

# GOVERNMENT GAZETTE.

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No. 19]

### MONDAY, FEBRUARY 11.

[1935

No	Number of Tenders.	Particulars of Contract.	Country of Manufacture or Production.	Amount.	Name of Contractor,
423	٠,	Railways Stores Suspense Account, Act 3759, Section 105— Supply and delivery of Stores, as ordered, from 1st October, 1934, to 30th June 1936.	As per annex	Rates as per annex	As per annex

Melbourne, 26th January, 1935.

## Schedule of Rates Contracts

FOR THE

### SUPPLY OF STORES

TO THE

### VICTORIAN RAILWAYS

Period 1.10.1934 to 30.6.1936.

E. C. EYERS, By Order of the Victorian Railways Commissioners.

No. 19.-1206.

### SUPPLY AND DELIVERY OF STORES.

As ordered, from 1.10.1934 to 30.6.1936.

Items marked \* to be supplied (subject to the General Conditions of Contract) to sample or samples exhibited by the Corporation.

Items marked † to be supplied to sample or samples furnished by the Contractor.

Items for which the Country of Manufacture is shown as a State of Australia are to be wholly or partly manufactured in such State.

No subletting will be allowed.

All rates are exclusive of Sales Tax.

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### · LUBRICATING OIL (MOTOR, ENGINE AND MACHINERY).

(See Appendix "A" for Specification).

Payment will be made on gallonage calculated on net weight ascertained by approved methods by the Comptroller of Stores or his representative at the place of delivery, and the specific gravity ascertained in the Victorian Railways Laboratory from samples drawn from such delivery.

\*\* The rates, excepting items 2, 3, 6, 7, 17, 19, 20, 21, 22, 32, 32A, 33, 34, 37 and 39, do not include Exchange between Australia and London, and are based on the following rates of conversion between London and the country of production:—London-New York conversion of 4.863 dollars to the £1 sterling. London-Japan on 1 yen equalling 1s. 3d. sterling.

Exchange and Conversion is to Corporation's account and the contract rate is to be adjusted by adding or deducting the rate of Exchange and/or conversion operating on the date of delivery

between Australia and the country of production in the following manner:

For each item, excepting as shown above, a factor in pence is shown. This is to be multiplied by the percentage of Exchange ruling on the date of delivery between Australia and the country of production shown. The result will determine the amount to be added to or deducted from the contract rate per gallon.

The rate of Exchange and conversion notified by the Commonwealth Bank of Australia as

ruling on the date of delivery to the Corportation will in all cases be adopted.

As regards Items 25 and 26, two factors are shown, and they are to be used separately for calculating the Australian-New York and Australian-Japan Exchange respectively. The calculation for Exchange in each case is to be made only on the percentage of the factors shown in the schedule, viz., 88 per cent. for U.S.A. Exchange, and 12 per cent. for Japanese Exchange.

\*\* As regards Items 14c and 15c, the rates are firm regarding conversion and are subject to adjustment for T.T. Exchange only.

\* The rate for Item 32 is based on Castor Seed at £15 per ton c.i.f. and e. Sydney, and will vary  $2\frac{1}{2}d$ . per gallon for every £1 variation per ton of seed, variations of fractions of £1 to be treated pro rata. The average price of castor seed c.i.f. and e. paid by Contractor for shipments received by him during each month shall govern the price of castor oil supplied by Contractor during the month following and until a further shipment of castor seed is received. The Contractor shall forward to the Comptroller of Stores with each invoice, particulars of the c.i.f. and e. value of the Castor Seed, and shall submit, if called upon, documentary evidence in support of his claim.

In the event of the Castor Oil not being supplied from stock in Melbourne, orders should provide for the material being consigned on Bill of Lading to the Comptroller of Stores, Victorian Railways, to enable the Department to obtain free wharfage, and the amount of wharfage involved

should be deducted from Contractor's invoice.

Storehouse Manager and Shipping Clerk to arrange accordingly.

\*\* As regards Item 37, the rate is based on par T.T. Exchange, between Australia and New Zealand, and any variation as notified by Commonwealth Bank at date of delivery is to the Corporation's account, and shall be calculated on 1s. 3d. per gallon.

More than one tender has been accepted for each of the following items, and provided satisfactory service is rendered, the business should be allotted as follows:

Items 2 and 2A 3 and 3A 6 and 6A ,, 7 and 7A ,, 17 to 17B 19 and 19A 20 and 20A

Trial orders are to be placed on Ramsay and Treganowan Ltd. and if the oil prove satisfactory, future requirements should be obtained from this Contractor.

21 and 21A ,, 22 and 22A 28 and 28A

32 and 32A

... As determined by the Chief Electrical Engineer.

... All orders for Castor Oil to be placed with Marrickville Margarine Ltd., while the rate for Castor Seed does not exceed £15 per ton c.i.f.e. Sydney. Storehouse Manager to check with Auditor of Disbursements before issuing orders.

The above allocation does not apply to Items which are specially provided for other Government Departments.

N	tem Vo.	Description.	Country of Manuf're.	Estimated Requirements	Rate.	Rate.	Name of Contractor.
	1 1 a	MOTOR, ENGINE AND MACHINERY OILS. Specification L4; Grade—extra light—Oil, for refrigerating machines, in 4 gal. tins "No. 1 Refrigerator" for Chalet, Mt. Buffalo) Exchange Factor—14d. gallon "Arctic C Heavy" (for Ice Works)		20 gals.	gallon	£ s. d. **0 2 3	C. C. Wakefield & Co Ltd. Vacuum Oil Co. Pty.

### LUBRICATING OILS (MOTOR, ENGINE AND MACHINERY)-continued.

	DOBRIGHTING OILS (MOTOR	,		CHILV	EKI)—cont	inuea.
Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Motor, Engine and Machinery Oils—continued. Specification L4; Grade — Light — Oil,				£ s. d.	5
$\int_{-2}^{2}$	cylinder for water cooled petrol engines, suitable for Ford Model T. cars— in 4 gallon tins "XL Motor Oil		700 gaļs.	gal.	0 2 0	
t { 3	Light " in 40/45 gallon drums "XL Motor	).	80		,	Ramsay & Trez
} 2A	Oil Light" in 4 gallon tins "S.O 5"	U.S.A.	Included	,,	0 1 9 **0 2 01	
†{ 3A	Exchange Factor—13d. gallon in 40/45 gallon drums "S.O 5" Exchange Factor—105d. gallon Specification L4; Grade — Medium — Oil,	· · · ·	in Items 2 and 3	,, ,,	**0 1 91	Vacuum Oil Co. Pty
<i>C</i> 1	cylinder for water cooled petrol engines, suitable for Chevrolet, Dodge, Ford Model A. and Morris Cars—	U.S.A.				
$\uparrow$ $\begin{cases} 4 \\ \end{cases}$	in 4 gallon tins "V2" Exchange Factor—12d. gallon	& Vict. U.S.A.	2200 gals.	,,	**0 2 31	Vacuum Oil Co.
5 }	in 40/45 gallon drums, "V2" Exchange Factor—12d. gallon in 4 gallon tins "Valvoline Medium"	& Vict.	1200 ,,	,,	**0 2 01	Co. Pty Ltd.
	(for use at Chalet, Mt. Buffalo) Exchange Factor—55d. gallon	U.S.A.		,,	**0 5 9	J. Carrigan
† di 5a	"in 40/45 gallon drums "Valvoline Medium" (for use at Chalet, at Mt. Buffalo)	"	100 ,,	,,	**0 5 3	Disease:
t i	Exchange Factor—48d. gallon "Specification L4; Grade—Heavy Medium—Oil, cylinder for water cooled petrol engines, including Gang Cars, Types K. and K.S., 2 cycle water-cooled engines, suitable for Armstrong Siddeley, Austin,					J. Carrigan
۲ 6	Dodge Cars; Chevrolet, Morris and Graham trucks— in 4 gallon tins "XL Heavy Medium"	Vict.	7000		ا م	
† 7	in 40/45 gallon drums "XL Heavy	"	7000 ,, 700 ,,	"	$\begin{bmatrix} 0 & 2 & 5 \\ 0 & 2 & 2 \end{bmatrix}$	Ramsay & Tregrand
64	Medium" in 4 gallon tins" Lustre Heavy" Exchange Factor— 140d. gallon	U.S.A.	ا ا		**0 2 5	Shell Co. of Aust.
T	in 40/45 gallon drums "Lustre Heavy" Exchange Factor— 140d. gallon	,,	Included in Items	<b>,,</b>	**0 2 2	Ltd.
∫ 6в	in 4 gallon tins "Atreco M.M. 1248" Exchange Factor—'184d. gallon	"	6 & 7	,,	**0 3 03	Atlantic Union Oil
†{ 7B	in 40/45 gal. drums "Atreco M.M. 1248" Exchange Factor 184d. gallon	,,		,,	**0 2 91	Co. Ltd.
6c	in 4 gallon tins "Castrol" X (for Police Department) Exchange Factor—255d. gallon	,,		,,	*0 3 11	
†} 7c	in 40/45 gal. drums "Castrol X" (for Police Department)	,,	1500 gals.	,,	*0 3 9	Co. Ltd.
6р	Exchange Factor—255d. gallon in 4 gallon tins "Mobiloil A.F." (for State Rivers and Water Supply Com- mission)	,,	1000 ,,	,,	**0 3 3	Sept. Habit
†{ 70	Exchange Factor—'21d. gallon in 40/45 gal. drums "Mobiloil A.F." (for State Rivers and Water Supply Commission)  Exchange Factor—'21d. gallon	,,	240 ,,	,,	*0 3 0	Vacuum Oil Co.

