance his copartners in Trade under the style or Firm of Chance Brothers & Co., hereinafter designated the Contractors of the one part and THE SECRETARY OF STATE in COUNCIL of the other part.

WITNESS that in consideration of the payments hereinafter mentioned to be made by the Secretary of State in Council to the Contractors the said James Timmins Chance for and on behalf of himself and his said copartners his and their respective executors and administrators both hereby promise and agree to and with the Secretary of State in Council in manner following that is to say.

1. THAT the said James Timmins Chance and his said copartners shall and will manufacture for and sell and deliver to the Secretary of State in Council all Goods and Stores of the several kinds description quality and dimensions mentioned or referred to in the several Schedules hereunto annexed which may be required by the Secretary of State in Council at any time or times during the period of one year from the first day of November One thousand eight hundred and sixty-seven for the purpose of being used at certain Lighthouses constructed or in the course of construction in India and also do and perform within the said period the work labor and services mentioned or referred to herein or in the said Schedules or any of them and find and provide all materials articles and things requisite or necessary in and about the premises.

2. THAT upon receiving notice from the Director General of Stores that any of the said Goods and Stores are from time to time required by the Secretary of State in Council the said Contractors shall state in writing by what day they propose to have the same ready for delivery as hereinafter mentioned and in case such day or respective days shall be approved of by the said Director General of Stores he shall give them orders for the same accordingly and such day or respective days shall be the time or times at which such Goods and Stores shall be in readiness for delivery and alongside ships or delivered as hereinafter mentioned but in case the day or respective days named by the Contractors shall be disapproved of by the Director General of Stores and he

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and they shall be unable to agree as to the day or days the Director General of Stores shall from time to time fix the day or respective days when such Goods and Stores shall be so ready or shall be so delivered and such last-mentioned day or days shall be the time or times upon which the same shall be so ready or delivered as aforesaid.

3. THAT all the said Goods and Stores shall be made of the very best materials and workmanship and be perfect and in accordance with designs and instructions (if any) from time to time given or supplied to the Contractors but which shall not be necessary on the part of the Secretary of State in Council and such designs and instructions when given shall at all times be followed and observed by them.

4. If it should at any time appear to the Director General of Stores that the Contractors are not using sufficient diligence in proceeding to execute any orders for the said Goods and Stores he shall be at liberty to give them a written notice requiring them to proceed with more despatch and to employ for that purpose an additional number of men and to do all such other things as may be specified in such notice and in case they shall fail to comply with such notice for seven days after service thereof or in case they shall make default in the performance of any of the conditions herein contained on their part it shall be lawful for the Secretary of State in Council to declare this contract at an end but without prejudice to his right to recover from the Contractors all loss damage and penalties to which they may then be liable in virtue of these presents.

5. THAT all the said Goods and Stores shall preparatory to their delivery as hereinafter mentioned be properly and securely packed in double boxes with tow and tinned where necessary respectively and marked in good black paint with the name of the light for which the said stores are intended and the Presidency in which such light is situate and the outside of each box shall contain a statement of the contents thereof written with the like paint and such of the boxes as contain glass shall in like manner be marked with the words "Glass with care" and on the side on which they are on their arrival at the port of destination to be opened such boxes shall be marked in like manner with the words "this side up" and in case of the possible abrasion during the voyage of the number on such boxes the numbers to be painted thereon shall be painted as aforesaid or cut out on each of the sides thereof and all the Goods and Stores from time to time ordered shall be ready for delivery on the day or respective days mentioned in Clause 2 of these presents alongside ships in one of the docks in or near London or in case of small orders shall at the discretion of the Director General of Stores be delivered on such respective days at the Stores of the Secretary of State in Council in Belvedere Road Lambeth Surrey and in case such Goods and Stores shall not be in readiness or be delivered by the time aforesaid the Contractors shall pay to the Secretary of State in Council as liquidated damages and not as penalty the following sums per diem that is to say the sum of twenty shillings for every first Order Light the sum of fifteen shillings for every second Order Light the sum of ten shillings for every third Order Light and the sum of five shillings for any other Order of Light and the sum of one-eighth per cent. *ad valorem* of any of the said Goods and Stores other than those hereinbefore mentioned for every day which shall elapse between the day or respective days on which such Goods and Stores ought to be ready or delivered and the day or days on which they are so in readiness or delivered as aforesaid PROVIDED ALWAYS that if any of the said Goods and Stores shall not be in readiness as aforesaid or shall remain undelivered as aforesaid for three months from the day or respective days on which they ought to be so ready or ought to be delivered it shall be lawful for the said Secretary of State in Council to put an end to this Contract but he shall nevertheless be entitled to recover from the Contractors all penalties to which they may then be liable and also all loss and damage sustained by the Secretary of State in Council by reason of default.

6. THAT it shall be optional with the Secretary of State in Council at any time before or upon delivery of any of the said Goods and Stores to appoint some person to inspect and examine the same on his behalf who shall be at liberty to reject any portion which may be considered unsatisfactory by him but whether such inspection or examination be or be not made in this country by or on his behalf the Contractors hereby expressly agree that they will from time to time make good

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any deficiency or defect whatsoever which may be reported by the Government Officers in India as existing therein upon their examination and inspection on their arrival at the port of destination by such Officers PROVIDED ALWAYS that in case any of the said Goods and Stores shall at any time be disapproved of by the Secretary of State in Council or by the Government of India it shall be competent for the Secretary of State in Council forthwith to declare the Contract at an end and to recover from the Contractors all penalties loss damages costs and charges whatsoever sustained by him by reason of their default. The Contractors hereby promise and agree that the said Goods and Stores when erected and set up provided such erection and setting up is in accordance with their drawing and instructions shall be in good working order and adjustment and that they shall severally answer the purposes for which they are intended, and that such Goods and Stores and every part thereof shall severally meet with the satisfaction and approval of the Indian Government.

7. THE Contractors shall replace any of the Goods and Stores which may sustain damage or injury during the voyage in case such damage shall in the opinion of the Secretary of State in Council have arisen from defective packing and the Contractors shall at or before the shipment of such Goods and Stores from time to time deliver to the Director General of Stores packing accounts for each set of the said Goods and Stores. The Contractor shall also supply drawings in duplicate of all complete apparatus and in order to facilitate reference and to identify the drawings each light supplied by the Contractors shall be numbered consecutively and the corresponding numbers shall be shewn distinctly on such drawings.

8. AND the Secretary of State in Council doth hereby promise and agree with the said James Timmins Chance and his copartners that in case and upon condition that they do and shall in all things well and truly observe perform fulfil and keep the provisions herein contained on their parts to be observed performed fulfilled and kept but not otherwise they shall be paid for and in respect of all Goods and Stores of which delivery shall be accepted by the Secretary of State in Council the rates or prices set opposite such descriptions of Goods and Stores in the said Schedules annexed which shall be in full satisfaction of all claims and demands whatsoever by the said Contractors under these presents including drawings package and delivery alongside vessels as aforesaid or at the Stores payment whereof shall be made as regards those delivered alongside on production of Mate's receipts respectively for the said Goods and Stores to the Director General of Stores and of the other Goods and Stores as early as practicable after delivery at the Stores in Belvedere Road aforesaid and of an invoice for the same in duplicate. PROVIDED ALWAYS that if the said Contractors shall at any time while this Contract remains in force make any reduction in their list of prices for or in respect of any of the Goods and Stores referred to in the Schedules and numbered 24, 26, 27, 52, 54, 75, 77, 81 and 87 and numbers 108, 113, 117, 121 and 124 then instead of the prices specified in the said Schedules in respect of such Goods and Stores the prices charged by the Contractors in their new tariff for such Goods and Stores shall be the prices which shall be paid by the Secretary of State in Council for them to be supplied in virtue of these presents. AND LASTLY it is hereby agreed by and between the parties hereto that if the said James Timmins Chance and his said copartners and the Secretary of State in Council shall upon the expiration of this Contract be desirous of renewing the same and if either of such parties shall signify such desire to the other of them and it shall be accepted then this Contract and all the clauses and provisions herein contained shall remain in force for such further term as may be agreed upon by and between the parties IN WITNESS whereof WILLIAM URQUHART ARBUTHNOT ESQUIRE AND SIR JAMES WEIR HOGG BARONET being two Members of the Council of India and the said JAMES TIMMINS CHANCE have hereunto set their hands the day and year first above written.

Proceedings of the Madras Government, Public Works Department,
5th May 1863.

Lighthouse Apparatus and Accessories.

No. of Item.	Description of parts.	Remarks.	Price.
<i>First Order Apparatus.</i>			
1	Fixed panel for	Upper tier of 13 prisms	£. s. d.
2	45° or 1/4th of the circle.	Cylindrical lens	55 0 0
3		Lower tier of 6 prisms	63 0 0
4		1/4th of the circle or 45°	49 0 0
5	Revolving or annular lens.	1/4th " " 30°	35 0 0
6		1/4th " " 22 1/2°	37 10 0
7	Revolving panel of upper	1/4th of the circle or 45°	52 0 0
8	prisms 18	1/4th " " 30°	35 10 0
9	prisms.	1/4th " " 22 1/2°	27 0 0
10	Revolving panel of lower	1/4th of the circle or 45°	19 0 0
11	prisms, 8 prisms.	1/4th " " 30°	68 10 0
12	Armature for fixed lights with table and column	1/4th " " 22 1/2°	47 0 0
13	Do. do. and flashing light	1/4th " " 15°	57 0 0
14	Rotatory machine for ditto with regulator	1/4th " " 15°	27 0 0
15	Armature for holophotal revolving lights...		38 0 0
16	Silver-plated reflector for ditto with regulator		26 0 0
17	Dioptric mirror for 45° one metre high		20 0 0
18	Three mechanical lamps and accessories		11 0 0
19	Improved pressure lamp, 5 spare burners stand, duplicate pieces, accessories, safety, fountain and tubes		144 0 0
20			367 0 0
21			367 0 0
22			60 0 0
23			70 0 0
24			81 0 0
25			50 0 0
26			75 0 0
27			47 10 0
28			52 0 0
29			43 5 0
30			27 10 0
31			31 10 0
32			34 0 0
33			23 15 0
34			15 15 0
35			19 15 0
36			45 5 0
37			32 15 0
38			21 0 0
39			27 0 0
40			27 0 0
41			19 10 0
42			13 15 0
43			16 10 0
44			108 0 0
45			306 0 0
46			306 0 0
47			30 0 0
48			60 0 0
49			72 0 0
50			60 0 0
51			
52			
53			
54			

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5th May 1863.

Lighthouse Apparatus and Accessories.

No. of Item.	Description of parts.	Remarks.	Price.
<i>Third Order Apparatus.</i>			
55	Fixed panel for	Upper tier of 11 prisms	£. s. d.
56	72° or 1/4th of the circle.	Cylindrical lens	28 0 0
57		Lower tier of 4 prisms	29 0 0
58		1/4th of the circle or 45°	15 6 8
59	Revolving panel of upper prisms	1/4th " " 30°	20 0 0
60	with 11 prisms.	1/4th " " or 22 1/2°	14 0 0
61	Revolving panel of lower prisms	1/4th of the circle or 45°	11 0 0
62	with 4 prisms.	1/4th " " or 30°	11 0 0
63	Revolving or annular lens.	1/4th " " or 22 1/2°	7 15 0
64		1/4th " " or 30°	6 0 0
65		1/4th " " or 45°	20 0 0
66		1/4th " " or 30°	13 15 0
67		1/4th " " or 22 1/2°	11 0 0
68	Armature for fixed light		49 0 0
69	Do. do. and flashing light		270 0 0
70	Rotatory machine for ditto with regulator		270 0 0
71	Armature for holophotal revolving lights		
72	Rotatory machine for ditto with regulator		
73	Silver-plated reflector for 72°		30 0 0
74	Dioptric mirror (same as 2nd Order)		60 0 0
75	Three mechanical lamps, &c., accessories		52 0 0
76	Improved pressure lamp, &c., same as 1st Order...		40 0 0
77	First Order.—Complete set of stores	(As see appended printed list in detail.)	63 0 0
78			
79	Ditto Packing double-cases with tow...		32 0 0
80	Second Order.—Complete set of stores	(As see appended printed list in detail.)	53 0 0
81	Ditto packing double-cases with tow...		22 0 0
82	Third Order.—Complete set of stores		46 0 0
83	Ditto packing double-cases with tow...	(As see appended printed list in detail.)	16 0 0
83A	Extra charge for tin lining cases containing Optical Apparatus, 1st Order		16 0 0
83B	Ditto ditto 2nd		12 0 0
83C	Ditto ditto 3rd		8 0 0
<i>Harbour Lights.</i>			
<i>Fourth Order.—Apparatus 500 mm. diameter—</i>			
84	Fixed panel of 90° with armature...		28 5 0
85	Table and column for fixed lights...		7 5 0
86	Silver-plated Reflector for 90°		6 0 0
87	Revolving panel of 60° with armature		23 5 0
88	Ditto of 36°		15 5 0
89	Pedestal and revolving carriage		40 0 0
90	Rotatory machine		36 0 0
91	Three moderator lamps		12 0 0
92	Complete set of stores, chimneys, &c.	(As see appended printed list in detail.)	14 0 0
93	Packing double-cases with tow not tinned		6 0 0
<i>Fifth Order.—Apparatus 375 mm. diameter—</i>			
94	Fixed panel of 90° with armature		19 10 0
95	Table and Column for fixed lights...		6 0 0