### LUBRICATING OILS (MOTOR, ENGINE AND MACHINERY)—continued.

Ite No		Description.	Country of Manuf're.	Estimated Requirements	Rate.	Rate.	Name of Contractor.
		MOTOR, ENGINE AND MACHINERY OILS— continued.	•			£ s. d.	;
		Specification L4; Grade — Heavy — Oil, cylinder for water cooled petrol engines, suitable for Austin, Daimler and Morris Cars; Bean, International and White trucks—					,,
.,	8	in 4 gallon tins "Castrol XL" (for Police Department) Exchange Factor— 265d gallon	U.S.A.	2800 gals.	gal.	**0 4 2	
†{	9 ,	in 40/45 gallon drums "Castrol XL" (for Police Department) Exchange Factor—265d. gallon	,,	3500 ,,	,,	**0 4 0	C. C. Wakefield & Co. Ltd.
		Specification L4; Grade—Extra Heavy— Oil, cylinder for water cooled petrol engines and air cooled petrol engines, suitable for Talbot cars, A.E.C. Karrier and Vulcan trucks; Coventry Eagle Motor Cycles and J.A.P. Air cooled engines—		,			
t{	10	in 4 gallon tins "V5" Exchange Factor—15d. gallon	& Vict.	4500 ,,	,,	**0 2 101	Vacuum Oil Co. Pty.
	11 10a	in 40/45 gallon drums '' V5'' Exchange Factor— 15d. gallon in 4 gallon tins '' Golden Shell''' (for Country Roads Board)	& Vict.	80 ,,	,,	**0 2 7½ **0 3 4	Ltd.
<b>†</b> ∤	11a	Exchange Factor— 22d. gallon in 40/45 gal. drums "Golden Shell" (for Country Roads Board) Exchange Factor— 22d. gallon	,,	600 ,,	,,	**0 3 1	Shell Co. of Aust.
	10в	in 4 gallon tins "Castrol-XXL" (for Police Department) Exchange Factor—32d. gallon	<b>,,</b>	1500 ,,	,,	**0 4 7	C. C. Wakefield &
. [	11в	in 40/45 gallon drums "Castrol-XXL" (for Police Department) Exchange Factor—32d. gallon	**	1,500 ,,	,,,	**0: 4 5 **0 6 3	Co. Ltd
	10c	in 4 gallon tins "Valvoline Heavy" (for Cadillac Cars at Chalet) Exchange Factor—'58d. gallon in 40/45 gal. drums "Valvoline Heavy" (for Cadillac Cars at Chalet) Exchange Factor—'55d. gallon	, ,,	200 ,,	,,,	**0 5 9	J. Carrigan'
<b>5</b>	12	Specification L4; Grade — Extra Heavy Special—Oil, cylinder for water cooled petrol engines, suitable for rail motors and petrol electric rail motors— in 4 gallon tins "Basso Super Heavy" Exchange Factor— 189d. gallon	, , ,	1500 ,,	,,	**0 2 9	Atlantic Union Oil
<b>*</b> †{	13	in 40/45 gal. drums "Basso Super Heavy" Exchange Factor—189d. gallon	-,,,	2000 ,,	,,,	**0 2 6	Co. Ltd.
	!	Oil cylinder, for Deisel engines, airless injection cold starting oil engines McDonald super Deisel road rollers two cycle and four cycle Deisel engines of 60-200 H.P.—	,				
	14	in 4 gallon tins "No. 732" (for Chalet Mt. Buffalo) Exchange Factor—133d. gallon	, ,,	400	,,	**0 2 4	Town C. (A)
†{	15	in 40/45 gallon drums "No. 732" (for Chalet, Mt. Buffalo) Exchange Factor—133d. gallon			,,	**0 ·2 1	Texas Co. (A'asia) Ltd.

### LUBRICATING OILS (MOTOR, ENGINE AND MACHINERY)—continued.

		T	1	γ	1		I
Item · No.	Description	Country of Manuf're	Estimated Requirements	Rato per	;	Rate	Name of Contractor
				ļ	£	s. d.	
	Motor, Engine and Machinery Oils— continued.						· ·
	Oil cylinder, for Deisel engines, airless						
	injection cold starting oil engines, McDonald super Deisel road rollers,			ľ.		. '	
	two cycle and four cycle Deisel engines			1			
(14A	of 60-200 H.P.—continued— in 4 gallon tins "ATLA Special Heavy"	U.S.A.	١	gal.	**0	2 9	<u> </u>
1	(for State Rivers and Water Supply		]] .	gai.	"	<u></u> 0	
ļ	Commission) Exchange Factor—17d. gallon		1000 gals.				Adamia III-i O'I
†{ 15A:	in 40/45 gal. drums "ATLA Special	٠,	1000 gais.	,,	**0	2 6	Atlantic Union Oil Co. Ltd.
	Heavy " (for State Rivers and Water Supply Commission)				l		
l	Exchange Factor—17d. gallon		] ]				·
714в	in 4 gallon tins "DTE Extra Heavy"	**	]	.,	**0	3 7	1
ł	(for State Rivers and Water Supply Commission)				]		
),,,	Exchange Factor—•24d. gallon		1500				Vacuum Oil Co. Pty.
‡ { 15в	in 40/45 gallon drums "DTE Extra Heavy (for State Rivers and Water	**	"	,,, ,	**()	3 4	Ltd.
	Supply Commission)				٠.		
$\begin{cases} 14c \end{cases}$	Exchange Factor—'24d. gallon in 4 gallon tins "CU3" (for Country	Germany	l₹		**0	2 10	\ \ \ \ \
	Roads Board)		}	,,		- 10	
+ 15c	Exchange Factor— 175d. gallon in' 40/45 gallon drums "CU3" (for	٠,	500 ,,.		**0	2 7	
	Country Roads Board)	·",	IJ.	,,			,
l l	Exchange Factor— 175d. gallon						Shell Co. of Aust.
	Oil, for lubrication in enclosed crank cases						L.
+16	of Leyland and Yorkshire steam wagons, in 4 gallon tins "B 9b" (for Country)	U.S.A.	450		**()	3 6	
	Roads Board)	•	. ,,	,,,		1.	
	Exchange Factor— 23d. gallon						J
	Specification L4a; Grade—Medium—Oil,		·				
	cylinder for Kerosene engines, including Crossley, Coulson, Smith and Searle,	•	4 .		, .	• •	
1.16	V.R. Standard, in 4 gallon tins—	371 .		,			
†17	"XL"	Vict.		,,,	0	$\begin{bmatrix} 2 & 6 \end{bmatrix}$	Ramsay & Tre- ganowan Ltd.
†17A	"Atlantic Kero, and Gas Engine Oil"	U.S.A.	700	,,	**0	2. $8\frac{1}{2}$	Atlantic Union Oil
	Exchange Factor— 152d. gallon		700 ,,	.		٠ ,	Co. Ltd. Vacuum Oil Co.
†17в	" Vacme Heavy Medium X " Exchange Factor 155d. gallon	U.Ş.A.		,,	**0	3 01	Pty. Ltd.
	Specification L5; Grade—Extra Light Oil,	& Vict.	ا ر			ļ	
	bearing, suitable for small electric motors,						•
	light line shafting, pumps, small machines, spindles, automatic signal mechanism,		,			•	,
	power sewing machines, power separators,						•
,•	light printing machines and ring oil bearings—						_
<b>†</b> 18	in 4 gallon tins, "Atlantic Ex. Light Bearing Oil"	U.S.A.	400 ,,	٠, ا	**0	$19\frac{1}{2}$	Atlantic Union Oil Co
	Exchange Factor—110d. gallon				,		. Ltd.
	Specification I5: Grade I just Oil						
	Specification L5; Grade — Light — Oil, bearing, suitable for signal apparatus,		<b>_</b>			,	en e
	medium line shafting, light ball bearings		,			*.	
	and races, medium printing machines, small milling machines, and ring oil bear-	!	·	,	,		•
<b>†</b> 19	ings— in 40/45 gallon dums "XL Light	Vict.	ا ا		Λ	1 7	Ramsay & Tre-
110	. Machine"	, 100.		"		• '	ganowan Ltd.
†19a	"Aleph"	U.S.A.	<b>\^</b> 1500 ,,	,, i	**0	1 53	Texas Co. (A'asia)
i	Exchange Factor—'108d. gallon	t	Jeroat ∙.	" ,		, - 4	Ltd.

### LUBRICATING OILS (MOTOR, ENGINE AND MACHINERY)—continued.

	tem Vo.	Description	Country of Manuf're.	Estimated Requirements	Rate per		Rate	ř	Name of Contractor
	-			<u> </u>		£	s.	d.	
		Motors, Engine, and Machinery Oils—continued.							
t.	-20	Specification L5; Grade—Medium—Oil, bearing, suitable for large electric motors and dynamo, heavy ball bearings and races, tricycles, windmills, large pumps, gyratory stone crushers, saw milling machinery, lathes, drilling machines and large milling machines— in 4 gallon tins "XL Medium Machine"		50 gals.	mat		1		) Page 201 & TI
† <del> </del>		,		7500	gal.	0		9.	Ramsay & Tre- ganowan Ltd.
• {	21	in 40/45 gallon drums "XL Medium Machine"		5500 ,,	,"	0		6	,
	20a	in 4 gallon tins "Altair" Exchange Factor—114d. gallon	U.S.A.	Included	,,	**0	1	91/2	11 .
†{	21 A	in 40/45 gallon drums "Altair" Exchange Factor—114d. gallon	,,	in items 20 and 21	,,	**0	1	$6\frac{1}{2}$	Texas Co. (A'asia) Ltd.
		Specification L5; Grade—Heavy—Oil, bearing, suitable for large machine tools, signal mechanism, heavy electric motors, road roller bearings, and heavy engine						•	
i	22	bearings— in 40/45 gallon drums "XL Heavy Machine"	Vict.	2200 gals.	,,	0	1	8	Ramsay & Treganowan Ltd.
1	22a	in 40/45 gallon drums '' 744 '' Exchange Factor— 121d. gallon	U.S.A.	<b>\</b>	,,	**0	1	8	
t	23	Specification L5; Grade—Extra Heavy— Oil, bearing, for Stone Crushers, Tractors and similar machinery— in 40/45 gallon drums "671" Exchange Factor—'087d. gallon	. ,,	150 ,	12	*.*0	1	5 <u>1</u>	Texas Co. (A'asia) Ltd.
t	-24	Specification L5; Grade—Extra Heavy— Special—Oil, bearing, for Rail and Road Motor Transmission Gear— in 40/45 gallon drums "SD" Gear Oil Exchange Factor—·12d. gallon		2500 ,,	".	**0	ì	97	Pty. Ltd.
	25	Specification L5a; Grade — Light — Oil, bearing, for marine steam engines— in 4 gallon tins "Kaliff DD" (for Public Works Department)	Japan &	. 50 ,,		**0	· . 2	6	(Socony Divison)
†{	26	Exchange Factor—11d. gal. on 88% U.S.A., 23d. gal. on 12% Japan in 40/45 gallon drums "Kaliff DD" (For Public Works Department) Exchange Factor—11d. gal. on 88% U.S.A., 23d. gal. on 12% Japan Specification L6; Grade—Medium—Oil,	"	1750 .,,	. \ . <b>.</b>	**0	2	3	Vacuum Oil Co. Pty. Ltd.
: .	27	for turbines— in 4 gallon tins							Nil
t	28 .	in 40/45 gallon drums ''Valvoline Medium Turbine'' Exchange Factor—'4d. gallon	U.S.A.	4500 ,,	"	**0	4	9	J. Carrigan
t	284	in 40/45 gallon drums "DTE Light" Exchange Factor—·19d gallon	,,	450 ,,	***	**0	2	10 <u>‡</u>	]
t	28в	in 40/45 gallon drums "DTE Heavy Medium" (For State Rivers and Water Supply Commission) Exchange Factor—19d. gallon	"	3000 ,,	<b>;</b>	**0	2	10 <u>1</u>	Vacuum Oil Co. Pty. Ltd.

### LUBRICATING OILS (MOTOR, ENGINE AND MACHINERY)-continued.

Item No.	. Description	Country of Manuf're	Estimated Requirements	Rate per		Rate		Name of Contractor
<del></del>	Motor, Engine and Machinery Oils—continued.				£	s.	d.	
29	Specification L6; Grade—Medium—Oil, for Air Compressors— in 4 gallon tins "Algol" Exchange Factor—'145d. gallon	U.S.A.	1000 gais.	gal.	**0	2	4	· ·
30 †{ 29A	in 40/45 gallon drums "Algol" Exchange Factor—145d. gallon in 4 gallon tins "Algol" (For Public Works Department) Exchange Factor—145d. gallon	"	80 ,,	"	**0		1 4	Texas Co. (A'asia)
30A	in 40/45 gallon drums "Algol" (for Public Works Department) Exchange Factor—145d. gallon	,,	J · 	,,	**0	2	1	
<del>†</del> 31	Specification L7; Grade—Light—Oil, for Transformers and Switch Gear—in 4 gallon tins "Transformer A" Exchange Factor—'2d. gallon	,,	2500 ,,	,, ·	**0	2	7 <u>1</u>	Vacuum Oil Co. Pty Ltd.
†32	Specification L8; Castor Oil— in 5 gallon drums	N.S.W. (partly)	} 1200 ,,	"	* 0	5	0	Marrickville Marga- rine Ltd.
†32a	in 5 gallon drums	Vict.		,,	0	5	1	Lycett Pty. Ltd.
†33	Oil, Neatsfoot, pure—"XL" in 4 gallon tins	,,	80 "	ý,	0	3	4.	)·.
†3 <b>4</b>	Oil, Neatsfoot Compound—"XL" in 40/45 gallon barrels or drums	,,	900 ,,	"	0	1	8	Ramsay & Treganowan Ltd.
+ ∫35	Soluble Cutting Compound— in 4 gallon tins "Soluble P" Exchange Factor—1055d. gallon	U.S.A. & Vict.	12 ,,	<b>"</b> .	**0	2	5 <u>3</u>	Vacuum Oil Co.
36	in 40/45 gallon drums "Soluble P" Exchange Factor— 055d. gallon	,,	4000 ,,	,,	**0	2	23	Pty. Ltd.
†37	Oil, Whale, for tempering springs, in 40/45 gallon barrels or drums	New Zealand	700 ,,	,,	**0	1	8	R. G. Grant & Co Pty. Ltd.
†38	Oil, Lardine, in 4 gallon tins Exchange Factor—•04d. gallon	U.S.A. & Vict.	75 ,,	,,	••0	1 ·	91	Vacuum Oil Co. Pty. Ltd
†39	Oil, Lard, Substitute, in 4 gallon tins "XL"	Vict.	20 "	,,	.0	3 1	0	Ramsay & Tre- ganowan Ltd.
40-46-	-Nil.							

### TURPENTINE, TURPENTINE SUBSTITUTE, AND METHYLATED SPIRITS.

<sup>7.</sup> TURPENTINE-Specification A5. Item No. 47.

The material shall be supplied to Tentative Australian Standard Specification, No. K7-1926 T.

The material shall be tested by standard methods of sampling and testing Tentative Australian Standard Specification, Nos. K7 and 8 1926 T., Part 2.

TURPENTINE, TURPENTINE SUBSTITUTE AND METHYLATED SPIRITS-continued.

8. MINERAL TURPENTINE—Specification A6. Items Nos. 48 and 49.

The material shall be supplied to Tentative Australian Standard Specification No. K8-1926 T.

The material shall be tested by Standard methods of sampling and testing Tentative Australian Standards Nos. K7 and 8—1926 T., Part 2.