Proceedings of the Madras Government, Public Works Department,
5th May 1863.

Lighthouse Apparatus and Accessories.

No. of Item.	Description of parts.	Remarks.	Price.
96	Harbour Lights.—(Contd.)		
97	Frame of fixed light varied by flashes		£. s. d.
98	Rotatory machine ditto		36 0 0
	Moderator lamp with spare burners and accessories.		36 0 0
			3 0 0
99	Sixth Order.—Apparatus, 300 mm. diameter.		
100	Fixed panel of 90° with armature		15 10 0
101	Table and Column for fixed lights		6 0 0
102	Armature for fixed and flashing light		28 15 0
103	Rotatory machine		36 0 0
104	Moderator lamp		3 0 0
104	Complete set of stores for 5th and 6th Orders each.	(As see appended printed list in detail.)	14 0 0
105	Packing double-cases with tow not tinned for 5th and 6th Orders each.		5 0 0
106	First Order Lanterns.		
	Lantern, with inclined or vertical standards of wrought-iron, 3-inch plate-glass secured with gun-metal strips and brass-screws, outer roof in copper, inner roof in iron, cast-iron service gallery, and steps, blinds, &c.	Internal diameter 12 feet, height of blocking 7 feet, day-light 10 feet.	774 0 0
107	Lantern improved with framing to coincide with excentered panels, plate-glass bent to circular form, all other parts complete as above with increased air-space in roof.		
108	Light-room of cast-iron, with wood or iron-lining, one door and ventilating boxes.		828 0 0
109	Balustrade for top of tower		
110	Packing		216 0 0
111	Second Order Lanterns.		
112	Lantern same as No. 106		44 0 0
112	„ improved, „ 107		28 0 0
113	Light-room	Internal diameter 10 feet.	
114	Balustrade for top of tower	Height of blocking 7 feet.	504 0 0
115	Packing	Glazing 8 feet	542 0 0
116	Third Order Lanterns.		
	Lanterns with vertical standards of wrought-iron, &c., all complete.		155 0 0
117	Light-room		40 0 0
118	Balustrade		18 0 0
119	Packing		
		Internal diameter 8 feet, height of blocking 7 feet, Glazing 5 feet 6 inches.	306 0 0
			104 0 0
			23 0 0
			14 0 0
120	Fourth Order Lanterns.		
	Lantern with vertical standards of wrought-iron, &c.		137 0 0
121	Light-room		43 0 0
122	Balustrade		20 0 0

Proceedings of the Madras Government, Public Works Department,
5th May 1863.

Lighthouse and Apparatus Accessories.

No. of Item.	Description of parts.	Remarks.	Price.
			£ s. d.
123	Fifth and Sixth Order Lanterns.		123 0 0
124	Lantern with wrought-iron standards		41 0 0
125	Light-room		18 0 0
126	Balustrade		3 0 0
	Packing for fourth, fifth, and sixth Orders		

Signed by the above-named JAMES TIMMINS CHANCE in the presence of JAMES KENNARD, Cambria Cottage, Smethwick, near Birmingham.

JAMES T. CHANCE.

Signed by the above-named WILLIAM URQUHART ARBUTHNOT and SIR JAMES WEIR HOGG, being two members of the Council of India, in the presence of ROBERT WICKENDEN, Drapers' Hall, London.

W. U. ARBUTHNOT,
J. W. HOGG.

List of various appurtenances supplied by CHANCE BROTHERS AND Co., for the service of their Dioptric Harbour Lights, of the 4th, 5th, and 6th Orders.

THE WHOLE OF THE BEST DESIGN AND MATERIAL.

	£ s. d.	Tools, &c.—(Concluded.)	£ s. d.
Chimneys and Wicks.		Brought forward...	10 4 1
100 Glass chimneys	3 10 0	1 Round spirit-level for setting lamp.	0 5 6
22 Yards of wicks, of each size	1 18 0	1 Pair chimney tongs	0 3 0
4 Balls of wicks for lighting lantern	0 3 2	1 Thermometer	0 2 9
		1 Wood rule (French and English measure)	0 4 0
Tin and Copper-Work.		1 Hand vice	0 4 3
1 Pump for drawing oil	0 7 6	1 Cold chisel	0 1 0
1 Oil filter, with spare felt	0 13 0	1 Wood chisel	0 1 0
1 Copper bucket	0 12 0		
1 Zinc bucket	0 3 9	Brushes, &c.	
1 Dripping pan for draining the burners	0 3 0	6 Glass chimney brushes	0 7 6
1 Lighting lantern, with two lucernes	0 10 9	2 Plume brushes	0 1 6
1 Tin box for the whitening	0 1 0	2 Hand do.	0 2 0
1 Small oil can	0 0 10	2 Paint do.	0 2 0
1 Tin wick box	0 7 6	2 Clockmaker's brushes (Revolving Lights)	0 3 2
		3 Glass cloths	0 4 0
Tools, &c.		2 Chamois skins	0 3 0
2 Gimlets	0 0 7		
1 Triangular scraper	0 1 6	Oils, &c.	
1 Pair snipping pincers	0 2 6	3 Bottles clockmaker's oil (Revolving Lights)	0 1 0
1 Do. flat pincers	0 1 3	1 Quart spirits of wine	0 7 6
1 Do. cutting pincers	0 3 0	5 lbs. whitening	0 0 9
2 Pairs curved scissors	0 6 6		
1 Screw-driver	0 1 9	1 Service box	0 2 6
1 Hammer	0 3 0	1 Tool chest, specially made	0 15 0
1 Spanner	0 8 0	1 Cover for apparatus	0 4 6
1 Long spirit-level	0 5 6		
Carried over...	10 4 1		14 0 0

N. B.—Certain special accessories for the service and repair of the Lamps are not included in the above List, being charged with the Lamps.