9. SPECIFICATION FOR METHYLATED SPIRITS—Items Nos. 50 and 51.

The material shall be supplied to Tentative Australian Standard Specification No. K30-1928 T.

The material shall be tested by Standard methods of testing Nos. 30 and 31—1928 T., Part 2.



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- 10. Payment will be made on gallonage calculated on net weights ascertained by approved methods by the Comptroller of Stores or his representative at the place of delivery, and the specific gravity ascertained in the Victorian Railways Laboratory from samples drawn from such delivery.
- \*\* As regards Item No. 47, the contract rate does not include Exchange between Australia and London, and is based on the par rate of conversion between London and the country of production. London-New York conversion is based on 4.86% dollars to the £1 sterling.

The contract rate will be adjusted to cover the rate of Exchange and conversion operating on the date of delivery between Australia and the country of production in the following manner:—

The factor per gallon, shown, shall be multiplied by the percentage of Exchange ruling on the date of delivery between Australia and the country of production. The result will determine the amount by which the contract rate per gallon is to be increased or decreased.

The rate of Exchange and conversion notified by the Commonwealth Bank of Australia as ruling on the date of delivery to the Corporation will be adopted.

The rates for Items Nos. 48 and 49 are contingent on this Department not using the Turpentine Substitute as a fuel or an admixture of fuel. In the event of the Department using, as a fuel, or for admixture with a fuel, any Turpentine Substitute, Contractor is to be so advised and duties of Customs of 6d. per gallon shall be to the Corporation's account.

As regards Items 48 and 49, prices are nett and for payment within 30 days. Rates cover delivery within the contractor's "Metropolitian Free Delivery Area."

Drums, Item 49, will be invoiced at £2 each, and amount credited on their return in good order and condition. Minimum delivery 44 gallons.

‡ Rates for Items 48 and 49 are current wholesale selling rates and are subject to fluctations on all deliveries made on and after the date such fluctations became operative. Special allowances or discounts not of common application are not applicable. Rates, printed below, are the net prices after deducting 1d., for special allowance and 1d. for cash discount. The special allowance is subject to cancellation or withdrawal without notice.

Clause 7 of conditions of contract does not apply to items 48 and 49.

Item No.	<b>Description</b>	Country of Manuf're.	Estimated Requirements	Rate per	Rate	•	Nameof Contract or
† 47	Turpentine, to Specification A. 5, in cases 2 x 4 gal. tins. "Taloco" Exchange Factor 0.395d. gallon	U.S.A.	4000 gals.	gal.	£ s.	d. 83	Hardie Trading Pty.
•	Turpentine, Substitute, volatile mineral spirit, paint thinners, Specification A.6— "Shell Mineral Turpentine"—						in the second se
$\dagger \left\{ \begin{matrix} 48 \\ .1 \\ 49 \end{matrix} \right.$	In cases, 2 x 4 gal. tins  In bulk, in returnable drums	East Indies	4000 ,, 350 ,,	,,	‡0 1 ‡0 1	8 <del>1</del> 4	The Shell Company of Australia Ltd.
† 50	Spirits, Methylated, in 4 gal. tins "C.S.R. Co."	N.S.W.	1750 ,,	,,	0 2	81/2	E. L. Yencken & Co. Pty. Ltd.
† 51	Spirits, Methylated, in 40 gal. returnable cylinders "J. L. Lennard"	Vict.	2500 "	,,,	0 2	$5\frac{1}{4}$	W. & G. Dean Pty. Ltd.

### INDIA-RUBBER GOODS, PACKING, ETC.

### 7. SPECIFICATION—RUBBER HOSE—Items 65 to 82.

All hose shall be made of rubber and cotton fabric, all materials and workmanship shall be of the very best quality; no rubber substitutes or short fibre cotton shall be used.

Hose shall be soft and pliable, uniformly and smoothly finished.

All hose delivered under the following items shall be in accordance with the requirements specified hereunder:—

Item No.	Inside D	iameter.	Outside	Diameter.	Length.	Ply.	Bursting Pressure.
nem 140.	Max.	Min.	Max.	Min.	Bengin.	l Ty.	lbs. per sq. in. minimum
	Inches.	Inches.	Inches.	Inches.			lb.
65 66 67 68 69 70 71 74 76 and 77 78 79	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 2 1	1 1 2 1 2 1 2 1 2 2 3 2 1 1 1 2 1 1 1 1	$egin{array}{cccccccccccccccccccccccccccccccccccc$	60 feet As ordered  "" "" "" 40 feet As ordered 60 feet	3 3 3 4 4 4 4 5 5 5 6 6	400 300 300 500 756 375 300 375 800 1000 1288 1300

### 8. SPECIFICATION-I.R. SHEET-Items 90 to 95.

Material.—All matting shall be made of rubber and canvas, all material and workmanship shall be of the very best quality for the purpose; no rubber substitutes shall be used.

The matting shall be soft and pliable, uniformly and smoothly finished.

The matting when tested shall comply with the following physical requirements:—
Tensile strength of Rubber Compound, not less than 275 lb. per square inch.
Elongation of Rubber Compound, not less than 50 per cent: in 2 inches.
Tensile strength of Complete Matting, not less than 650 lb. per square inch.
Permissible variation of thickness from that ordered—Under nil, over 035 inch.

9. As regards items 58-60, 120, 121 and 122 to 129, the rates include Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 50% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

† As regards items 52, 53, 54, 64 to 66, 69, 71, 83, 84 to 84 $\kappa$ , 96 to 99, 102, 108 to 110, 118, 119, 137 to 142, rates are subject to  $2\frac{1}{2}\%$  discount for settlement within 30 days.

As regards items Nos. 84 to 84k, Dunlop Perdriau Rubber Co. Ltd. should receive approx. 84% of the business and the Goodyear Tyre and Rubber Co. of A'sia. Ltd. 16%. The estimated requirements have been amended accordingly. Storehouse Manager to arrange.

As regards item 58, time for importation is to be allowed after placing order.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
			, j. i		£ s. d.	•
52	Boots, I.R., Ankle, farmyard, any size, as ordered	Viet. (partly)	·20.pairs.	pair	‡0 8-11	
53	Boots, I.R., gum knee, any size, as ordered		20 ,,	,,,	‡0 11 6	1
54	Boots, Thigh, any size, as ordered	,,,	120 ,,	, ,,	‡1 0 0	Dunlop Perdriau Rubber Co. Ltd.
*55	Bumpers, I.R., Door	1	20 doz.	doz.	0 1 5	}
56	" M.M.B.W	,,,	6 ,,	,,,	0 0 41	Barnet Glass Rubber Co. Ltd.
*57	", I.R., Sash, §"	,,	120 ,,	6 - 1)1	0 2 1	Dunlop Perdriau Rubber Co. Ltd.

‡ Less 2½% discount-30 days.