GLASS WORKS, NEAR BIRMINGHAM,
The 27th June 1867.

(Packing included.)

*Proceedings of the Madras Government, Public Works Department,
5th May 1868.*

*List of various appurtenances supplied by Chance Brothers and Co., for the service of their
Dioptric Sea lights.*

THE WHOLE OF THE BEST DESIGN AND MATERIAL.

150 Chimneys for large Lamp.

	£	s.	d.
1st Order	24	5	0
2nd "	17	6	0
3rd "	12	18	0

44 Yards of wick for large Lamp.

	£	s.	d.
1st Order	11	1	0
2nd "	8	0	0
3rd "	5	8	0

Chimneys and Wicks.

150 Glass chimneys for large lamp, see above			
50 Ditto for keeper's lamp...	0	19	0
44 Yards of wicks of each size for large lamp, see above			
1 Gross of wicks for keeper's lamp.	0	3	0
8 Balls of wicks for lighting lantern and common lantern ...	0	6	3

Tin and Copper Work.

1 Oil filter, with spare felt	0	18	9
2 Copper buckets	1	4	0
1 Tin wick-box	0	11	3
2 Tin boxes for the whitening	0	2	0
2 Lamps for keeper's use ...	0	13	6
1 Common lantern and oil-heater...	0	4	4
2 Lighting-lanterns, with two lucernes each	1	1	6
1 Dripping pan for draining the burners	0	3	0
1 Copper pump for drawing oil ...	0	14	0
1 Set of oil measures	0	2	6
2 Small oil-cans	0	1	8

Tools, &c.

2 Triangular scrapers	0	3	0
14 Files, assorted	0	12	0
2 Clock-maker's files (Revolving Lights)...	0	2	6
2 Wood chisels	0	2	0
3 Cold do.	0	2	6
1 Pair of flat pincers	0	1	3
1 Do. of pincers for nails...	0	2	6
1 Do. of cutting pincers ...	0	3	0
1 Do. of snipping do.	0	3	0
1 Spanner	0	2	6
1 Hand vice	0	8	0
1 Bench vice	0	4	3
1 Large hammer	0	3	0
2 Small hammers	0	3	0
1 Screw-drivers, assorted ...	0	3	9
1 Drill-bow, holder, drills, breast-plate, and cat-gut	0	5	4
1 Plumb-bob	0	7	6
16 Tool handles	0	6	3
50 Sheets emery cloth	0	1	8
1 Metal saw, with four spare blades.	0	5	3
6 Gimlets	0	1	6

Carried over...

N. B.—Certain special accessories for the service and repair of the large Lamp are not included in the above List.
being charged with the Lamp.

1st Total of Stores, including packing.
GLASS WORKS NEAR BIRMINGHAM, }
27th June 1867. 2nd ... £ 53
3rd ... £ 46

*Proceedings of the Madras Government, Public Works Department,
5th May 1868.*

ORDER.—Ordered, that copies of this Dispatch, and its enclosures, be forwarded to the Governments of Madras, Bombay, and Bengal, and to the Chief Commissioner of British Burmah, for guidance.

(Signed) C. H. DICKENS, Colonel, R. A.,
Secretary to the Government of India

To the Secretary to the Government of Madras, Public Works Department.

No. 104. ORDER THEREON, 5th May 1868, No. 1,399.

CIVIL WORKS, No. 13.

Communicated to the Marine Department; also to the Superintending Engineers and the General Superintendent of Public Works Stores for information and guidance.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Marine Department.

" Superintending Engineers.

To Captain Kennedy.

To the General Superintendent of Public Works Stores.

Exl. S. T. Augustin.

11 C

Nos. 181—4 C.
GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
CIVIL WORKS.
Miscellaneous.

FORT WILLIAM, MARCH 27, 1868.
Supply of apparatus for Lighthouses in India.

Read the following Despatch:—

No. 12, dated 8th February, 1868.

From—The Secretary of State for India,

To—The Government of India.

I forward, for your information and guidance, counterpart of Articles of Agreement entered into with Messrs. Chance Brothers, for the supply of Lighthouse apparatus and stores that may be required for the Indian Lighthouses.

2. I request that any demands for stores for this service may be described, as far as possible, in the terms used in the Lists accompanying the Agreement.

ARTICLES of AGREEMENT made the twenty-eighth day of November One thousand eight hundred and sixty-seven BETWEEN JAMES TIMMINS CHANCE of the Glass Works near Birmingham in the County of Warrick carrying on business there with Robert Lucas Chance Edward Chance Frank Chance John Homer Chance and Henry Chance his copartners in Trade under the style or Firm of Chance Brothers & Co., hereinafter designated the Contractors of the one part and THE SECRETARY of STATE in COUNCIL of the other part.

WITNESS that in consideration of the payments hereinafter mentioned to be made by the Secretary of State in Council to the Contractors the said James Timmins Chance for and on behalf of himself and his said copartners his and their respective executors and administrators both hereby promise and agree to and with the Secretary of State in Council in manner following that is to say.

1. THAT the said James Timmins Chance and his said copartners shall and will manufacture for and sell and deliver to the Secretary of State in Council all Goods and Stores of the several kinds description quality and dimensions mentioned or referred to in the several Schedules hereunto annexed which may be required by the Secretary of State in Council at any time or times during the period of one year from the first day of November One thousand eight hundred and sixty-seven for the purpose of being used at certain Lighthouses constructed or in the course of construction in India and also do and perform within the said period the work labour and services mentioned or referred to herein or in the said Schedules or any of them and find and provide all materials articles and things requisite or necessary in and about the premises.

2. THAT upon receiving notice from the Director General of Stores that any of the said Goods and Stores are from time to time required by the Secretary of State in Council the said Contractors shall state in writing by what day they propose to have the same ready for delivery as hereinafter mentioned and in case such day or respective days shall be approved of by the said Director General of Stores he shall give them orders for the same accordingly and such day or respective days shall be the time or times at which such Goods and Stores shall be in readiness for delivery and alongside ships or delivered as hereinafter mentioned but in case the day or respective days named by the Contractors shall be disapproved of by

the Director General of Stores and he and they shall be unable to agree as to the day or days the Director General of Stores shall from time to time fix the day or respective days when such Goods and Stores shall be so ready or shall be so delivered and such last-mentioned day or days shall be the time or times upon which the same shall be so ready or delivered as aforesaid.

3. THAT all the said Goods and Stores shall be made of the very best materials and workmanship and be perfect and in accordance with designs and instructions (if any) from time to time given or supplied to the Contractors but which shall not be necessary on the part of the Secretary of State in Council and such designs and instructions when given shall at all times be followed and observed by them.

4. If it should at any time appear to the Director General of Stores that the Contractors are not using sufficient diligence in proceeding to execute any orders for the said Goods and Stores he shall be at liberty to give them a written notice requiring them to proceed with more despatch and to employ for that purpose an additional number of men and to do all such other things as may be specified in such notice and in case they shall fail to comply with such notice for seven days after service thereof or in case they shall make default in the performance of any of the conditions herein contained on their part it shall be lawful for the Secretary of State in Council to declare this contract at an end but without prejudice to his right to recover from the Contractors all loss damage and penalties to which they may then be liable in virtue of these presents.

5. THAT all the said Goods and Stores shall preparatory to their delivery as hereinafter mentioned be properly and securely packed in double boxes with tow and tinned where necessary respectively and marked in good black paint with the name of the light for which the said stores are intended and the Presidency in which such light is situate and the outside of each box shall contain a statement of the contents thereof written with the like paint and such of the boxes as contain glass shall in like manner be marked with the words "Glass with care" and on the side on which they are on their arrival at the port of destination to be opened such boxes shall be marked in like manner with the words "this side up" and in case of the possible abrasion during the voyage of the number on such boxes the numbers to be painted thereon shall be painted as aforesaid or cut out on each of the sides thereof and all the Goods and Stores from time to time ordered shall be ready for delivery on the day or respective days mentioned in Clause 2 of these presents alongside ships in one of the docks in or near London or in case of small orders shall at the discretion of the Director General of Stores be delivered on such respective days at the Stores of the Secretary of State in Council in Belvedere Road Lambeth Surrey and in case such Goods and Stores shall not be in readiness or be delivered by the time aforesaid the Contractors shall pay to the Secretary of State in Council as liquidated damages and not as penalty the following sums per diem that is to say the sum of twenty shillings for every first Order Light the sum of fifteen shillings for every second Order Light the sum of ten shillings for every third Order Light and the sum of five shillings for any other Order of Light and the sum of one-eighth per cent. *ad valorem* of which shall elapse between the day or respective days on which such Goods and Stores ought to be ready or delivered and the day or days on which they are so in readiness or delivered as aforesaid. PROVIDED ALWAYS that if any of the said Goods and Stores shall not be in readiness as aforesaid or shall remain undelivered as aforesaid for three months from the day or respective days on which they ought to be so ready or ought to be delivered it shall be lawful for the said Secretary of State in Council to put an end to this Contract but he shall nevertheless be entitled to recover from the Contractors all penalties to which they may then be liable and also all loss and damage sustained by the Secretary of State in Council by reason of their default.

6. THAT it shall be optional with the Secretary of State in Council at any time before or upon delivery of any of the said Goods and Stores to appoint some person to inspect and examine the same on his behalf who shall be at liberty to reject any portion which may be considered unsatisfactory by him but whether such inspection or examination be or be not made in this country by or on his behalf the Contractors hereby expressly agree that they will from time to time make good any deficiency or defect whatsoever which may be reported by the Government Officers in India as existing therein upon their examination and inspection on their arrival at the port of destination by such Officers. PROVIDED ALWAYS that in case any of the said Goods and Stores shall at any time be disapproved of by the Secretary of State in Council or by the Government of India it shall be competent for the Secretary of State in Council forthwith to declare the Contract at an end and to recover from the Contractors all penalties loss damages costs and charges whatsoever sustained by him by reason of their default. The Contractors hereby promise and agree that the said Goods and Stores when erected and set up provided such erection and setting up is in accordance with their drawing and instructions shall be in good working order and adjustment and that they shall severally answer the purposes for which they are intended, and that such Goods and Stores and every part thereof shall severally meet with the satisfaction and approval of the Indian Govern-

7. THE Contractors shall replace any of the Goods and Stores which may sustain damage or injury during the voyage in case such damage shall in the opinion of the Secretary of State in Council have arisen from defective packing and the Contractors shall at or before the shipment of such Goods and Stores from time to time deliver to the Director General of Stores packing accounts for each set of the said Goods and Stores. The Contractor shall also supply drawings in duplicate of all complete apparatus and in order to facilitate reference and to identify the drawings each light supplied by the Contractors shall be numbered consecutively and the corresponding numbers shall be shewn distinctly on such drawings.

8. AND the Secretary of State in Council doth hereby promise and agree with the said James Timmins Chance and his co-partners that in case and upon condition that they do and shall in all things well and truly observe perform fulfil and keep the provisions herein contained on their parts to be observed performed fulfilled and kept but not otherwise they shall be paid for and in respect of all Goods and Stores of which delivery shall be accepted by the Secretary of State in Council the rates or prices set opposite such descriptions of Goods and Stores in the said Schedules annexed which shall be in full satisfaction of all claims and demands whatsoever by the said Contractors under these presents including drawings package and delivery alongside vessels as aforesaid or at the Stores payment whereof shall be made as regards those delivered alongside on production of Mate's receipts respectively for the said Goods and Stores as early as practicable after delivery at the Stores and of the other Goods and Stores as early as practicable after delivery at the Stores in Belvedere Road aforesaid and of an invoice for the same in duplicate. PROVIDED ALWAYS that if the said Contractors shall at any time while this Contract remains in force make any reduction in their list of prices for or in respect of any of the Goods and Stores referred to in the Schedules and numbered 24, 26, 27, 52, 54, 75, 77, 84 and 87 and numbers 108, 113, 117, 121 and 124 then instead of the prices specified in the said Schedules in respect of such Goods and Stores the prices charged by the Contractors in their new tariff for such Goods and Stores shall be the prices which shall be paid by the Secretary of State in Council for them to be supplied in virtue of these presents. AND LASTLY it is hereby agreed by and between the parties hereto that if the said James Timmins Chance and his co-partners and the Secretary of State in Council shall upon the expiration of this Contract be desirous of renewing the same and if either of such parties shall signify such desire to the other of them and it shall be accepted then this Contract and all the clauses and provisions herein contained shall remain in force for such further term as may be agreed upon by and between the parties. IN WITNESS WHEREOF WILLIAM ORQUHART ARBUTHNOT ESQUIRE AND SIR JAMES WEIR HOGG BARONET being two Members of the Council of India and the said JAMES TIMMINS CHANCE have hereunto set their hands the day and year first above written.