### INDIA-RUBBER GOODS, PACKING, ETC.—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor:
	• • •			-	£ s. d.	
*58	Gaskets, for 3" "B. & W." Headers, oval	U.K.	35,000	100	0 18 0	, · · · · · · · · · · · · · · · · · · ·
*59	Gaskets, for 4" "B. & W." Header joints, oval "Golden Walkerite"	,,	2000	,,	1 5 0	Jas. Walker & Coy
*60	Gaskets, square, for superheaters, Babcock and Wilcock boilers, graphited	,,	1100	,,	0 18 0	(A'sia) Ltd.
†61	Gloves, I.R., Half Gauntlet, for Electricians' use, tested to 5000 volts, any size, as		150 pairs	pair	0 6 11	· · · · · · · · · · · · · · · · · · ·
†62	ordered Gloves, I.R., Elbow length, acid resisting, for handling weed poisoning liquid—	,,	240 ,,	".,	0 8 6	Dunlop Perdr au
†63.	any size, as ordered Gloves, I.R., Special, Dipped, Reinforced thumb, for acid and accumulator work, tested to 5000 volts, any size, as ordered, weight not to exceed 16 oz.	, ;; ;;	100,,	".	0 11 3	Rubber Co. Ltd
	Hose, India-rubber, vulcanized, to Specification—		,		.14	· .
†64	3-ply, ¾ diameter, Armoured outside, oil resisting "Kangaroo"	N.S.W.	500 feet	foot	\$\$\frac{10}{1000} \ \text{0 10} \\ \text{1000} \\ \	<b>ነ</b>
<b>†</b> 65	3-ply, ½ diameter, ordinary quality; for water "Koala"	. ,,,	3500 ;,	,,,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Hardie Rubber
†66	3-ply, ¾", diameter, ordinary quality, for water "Koala"	. ,,	14,000 ,,	,,	$   \begin{array}{c cccccccccccccccccccccccccccccccccc$	Co. Ltd.
†67	3-ply, 1" diameter, ordinary quality, for water	Vict. (partly)	1400 ,,	,,	0 0 7	Dunlop Perdriau
68	3-ply, 1½" diameter, ordinary quality, for water.	33.	150 ,,	,,	0 1 1	Rubber Co. Ltd
69 .	4-ply, ¾ diameter, special quality, water "Koala"	N.S.W.	· 1500 ,,	,,	$     \begin{cases}                                $	Hardie Rubber Co. Ltd.
·70 ·	4-ply, 2" diameter, water	, ,,,	700 .,,	,,	0 1 9	Dunlop Perdriau Rubber Co. Ltd.
71	4-ply, 2½" diameter, water "Koala"	"	1200 ,,	,,	10 2 7 less 20%	Hardie Rubber Co. Ltd.
72	4-ply, 2¾" diameter, in 3' 2" lengths, suction, smooth bore, Armoured inside, with plain ends 3" long (for "X" class	•••	40 lengths		•••	} Nil.
73	engines) 4-ply, 2\frac{2}{3}" diameter, in 3' 7" lengths, suction smooth bore, Armoured inside, with plain ends 3" long (for "S" class engines)		. 20 ,,			 
74	4-ply, 2" diameter, Armoured outside, for	Vict.	4300 feet	foot	0 2 0	••
75	water 4-ply, 2" diameter, Armoured inside, rough bore	(partly)	700 . ,,	**	0 2 2	Dunlop Perdriau
76	5-ply, 3" diameter, in 60' lengths, chemical quality	ان در الحوو د	5 lengths	length	1 17 6	Rubber Co. Ltd.
7 .	5-ply, 3" diameter, in 60' lengths, for steam	١,,	8000 feet	foot	0 0 8	P
8	or compressed air, as ordered 5-ply, § diameter, Armoured externally, for Pintsch Gas, in 40' lengths	"	360 "	,,	0 1 4	Rubber Co. Ltd.
9	5-ply ½" diameter, for Compressed air		5000 ,,	· "·	0 0 9 7	11.
80	5-ply, 11 diameter, for steam	,,	600 ,,	,,	0 1 4	Dunlop Perdriau
1	6-ply, 3" diameter, Armoured outside; for	, ,,	2000 "	,,	0 1 2	Rubber Co. Ltd.
2	steam 6-ply, ½" diameter, for Pantograph	",	700 ,,	,,	0 0 113 1	Barnet Glass Rubber
3	India-rubber Sheet, 1 thick, for re-treading	,,	40 lb.   t—30 days.	lb.	to 1 3 0	Co. Ltd. Golding's Pty. Ltd;

### 458 INDIA-RUBBER GOODS, PACKING, ETC. -continued:

Item	Description		Country of Manuf're.	Estimated Requirements	Rate. per	· Rate.	Name of Contractor.
	India-rubber, Sheet Vulcanize With canvas insertion	d—	.;; .	,	,	(£ s. d.	
٠ ٠.	Gauge No! of Max	Length ea. roll	. 48		•	all less	, ,
<b>†</b> 84	$\frac{1}{32}''$ 1 36"	50 yds.	Vict.	η .	lb.	$10^{33}\frac{3}{3}\%$	Dunlop Perdriau Rubber Co. Ltd.
†84a	1 36" " Style 140"	50 ,,	(partly) N.S.W. (partly)		"	‡0 2 5	Goodyear Tyre and Rubber Co. of Au
†84B	1 36"	50 ,,	Vict.		٠,,	‡0 1 4	tralasia Pty. Ltd. Dunlop Perdriau
†84c	1 36" " Style 140"	50 ,,	(partly) N.S.W. (partly)		, ,, (	‡0 1 4	Rubber Co. Ltd. Goodyear Tyre and Rubber Co. of Au
†8 <b>4</b> D		35 "	Vict.		.,,	‡0 1 10	tralasia Pty. Ltd. Dunlop Perdriau
<b>†84</b> е	33." 1 36" "Style 140"	35 ,,	(partly) N.S.W. (partly)		`,,	·‡0 1 10	Rubber Co. Ltd. Goodyear Tyre and Rubber Co. of Au
†84F	1 7 2 36"	25 ,,	Vict.	Dunlop 5880 lb.	<b>,</b> ,,	‡0 1 3	tralasia Pty. Ltd. Dunlop Perdriau
†84Ģ	18" 2 36" "Style 140"	25 ,,	(partly) N.S.W. (partly)	Goodyear 1120 lb.	,,	‡0 1 3	Rubber Co. Ltd. Goodyear Tyre and Rubber Co. of Au
†84н	3 36"	25 "	Vict.		,,	‡0 1 7½	
†841	3 36" "Style 140"	25 ,,	(partly) N.S.W. (partly)		, ,,	$10 \ 1 \ 7\frac{1}{2}$	Rubber Co. of A.
†8 <b>4</b> J	4 36"	25 ,,	Vict.	,	. "	‡0 1 10½	tralasia Pty. Ltd. Dunlop Perdriau
†84к	4 36" "Style 140"	25 ,,	(partly) N.S.W. (partly)	] .	:	‡0 1 10½ all less	Rubber Co. Ltd. Goodyear Tyre and Rubber Co. of Au tralasia Pty. Ltd.
(85	India-rubber, Sheet, Brown-	 . Late care.	,	20 lb.		331%	traiasia rity. Etd.
86	18"		,	2000	•••		
t √ 87	38"		'''	175			  } <sub>Nil.</sub>
88	1,			175 ,,	,,	· · · · ·	
89	1" 1 0 1 in it	9 A La	'	150 ,,			
Cus	India-rubber, Sheet, Brown	. backed <del>∴¹</del>	100	;			, ,
(90l	thick—'	•••	Vict.	15 l. yd	ļin. yd.	Nett 0 11 3	<u> </u>
91	27½" wide	al relaced a Tary on	(partly)	15 ,,	,,	0 11 8	<b> </b>
92	30" wide	•••	, ,,	18 ,,	, "	0 12 8	Dunlop Perdriau.
†   93	1 3 2 m 36" wide		,,,	20 ,,	,,	0 12 10	Rubber Co. Ltd
94	48" wide		,,	20 ,,	٠,,	0 14 9	
95	72" wide India-rubber, Stock, camel	 oack, for re-	. ,,	15 ,,	<b>"</b>	1 2 6	J
$^{96}$	treading—		. ,,	80 lb.	1b.	‡0 1 1	
97	5½ x ¾"' "	0 (21.4.4.	. ,,	. 80 "	, ,, i	‡0 1 1	Golding's Pty. Lite
98 .	6" x ½" · · · · ·		. "	350 ,,	,,	‡0 · 1 1	
99 .	7½" x ½"		. ,,	900 ,,	. "	10 1 1	1