Lighthouse Apparatus and Accessories.

No. OF ITEM.	DESCRIPTION OF PARTS	REMARKS.	PRICE.
			£ s. d.
	FIRST ORDER APPARATUS		
1	Fixed panel for 45° or 1/4th of the circle.	Upper tier of 13 prisms	55 0 0
2		15 "	63 0 0
3		Cylindrical lens	49 0 0
4		Lower tier of 6 prisms	35 0 0
5		8 "	37 10 0
6		1/4th of the circle or 45°	52 0 0
7		1/4th " " 30°	35 10 0
8		1/4th " " 22 1/2°	27 0 0
9		1/4th " " 15°	19 0 0
10	Revolving or annular lens.	1/4th of the circle or 45°	68 10 0
11		1/4th " " 30°	47 0 0
12		1/4th " " 22 1/2°	37 0 0
13		1/4th " " 15°	27 0 0
14	Revolving panel of upper prisms.	1/4th of the circle or 45°	38 0 0
15		1/4th " " 30°	26 0 0
16		1/4th " " 22 1/2°	20 0 0
17		1/4th " " 15°	14 0 0
18	Revolving panel of lower prisms, 8 prisms.	1/4th of the circle or 45°	144 0 0
19		1/4th " " 30°	367 0 0
20		1/4th " " 22 1/2°	367 0 0
21	Armature for fixed lights with table and column.		
22	Armature for fixed and flashing lights		
23	Rotatory machine for ditto with regulator		
24	Rotatory machine for heliophotal revolving lights		
25	Rotatory machine for ditto with regulator		

NO. OF ITEM	DESCRIPTION OF PARTS.	REMARKS.	PRICE.
			£ s. d.
23	Silver-plated reflector for 45° one metre high	.....	60 0 0
24	Dioptric mirror for 45° with its frame-work	.....	70 0 0
25	Three mechanical lamps and accessories	.....	84 0 0
26	Mechanical lamp, Scotch system, or Chance's ditto	.....	50 0 0
27	Improved pressure lamp, 5 spare burners stand, duplicate pieces, accessories, safety, fountain and tubes	.....	75 0 0
SECOND ORDER APPARATUS.			
28	Fixed panel for	Upper tier of 12 prisms	47 10 0
29	" " "	" " 15 "	" " "
30	" " "	" " 16 "	" " "
31	60° or 1/4th of the circle.	Cylindrical lens	52 0 0
32	" " "	" " "	" " "
33	" " "	Lower tier of 5 prisms	43 5 0
34	" " "	" " 6 "	27 10 0
35	Revolving or 1/8th of the circle or 45°	.....	31 10 0
36	annular lens, 1/4th " " 30°	.....	34 0 0
37	2nd Order. 1/8th " " 18°	.....	23 15 0
38	Revolving panel 1/8th of the circle or 45°	.....	15 15 0
39	of upper 1/8th " " 30°	.....	19 15 0
40	prisms English, 1/8th " " 18°	.....	45 5 0
41	16 prisms. 1/8th " " 22 1/2°	.....	32 15 0
42	Revolving panel 1/8th of the circle or 45°	.....	21 0 0
43	of lower 1/8th " " 30°	.....	27 0 0
44	prisms English, 1/8th " " 18°	.....	27 0 0
45	prisms. 1/8th " " 22 1/2°	.....	19 10 0
46	Armature for fixed lights	.....	13 15 0
47	Armature for fixed and flashing lights	.....	16 10 0
48	Rotatory machine for ditto with regulator	.....	109 0 0
49	Armature for holophotal revolving lights	.....	306 0 0
50	Rotatory machine for ditto with regulator	.....	306 0 0
51	Silver-plated reflector for 60°, 800 mm. high	.....	306 0 0
52	Dioptric mirror for 60° with its frame-work	.....	50 0 0
53	Three mechanical lamps and accessories	.....	60 0 0
54	Improved pressure lamp, &c., same as 1st Order...	.....	72 0 0
Third Order Apparatus.			
55	Fixed panel for	Upper tier of 11 prisms	23 0 0
56	" " "	" " of 15 "	" " "
57	72° or 1/4th of the circle.	Cylindrical lens	" " "
58	" " "	" " "	" " "
59	" " "	Lower tier of 4 prisms	29 0 0
60	Revolving panel 1/8th of the circle or 45°	.....	15 6 8
61	of upper prisms 1/8th " " or 30°	.....	20 0 0
62	with 11 prisms. 1/8th " " or 22 1/2°	.....	14 0 0
63	Revolving panel 1/8th of the circle or 45°	.....	11 0 0
64	of lower prisms 1/8th " " or 30°	.....	11 0 0
65	with 4 prisms. 1/8th " " or 22 1/2°	.....	7 15 0
66	Revolving or 1/8th of the circle or 45°	.....	6 0 0
67	Annular Lens. 1/8th " " or 30°	.....	20 0 0
68	" " 1/8th " " or 22 1/2°	.....	13 15 0
69	Armature for fixed light	.....	11 0 0
70	Armature for fixed and flashing light	.....	49 0 0
71	Rotatory machine for ditto with Regulator	.....	270 0 0
72	Armature for holophotal Revolving lights	.....	270 0 0
73	Rotatory machine for ditto with Regulator	.....	270 0 0
74	Silver-plated Reflector for 72°	.....	270 0 0
75	Dioptric mirror (same as 2nd Order)	.....	30 0 0
76	Three mechanical lamps, &c., accessories	.....	60 0 0
			52 0 0