### INDIA-RUBBER GOODS, PACKING, ETC.—continued.

Item No.	Description	Country of Manuf're.	Estimated Requirements	Rate per	Rate	Name of Contracto	o <b>r</b>
					£, s.	d.	
†100	Rollers, Feed, for Edison Mimeograph	Vict.	350	each	0 0	Barnet Glass Rul Co. Ltd.	bber
<b>†</b> 101	Solution, I.R., in 4-gal. tins	(partiy)	175 lb.	lb.	0 0	81 Dunlop Perdriau Rubber Co. Lt	
102	Solution, Vulcanizing, in 4-gal. tins	"	300 ,,	4 gal.	‡1 4	Barnet Glass	
†103	Tips, Finger, pinnacle type	,,	450 doz.	dozen	0 0	6½ Rubber Co. I	Ltd.
†104	Fingerettes, I.R., Red (medium)	,,	40 "	,,	0 2	03	
†105	Tubing, 3" diameter x 1" wall, for gas	,,	40 feet	foot	0 0	21	
†106	Tubing, 1" diameter x 16" wall, for acid	,,	80 ,,	,,	0 0	3 Dunlop Perdria Rubber Co. I	
†107	Tubing, ½" diameter, for gas	,,	30 ,,	,,	0 0	234	Ju.
†108	Goloshes, Men's, any size as ordered	,,	45 pairs	pair	ţ0 3	o   J .	
	Plugs, I.R., basin, with N.P. rings and screwed bolts and nuts—				10.0		
<b>†</b> {\begin{align*} 109	1½″ ,	,,	8 doz.	doz.	'	Barnet Glass	
(110	2″	,,	2 ,,	,,	‡0 3	7]:	⊥td.
*111	Rings, I.R., grey, $4\frac{7}{16}$ inside diameter x $\frac{3}{2}$ wall x $\frac{1}{16}$ thick	,,	120 ,,	. "	0 0	10	
*112	Washers, I.R.— Cushion, 43" x 2" x 27" hole	"	2 ,,	, ,,	1 8	4	
†113	Gauge Glass, flat or round, as ordered	,,	6 ,,	,,,	0 0	71	
	any sizes ordered	,				Dunlop Perdria Rubber Co. I	
†114	Gauge Glass, hexagonal, for "B. & W." Boilers 250 lb. pressure	,,	. 30 ,,	1115,	0 1		Jua.
*115	Gauge Glass, with insertion, $\frac{13}{10}''$	,,,	20 ,,	"	0 1	7	
*116	Gauge Glass, Flat, with insertion, 1 1 x	<b>"</b> '··'	′ 40 ,,	,,	0 1	8   ]	
†117	118 x 18" Royle's Union	,,	10 ,	· · "	0 1	62 Barnet Glass Ru	bber
†118	Hose Coupling, Packing Rings for 3"	,,	250 ,,	٠٠,,	‡0 1	Hardie Rubber	•
†119	Head, to Blue Print, dated 31.8.34 Hose Coupling, Packing Rings for 1" Head, to Blue Print, dated 31.8.34	, ,, ·	2800 ,,	, ,,	‡0 ·1		1
<i>C</i> +	·						
\$	· .		٠٠.	٠,	٠,	. ,	,
	PACKING, ETC.			, 1,6-1			
†120	Packing, Asbestos, for Valve Glands "Gol-	U.K.	20 16.	lb.	0 8	6	<b>a</b>
†121	den Fibre" Packing, Asbestos, for Valve Glands,	<b>,</b>	. 100 "	٠ ,,	0 8	Jas. Walker & 6 (A'sia.) Ltd.	Joy.
†122	"Russett Fibre" Packing Asbestos, Cord or Yarn. "Cape	,,	1500 "	,,	0 · 1	~ <b>T</b> ] }	١.,
†123	Asbestos Co. Ltd." Packing Asbestos, Millboard, any thicknesses ordered. "Cape Asbestos Co. Ltd.	<b>"</b>	5000 ,,	,,	0 0	Gilbert Lodge & Co. Ltd.	٠,

### INDIA-RUBBER GOODS, PACKING, ETC.—continued.

Item No.	, , , Description .	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
<del></del>	PACKING—continued.		;	 	£. s. d.	
†124 <sub>-1</sub>	Packing, (Sunlight), "Tuck's" 1"	U.K. ,	. dl. 008	ılb.	-0 -0 11	
. ( , ,	Packing, Patent, for use in joints of water,			• 14"	.'•	1
(125	steam or air installations—"Tuxite"	,,	۱٬ ش ۲۰۰	. ,,	0 1 1	Tuck's
† { 126 '	16"	. ,,	<b>4000</b> ,,		0 0 11	
127	§"	,,		, ." . "	0 0 11	•
4. 14.1.,c	Packing, Patent, for use in joints, which may be in contact with air, oil, motor spirit or benzol—"Gaskoid"		. 1 (0)			
. [128	18"	,,	١,	<b>,</b> ,	0 4 0	· ·
†{129	18"	,,,	150, ,,	, ,,	0 4 0	Mica & Insulating Supplies Co.
<b>510</b> 3	Packing, Greasy Hemp; Square—" Tucks"	, , , , , , , , , , , , , , , , , , ,		_		
130	3″	Viet."	30 ,,	,,	0 0 9	,
131	<u>1</u> "	, ,,	70 ,,	,,	0 0 9	.,
$\dagger \begin{cases} 132 \\ 132 \end{cases}$	··· ··· ··· ··· ··· ··· ··· ··· ··· ··	' <b>,,</b>	180 ,,	11	0.09	
133	3."	"	70 ,,	, , ,	. 0 0 9	Tuck's
134	₹"	"	30 ,,	.,,	0 0 9	
(135	Supple out	i »	350 ,,	"	0 0 9	
†136	Packing, Round, 3/2" "Snowflake"	, <b>,,</b> .	40., ,,	. 1994 2011	0 2 6	]
	Packing, Round or Square, as ordered "Paragon"	,		·. ,	·:	
137	<b>₽</b> ″ (	N.S.W.	100 ,,	. ,, :	10 2 4	ή .
138	:	. "	380 ,,	,,	10 2.4	, ,
139	in the state of th	, ,,	20 . ,,	٠ "	‡0 <u>2</u> 0	
140	Colonia de la companya de la colonia de la c	· " ,	250 ,,	, , , , , , , , , , , , , , , , , , ,	10 1 9	Hardie Rubber Co. Ltd.
141	<b>§″</b>	ļ "	280 ,,	***	‡0 1 9	
(142	3" and over	,,	2000 ,,	,,	‡0 1 8	
†143	Asbestos Compound "Minerals Ltd "	, ,,	20 cwt:	cwt.	0 12 0	McPherson's Pty.
	Asbestos Graphite, Compounded, suitable for Superheat Temperature, Piston and Valve Spindle Stuffing Boxes—"Loco"	. ( *	i Later to pe			
+ \\ \begin{pmatrix} 144 \\ \\ \\ \end{pmatrix}	3″ dia	Vict.	' 450 lb.	lb,	0 3 0	<u>] , , , , , , , , , , , , , , , , , , ,</u>
145	½" dia	(partly)	.800: ,,	, <b>,,</b> .	0 3 0	Tuck's
†146	square	· ,	.175 <sub>.7</sub> ,,	,•••.		Nil.
147-16			nt30 days:			

### BUILDING AND CONCRETE SAND

- 7. The Sand shall be clean and free from foreign matter, and shall be delivered properly loaded into railway trucks at the station named, and consigned as ordered. The proper loading of the Sand into railway trucks shall include so lining the trucks with paper as to prevent the Sand escaping, and the Contractor shall be liable for any loss of Sand arising, in the judgment of the Comptroller of Stores, from the Contractor's failure or neglect to so line the trucks, and the amount of such loss as assessed by the Comptroller of Stores shall from time to time be borne by the Contractor, and may be deducted from any moneys due to him by the Corporation.
  - 8. Measurement will be made at the Railway Station from which the Sand is consigned.
- 9. Inspection will be made at the Railway Station or destination to which the Sand is consigned.

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As regards items 162—163A, orders should be placed on the most advantageous contractor, having regard to rate, suitability and place of delivery.

Other purchases of sand under agreement shall not be regarded as an infringement of these contracts.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	SAND—	<del></del>		, -	£, s. d.	
†161	Coarse, delivered in trucks at Pyalong	Vict.	1750 c. yds.	cubic yard	0 2 0	F. Easton
†162	Medium, delivered in trucks at Frankston	,,,	<u> </u>	yard "	0 1 8	Construction Sand Ltd.
†162a	Medium, delivered in trucks at Cran-	,,	1500 "	,,	0 1 9	Cranbourne Sand Pty. Ltd.
†162в	bourne Medium, delivered in trucks at Pyalong	,,	IJ	,	0 2 0	F. Easton
†163	Coarse, for concrete work, delivered in trucks at Pyalong	,,	]	,,	0 2 0	3
†163a	Coarse, for concrete work, delivered in trucks at Koo-wee-rup	,,	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	,,	0.3 9	Plowright Albion Koo-wee-rup
164	Nil					Washed Sand & Gravel Co. Pty.Ltd.

### SAND FOR LOCOMOTIVES AND MOULDING PURPOSES.

- 7. The Sand shall be delivered, properly loaded into railway trucks at the station named, and consigned as ordered. The proper loading of the Sand into railway trucks shall include lining the trucks with paper so as to prevent the Sand escaping, and the Contractor shall be liable for any loss of Sand arising, in the judgment of the Comptroller of Stores, from the Contractor's failure or neglect to so line the trucks, and the amount of such loss as assessed by the Comptroller of Stores shall from time to time be borne by the Contractor, and may be deducted from any moneys due to him by the Corporation.
- 8. Measurement will be made at the railway station from which the Sand is consigned.
- 9. Inspection will be made at the railway station or destination to which the Sand is consigned.

†165	Sand, for Locomotives delivered in trucks at Carisbrook	Vict.	1000 с	. yds.	cubic yard	0	1	10	J. Landrigan
†166	Sand, for Brass Moulding purposes de- livered in trucks at Essendon	<b>,,</b> ·	40	"	٠ ,,	0	14	0	E. T. Hughes
†167	Sand, fine, Sea, for Blacksmiths use, delivered in trucks at Seaford	, <b>"</b> .	175	**	,,	0	3	0	Frankston and
†168 , ,	Sand, fine, Sea, for foundry use, delivered in trucks at Seaford	"	450	**	,,	0	3	0	Kelvin Sand Pits
169	Nil in the state of the state o	٠. '			1 -		. '		, ,

### INFUSORIAL EARTH (GROUND).

7. The material required is that known as Infusorial Earth, i.e., Diatomaceous Earth, free from stones and foreign matter.

The Infusorial Earth (Diatomaceous Earth) shall be ground ready for mixing.

8. The empty bags will be returned by the Corporation to the Contractor from time to time at the Metropolitan Receiving Depot, Spencer-street. Any bags not returned shall be paid for at the rate of 2/- per dozen.

Item No.	Description	Country of Manuf're.	Estimated Requirements	Rate per	Rate	Name of Contractor
†170	Earth, Infusorial, in bags, which will remain property of Contractor, delivered Spencer-street	Vict.	10 tons	ton	£ s. d. 5 12 6	S. N. Rodda Pty. Ltd

#### ROPE AND TWINES, ETC.

- 7. The Rope to be supplied under Items 185 to 190 inclusive shall be packed in hessian. The hessian packing will, as far as practicable, be returned to the Contractor at the Metropolitan Receiving Depot, Spencer-street.
  - 8. Net weight of Rope only will be paid for.
- 9. As regards Items 189 and 190, any  $1\frac{1}{4}$ " or  $2\frac{1}{4}$ " Rope ordered shall have one blue strand in each Rope in addition to the blue yarn in one strand, or one blue yarn in each strand as specified respectively.
- 10. As regards Item 201, the rate includes Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 50% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.
- 11. The Straw Rope is to be equal in quality with that previously supplied by E. Berriman.

	Cord, Sash, Cotton Braided, in coils-		1 .	ĺ.	]	1	
[171	No. 6	Vict.	50 lb.	lb:	0 1	,3 <del>3</del> }	
172	No. 7 :	(partly)	. 10 "	,,	0 1	33	1,44
† { 173	No. 8 '	,,	400 ,,	,,	0 1	33	:
174	No. 9	,,	50 ,,	,, ,	0 1	33	M. Donaghy & Sons Pty. Ltd.
175	No. 10	",	30 ,,	. "	0 1	33	
†176	Cord, Sash, Braided, Flax or Italian Hemp	Vict.	550 ,,	,,	0 1	43	•
†177	Cord, Whip, any sizes ordered		40 ,,			1.	
†178	'Cord, Marking (Chalk)	·	70 ,			- 41	Nil 
†179	Cord, Nicking Line, any sizes ordered		250 ,,	,,	0 2	$\frac{2}{1}$	
†180	Packing, Flax, pure	(partly)	10 - 4	***		$2\frac{1}{2}$	M. Donaghy & Sons Pty. Ltd.
†181	Rope, Clothes Line, Flax 3" circ	,,	3 ,,	cwt.	2 6	0   .	
	Rope, Straw, in bundles, delivered f.o.r.	,	-			ļ	
182	1	Vict.	20 bdis	bdle.	0 1	9 \	
183	· · · · · · · · · · · · · · · · · · ·	» ·	· 20 ,,	,,,	;0 . 1	6   } E	E. Berriman
184	- 1" ·	,,	50 ,,	, ,,	" 0 I	6	rs. '
†185	Rope, Europe, bolt, entirely of new Russian hemp, up to 3", as ordered, with blue	Vict.	'200. cwt.	cwt.	4 1	0 ]	ames Miller & Co.
1.0	worsted thread in one strand			,	•		Pty. Ltd.
(186	worsted thread in one strand————————————————————————————————————		100 ,,		2 2	g	MDonaghy &
$\uparrow$ $\left\{ 187\right\}$	Over $2\frac{1}{2}$ up to $12$ ", as ordered	,,	'80 ,,	"		6	Sons Pty. Ltd.

### ROPE AND TWINES, ETC.-continued.

Item No.	Description.	Country of Manuf're.	Estimated Requirements	Rate. per	Rate.	Name of Contractor.
†188	Rope, Manila, stretched, for power trans- mission, 4" circ., 3 strand, with one blue yarn in one strand	Vict. (partly)	100 cwt.	cwt.	£ s. d. 3 10 0	1
†189	Rope, New Zealand Hemp, 1" to 2", as ordered, with blue yarn in one strand (1½" Rope to have in addition one blue	,,	700 ,,	**	2 6 0	,
<b>190</b>	strand in each Rope) Rope, New Zealand Hemp, 2½" to 3", as ordered, with one blue yarn in each strand (2½" Rope to have in addition one blue	, ; ;-	1500 "	. "	2 6 0	
†191	strand in each Rope) Rope, Lashing, New Zealand Flax	٠,,	35 ,,	•	2 4 9	М. Donaghy & Sons Pty. Ltd.
†192.	Marline, 3 cord, in 1 lb. hanks	Vict.	1000 lb.	lb.	0 0 11	.
†193	Spunyarn, Jute	Vict.	300 ,,	cwt.	2 4 9	,
†194	Twine, Binder, free of oil, in 4½ lb. balls,	(partly)	50 cwt.	,,	2 4 0	
†195	Twine, Fine, in ½ lb. balls	,,	2500 lb.	lb.	0 0 10	
†196	Twine, Medium, in ½ lb. balls	,,	2000 ,,	,,,	0 0 10	
†197	Twine, Coarse, in ½ lb. balls	. ,,	800 "	"	0 0 93	}
†198	Twine, Seaming, Flax, 3-ply "Emu"	Vict.	1200 ,,	, ,,	$0 \ 2 \ 0\frac{1}{2}$	G. Kinnear & Sons
†199	Twine, Coarse, Special, for Trimmers' use	,,	900 .,	,,	0 0 93	Pty. Ltd.
†200	Twine, Mattress, No. 2, 4-ply in 1 lb. balls	,,	1500 "	,	0 1 5½	M. Donaghy & Sons Pty. Ltd.
†201	Twine, Machine, best 6 cord, right or left hand twist, as ordered, in 1 lb. kops, best pure linen thread, "Dunbar's Red Label"	U.K.	4200 ,,	* ** '	0 5 8	Frank & Bryce Ltd.
†202 203_	Twine, Machine, best 5 cord, right or left hand twist, as ordered, in 1 lb. kops, best pure linen thread, "Emu" 204—Nil	Vict.	300 ,,	,,,	0 2 01	G. Kinnear & Sons Pty. Ltd.

### CANVAS AND CANVAS HOSE

- 7. The Canvas shall be composed of "All Long Flax," and shall be free from dressing and every foreign substance, and each bolt of Canvas shall be branded so as to show clearly the Contract weight, in ounces, per square yard, and shall be of the full weight specified when delivered.
- 8. Each delivery of the Canvas may, at the option of the Corporation, be subjected to the following tensile tests, viz.:—

Strips of Canvas may be tested on a "Goodbrand's" Cloth Testing Machine, and shall then show an average tensile strength on the warp and weft respectively, as follows, viz.:—

	Item Nos. and Description.	- Average on each	of 12 strips, 12 x 1
•		On Warp.	On Weft.
**		lb.	ib.
_	205 and 212, 33 oz. Canvas	270	530
,	206 and 213, 30 oz. Canvas	250 '	500
	207 and 214, 22 oz. Canvas	225	390
1	208, 20 oz. Canvas	· 200	390
	209, 18 oz. Canvas	225	280
	210, 16 oz. Canvas	200	250
	211, 14 oz. Canvas	200	215
	216, OO, Bleached Canvas	185	330
	217, Lavender, 18 oz	125	125

<sup>9.</sup> The Canvas shall be supplied in bolts, each consisting of one piece approximately 50 yards in length, and branded with the exact length.

443.44.

# 464 CANVAS AND CANVAS HOSE—continued.

### 10. HOSE FOR FIRE EXTINCTION PURPOSES-Item No. 219.

The Hose shall be  $2\frac{1}{2}$  inches in diameter. It shall be manufactured of long clean flax, free from tow or other fabric. The weft shall consist of not less than 12 strands.