No. of ITEM.	DESCRIPTION OF PARTS.	REMARKS.	PRICE.
			£ s. d.
77	Improved pressure lamp, &c., same as 1st Order	(As see appended printed list in detail)	40 0 0
78	First Order.—Complete set of stores	.....	63 0 0
79	Ditto Packing double-cases with tow	.....	32 0 0
80	Second Order.—Complete set of stores	(As see appended printed list in detail)	53 0 0
81	Ditto packing double-cases with tow	.....	22 0 0
82	Third Order.—Complete set of stores	(As see appended printed list in detail)	46 0 0
83	Ditto packing double-cases with tow	.....	16 9 0
83 A	Extra charge for tin lining cases containing	.....	16 0 0
83 B	Optical Apparatus, 1st Order	.....	12 0 0
83 C	Ditto ditto 2nd " "	.....	8 0 0
	Ditto ditto 3rd " "	.....	" " "
Harbour Lights.			
Fourth Order.—Apparatus 500 mm. diameter—			
84	Fixed panel of 90° with armature	.....	28 5 0
85	Table and column for fixed lights	.....	7 5 0
86	Silver-plated Reflector for 90°	.....	6 0 0
87	Revolving panel of 60° with armature	.....	23 5 0
88	Ditto of 30° " "	.....	15 5 0
89	Pedestal and revolving carriage	.....	40 0 0
90	Rotatory machine	.....	36 0 0
91	Three moderator lamps	.....	12 0 0
92	Complete set of stores, chimneys, &c.	(As see appended printed list in detail)	14 0 0
93	Packing double-cases with tow not tinned	.....	6 0 0
Fifth Order.—Apparatus 375 mm. diameter—			
94	Fixed panel of 90° with armature...	.....	19 10 0
95	Table and Column for fixed lights	.....	6 0 0
96	Frame of fixed light varied by flashes	.....	36 0 0
97	Rotatory machine ditto	.....	36 0 0
98	Moderator lamp with spare burners and accessories	.....	3 0 0
Sixth Order.—Apparatus, 300 mm. diameter.			
99	Fixed panel of 90° with armature	.....	15 10 0
100	Table and column for fixed lights	.....	6 0 0
101	Armature for fixed and flashing light	.....	28 15 0
102	Rotatory machine	.....	36 0 0
103	Moderator lamp	.....	3 0 0
104	Complete set of stores for 5th and 6th Orders each	(As see appended printed list in detail.)	14 0 0
105	Packing double-cases with tow not tinned for 5th and 6th Orders each	.....	5 0 0
First Order Lanterns.			
106	Lantern, with inclined or vertical standards of wrought-iron, 1-inch plate-glass secured with gun-metal strips and brass-screws, outer roof in copper, inner roof in iron, cast-iron service gallery, and steps, blinds, &c.	Internal diameter 12 feet, height of blocking 7 feet, day-light 10 feet.	774 0 0

(6)

No. of ITEM.	DESCRIPTION OF PARTS.	REMARKS.	PRICE.
107	Lantern improved with framing to coincide with excentered panels, plate-glass bent to Circular form, all other parts complete as above with increased air-space in roof		£ s. d.
108	Light-room of cast-iron with wood or iron-lining one door and ventilating boxes	...	823 0 0
109	Balustrade for top of tower	...	216 0 0
110	Packing	...	48 0 0
		...	23 0 0
<i>Second Order Lanterns.</i>			
111	Lantern same as No. 106	Internal diameter 10 feet	504 0 0
112	" improved, " 107	Height of blocking 7 feet	542 0 0
113	Light-room " 108	Glazing 8 feet	153 0 0
114	Balustrade for top of tower	...	40 0 0
115	Packing	...	18 0 0
<i>Third Order Lanterns.</i>			
116	Lantern with vertical standards of wrought-iron, &c., all complete.	Internal diameter 8 feet, height of blocking 7 feet	300 0 0
117	Light-room	Glazing 5 feet 6 inches	104 0 0
118	Balustrade	...	28 0 0
119	Packing	...	14 0 0
<i>Fourth Order Lanterns.</i>			
120	Lantern with vertical standards of wrought-iron, &c.	...	137 0 0
121	Light-room	...	45 0 0
122	Balustrade	...	20 0 0
<i>Fifth and Sixth Order Lanterns.</i>			
123	Lantern with wrought-iron standards	...	123 0 0
124	Light-room	...	41 0 0
125	Balustrade	...	18 0 0
126	Packing for Fourth, Fifth, and Sixth Orders	...	3 0 0

Signed by the above-named JAMES
TIMMINS CHANCE in the presence of
JAMES KENNARD, Cambria Cottage,
Smethwick, near Birmingham.

JAMES T. CHANCE

Signed by the above-named WILLIAM
URQUHART ARBUTHNOT and SIR
JAMES WEIR HOGG, being two
members of the Council of India in
the presence of ROBERT WICKENDEN,
Drapers' Hall, London.

W. U. ARBUTHNOT,
J. H. HOGG.

(7)

List of various appurtenances supplied by CHANCE BROTHERS AND CO., for the service
of their Dioptric Harbour Lights, of the 4th, 5th, and 6th Orders.

THE WHOLE OF THE BEST DESIGN AND MATERIAL.

		£ s. d.
CHIMNEYS AND WICKS.		
100 Class chimneys	3 10 0	
22 Yards of wicks, of each size	1 13 0	
4 Balls of wicks for lighting lantern	0 3 2	
TIN AND COPPER-WORK.		
1 Pump for drawing oil	0 7 6	
1 Oil filter, with spare felt	0 13 0	
1 Copper bucket	0 12 0	
1 Zinc bucket	0 3 9	
1 Dripping pan for draining the burners	0 3 0	
1 Lighting lantern, with two lucernae	0 10 9	
1 Tin box for the whitening	0 1 0	
1 Small oil can	0 0 10	
1 Tin wick box	0 7 6	
TOOLS, &c.		
2 Gimlets	0 0 7	
1 Triangular scraper	0 1 6	
1 Pair snipping pincers	0 2 6	
1 Pair flat pincers	0 1 3	
1 Pair cutting pincers	0 3 0	
2 Pairs curved scissors	0 6 6	
1 Screw-driver	0 1 9	
1 Hammer	0 3 0	
1 Spanner	0 8 0	
1 Long spirit-level	0 5 6	
Carried over	10 4 1	
TOOLS, &c.—(Contd.)		
Brought forward	10 4 1	
1 Round spirit-level for setting lamp	0 5 6	
1 Pair chimney tongs	0 3 0	
1 Thermometer	0 2 9	
1 Wood rule (French and English measure)	0 4 0	
1 Hand vice	0 4 3	
1 Cold chisel	0 1 0	
1 Wood chisel	0 1 0	
BRUSHES, &c.		
6 Glass chimney brushes	0 7 6	
2 Plume brushes	0 1 6	
2 Hand brushes	0 2 0	
2 Paint brushes	0 2 0	
2 Clockmaker's brushes (Revolving Lights)	0 3 2	
3 Glass cloths	0 4 0	
2 Chamois skins	0 3 0	
OILS, &c.		
3 Bottles clockmaker's oil (Revolving Lights)	0 1 0	
1 Quart spirits of wine	0 7 6	
5 lbs. whitening	0 0 9	
1 Service box	0 2 6	
1 Tool chest, specially made	0 15 0	
1 Cover for apparatus	0 4 6	
	14 0 0	

N. B.—Certain special accessories for the service and repair of the Lamps are not included in the above List, being charged with the Lamps.

GLASS WORKS, NEAR BIRMINGHAM,
The 27th June, 1867.

(Packing included.)

List of various appurtenances supplied by Chance Brothers & Co., for the service of their
Dioptric Sea lights.

THE WHOLE OF THE BEST DESIGN AND MATERIAL.

		£ s. d.
150 CHIMNEYS FOR LARGE LAMP.		
1st Order	24 5 0	
2nd "	17 0 0	
3rd "	12 13 0	
44 YARDS OF WICK FOR LARGE LAMP.		
1st Order	11 1 0	
2nd "	8 0 0	
3rd "	5 8 0	

CHIMNEYS AND WICKS.

	£	s.	d.
150 Glass chimneys for large lamp, see above			
50 Ditto for keeper's lamp	0	19	0
44 Yards of wicks of each size for large lamp, see above			
1 Gross of wicks for keeper's lamp	0	3	0
8 Balls of wicks for lighting-lantern and common lantern	0	6	3

TIN AND COPPER WORK.

1 Oil filter, with spare felt	0	18	9
2 Copper buckets	1	4	0
1 Tin wick-box	0	11	3
2 Tin boxes for the whitening	0	2	0
2 Lamps for keepers' use	0	13	6
1 Common lantern and oil-heater	0	4	4
2 Lighting-lanterns, with two lucerns each	1	1	6
1 Dripping pan for draining the burners	0	3	0
1 Copper pump for drawing oil	0	14	0
1 Set of oil measures	0	2	6
2 Small oil-cans	0	1	8

TOOLS, &c.

2 Triangular scrapers	0	3	0
14 Files, assorted	0	12	0
2 Clock-maker's files (Revolving Lights)	0	2	6
2 Wood chisels	0	2	0
3 Cold chisels	0	2	6
1 Pair of flat pincers	0	1	3
1 Pair of pincers for nails	0	2	6
1 Pair of cutting pincers	0	3	0
1 Pair of snipping pincers	0	2	6
1 Spanner	0	8	0
1 Hand vice	0	4	3
1 Bench vice	0	12	0
1 Large hammer	0	3	0
2 Small hammers	0	3	9
3 Screw-drivers, assorted	0	5	4
1 Drill-bow, holder, drills breast-plate, and cat-gut	0	7	6
1 Plumb-bob	0	6	3
16 Tool handles	0	1	8
50 Sheets emery cloth	0	5	3
1 Metal saw, with four spare blades	0	11	6
6 Gimlets	0	1	8
Carried over	12	6	2

TOOLS, &c.

Brought forward	£	s.	d.
1 Soldering iron	12	6	2
2 Pairs of straight scissors	0	2	6
4 Pairs of curved scissors	0	3	0
1 Long spirit-level	0	13	0
1 Round spirit-level for setting lamp	0	5	6
1 Wood rule (French and English measure)	0	8	6
1 Double decimetre	0	4	0
1 Thermometer	0	1	9
2 Pairs of blue spectacles	0	2	9
1 Cutting diamond	0	4	0
2 Glaziers' knives	1	10	0
1 Hone	0	2	0
1 Pair of chimney-tongs	0	1	0
1 Telescope (large improved day and night)	0	3	3
	2	2	0

BRUSHES, &c.

2 Large plume brushes	0	6	3
2 Small plume brushes	0	1	3
6 Clock-maker's brushes (Revolving Lights)	0	9	6
1 Wolf's-head brush	0	5	0
2 Long brooms	0	4	6
4 Hand brushes	0	3	9
8 Paint brushes	0	7	6
12 Glass-chimney brushes	0	15	0
4 Brushes for cleaning large lamp	0	2	6
4 Sponges	0	12	6
3 Chamois skins	0	4	0
1 Cover for apparatus	0	10	0
12 Glass cloths	0	14	6

OILS, PAINTS, &c.

2 Quarts spirits of wine	0	15	0
2 Quarts turpentine	0	5	4
2 Quarts linseed oil	0	3	6
2 Quarts boiled oil	0	3	8
6 Bottles clock-maker's oil (Revolving Lights)	0	2	0
10 lbs. whitening	0	1	4
20 lbs. white-lead	0	8	6
10 lbs. red-lead	0	5	0
10 lbs. green paste	0	5	6
1 Service box	0	2	6
2 Ladders (large and small)	0	18	0
1 Tool chest, specially made	0	18	0
	27	14	0

N. B.—Certain special accessories for the service and repair of the large Lamp are not included in the above List, being charged with the Lamp.

Total of Stores, including packing.
 1st ... £63 2nd ... £53 3rd ... £16
 GLASS WORKS NEAR BIRMINGHAM,
 27th June, 1867.

ORDER.—Ordered, that copies of this Despatch, and its enclosures, be forwarded to the Governments of Madras, Bombay, and Bengal, and to the Chief Commissioner of British Burmah, for guidance.

cc 1800

William Colonel R. A.,
 Secy. to the Govt. of India.

To the Secy to the Govt of India
 45 copies

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS.
Miscellaneous.

To

THE GOVTS. OF MADRAS, BOMBAY AND BENGAL
AND TO CH. COMM. OF BRITISH BURMAH

No. 181-4 C.

Dated March 27, 1868.

Received *2 April 1868*.

Forwards, for guidance, Secretary of State's
Despatch No. 12, dated 12th March, on the subject
of the supply of apparatus for Lighthouses in
India.

No 1399-5: May 1868
With an Order

1399

103-104

103-104

*Letter from Secy. to Govt. of India
dated 27 March 1868
re Lighthouse apparatus
for Madras, Bombay and Bengal
and to Ch. Comm. of British Burmah*

No 103-104

c. 17 April 1868