The Hose shall be capable of withstanding an internal static pressure of 300 pounds per square inch, and a working pressure of 150 lbs: per square inch.

The Hose shall be supplied in lengths which will cut into lengths of 100 feet or multiples thereof without waste.

A statutory declaration will be furnished by the Corporation to the Contractor that the Hose supplied has been installed for fire extinguishing purposes after it has been actually installed, which should reasonably be within a period of six months after delivery.

### CANVAS BAGS AND BOTTLES.

11. Item No. 220.—The Canvas Tool Bags shall be made from the heaviest description of flax Canvas free from dressing and sewn with the best 6 cord Linen Thread—the bottom shall be manufactured from the best sole leather.

bleached Canvas sewn with the best 6 cord Linen Thread. All seams shall be double sewn. A metal tap shall be fitted in lieu of the old style of Canvas tube.

13. Item No. 222.—The Canvas Water Bottles shall be made of all long flax Canvas, free from dressing and not less than 20 oz. per square yard. They shall be sewn with the best six cord Linen Thread.

#### EXCHANGE AND DELIVERY.

The rates for Items 206 to 209, 211, 213, 214 & 216 include T.T. Exchange at 25½%, and if on the date of delivery of any service the Telegraphic Transfer Exchange rate between Australia and London is more or less than the rate mentioned, the variation shall be to the Corporation's account, calculated on the c.i.f. value, as disclosed by Contractor's documents.

The rates for items 210 and 212 include T.T. Exchange at  $25\frac{1}{2}\%$  and if on the date of the bill of Lading for any service the Telegraphic Transfer Exchange rate between Australia and London is more or less than the rate mentioned the variation shall be to the Corporation's account and will be calculated on the C.I.F. value, as disclosed by Contractor's documents.

As regards items 218 and 219, the rates include Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of-Exchange be varied during the contract period, the difference calculated on 60% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

No adjustment for Exchange will be made as regards item 217.

As regards item 218, 12 weeks from commencing date of contract will be allowed for importation of stocks.

As regards Items Nos. 206 to 216.—Canvas—10 weeks will be allowed for delivery to permit of importation after issue of order, and should, during the period of the contract, purchases elsewhere be necessary to meet urgent requirements, such purchases shall not be regarded as an infringement of this Contract.

Names of manufacturers.—Item 206-209, 211, 213, 214 and 216—M. C. Thomson & Co. Ltd., Glasgow

" 210, 212—Richards Ltd., Aberdeen

Item No.	, Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	. Name of Contractor
	Canvas, 36" wide—			:	£ s. d.	50
†205	33 oz. per square yard	'				Nii
†206	30 oz. " " No. 1 Quality	и.к.	2000 l. yds.	lin. yd.	0 3 9	٦.
<b>†2</b> 07	22 oz. " ,	,,	1750 "	, ,,.	0 2 10 <del>3</del>	John Edmondson
†208	20 oz. " " " "	,,	3500 ,,	. ,,	;0 ,2, 8 <u>1</u>	70. C. D. T.J
†209		., ,,	4000 ,, ,_	,,	$0 \ 2.5 \frac{1}{16}$	J
†210	16 oz. "	,,	4000 ,,	,,,	0 2 25	Elder Smith & Co.
\211	14"oz No. 1 Quality .		3500 "	,	2 13	Ltd. John Edmondson & Co. Pty. Ltd.

### CANVAS AND CANVAS HOSE-continued.

Item No.	Description.	Country of Manuf're.	Estimated Requirements	Rate.	Rate.			Name of Contractor.
	Canvas, 24" wide	.\		 	£	s.	d.	
†212	33 oz. per sq. yard	U.K.	2000 l. yds.	lin. yd.	0	2	8 <del>3</del>	Elder Smith & Co.
†213	30 oz. per sq. yard, No.1 Quality .	' ,,	1750 ,,	,,	0	2	$6\tfrac{11}{16}$	
<b>5</b> †214	22 oz. per sq. yard ,,	· ·	1750 ,,	,,	0	1	$11\frac{1}{2}$	& Co. Pty. Ltd.
<sup>*</sup> †215	20 oz. per sq. yard, Water Bag Quality		2500 ,,			• • •		Nil
†216	OO, Bleached, 28 oz. per sq. yard No. Quality	1 ,,	75 .,,	/ /,,	. 0	2	$0\frac{3}{4}$	John Edmondson & Co. Pty. Ltd.
†217	Canvas, 72" wide, Lavender, 18 or "Richards"	z. U.K. & Vict.	600 ,,	<b>"</b> ,	. 0	5	<b>4</b> :	a Co. Fty. Ltd.
	Canvas Hose—				:			Gair Manufacturing Co. Pty. Ltd.
†218	Hose, Canvas, $2\frac{1}{2}$ ", for other than fine extinction purposes "Richards"	re, U.K.	9000 feet	foot	0	0	$9\frac{1}{2}$	11.
†219	Hose, Canvas, 2½", for fire extinction purposes, "LM 12 strand"		4500 ,,	,,	0	0	$9\frac{7}{8}$	Gilbert Lodge & Co.
*220	Page Tool Conver	Vict.	20	each	0	6	7	)
*221	Bags, Water, Canvas	,, '	60	,,,	0	8	6	Chief Mechanical
$\begin{array}{l} * \left\{ \begin{array}{l} 222 \\ 222 \text{A} \\ *223 \end{array} \right. \end{array}$	Bottles, Water, Canvas ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,	} 1800 250 doz.	"	0	1 1	$\frac{9}{7\frac{1}{2}}$	Enginéer Nil
224-	•			: ",			•	. , .

### TENTS AND FLIES."

7. The Tents and Flies shall be manufactured from GOOD QUALITY 10-ounce per square yard Duck, free from dressing and every foreign substance.

The Tents and Flies shall be branded with the Contractor's name, in letters not exceeding  $1\frac{1}{2}''$ 

The tents and flies shall be made with ridge bands in one length, and of a quality at least equal to 10-ounce Duck.

All eyelet holes shall be strongly reinforced with canvas patch—eyelets to be of extra strong quality.

Tents to have a wall height of 3 ft. and be made with door flap of at least 6 inches.

Forty feet of  $\frac{3}{4}$  inch New Zealand Rope shall be supplied with each tent and each fly.

Linen thread only shall be used.

*†228	Tents, Duck, 6' x 8', to specification and sample submitted	Vict.	100	each	1 6 11	The Gair Manufacturing Co.
$\mathcal{J}^{229}$	Flies, Duck, 8' x 10' for 6' x 8' Tents, to specification	>>	100	,,	0 13 11	Pty. Ltd.
						•
	LEA'	THER C	CLOVES.	. "	- '	•
*†230	Gloves, Chrome Tanned Leather Palm, and canvas back, all leather thumb, extra chrome round first finger	Vict.	6500 pairs	pair	0 1 3	Robert S. Don Pty. Ltd.

	canvas back, all leather thumb, extra					Ltd.
*†231	Gloves, Chrome Tanned Leather Palm, and canvas back, leather fingers (for use at Reclamation Depot)	,,	100 ,,,	**	0 1 31	J. & J. Smith
*†232	Gloves, all Chrome Tanned Leather, with inturned seams	2)	750 "	**	0 2 0	Robert S. Don Pty. Ltd.

### WIRE ROPE

o and

8. As regards items 234, 248-251 the rates include Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract "period, the difference calculated on 50% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

Name of Manufacturers.—Items 233 and 235-247—Australian Wire Rope Works Ltd., , 234 and 248-251—John Shaw Ltd., Sheffield

	Charles State	<u> </u>	<u> '</u>	201 4114			<del> </del>	· · · · · · · · · · · · · · · · · · ·
Item i.,		Description	,	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
r pa l	Rope, Steel V	Vire, flexible	e, galvanized,				υ£ s. d.	
15 4	Circum. Construction	Guaranteed Strength of Rope	Aggregate Break- ing Strength of Rope	11.	1		. ' '	
233	1. 1. 6/7	33 cwt.	•••	N.S.W.	1500 feet	foot	0 0 13	Inglis Smith & Co. Pty. Ltd.
234 '	1 1 6/19	72 tons	·82 tons	U.K.	2500 ,,	,,	0 0 13	Hardware Co. of Australia Pty. Ltd.
235	§" 6/19	22 cwt.		N.S.W.	10,000 ,,	i ,,	0 0 2	) .
236	₹″ → 6/19	32 ,,	•••	,,	3000 ,,	,,,	0 0 21	
237	1" 6/19	2.9 tons	3.3 tons	,,	1400 ,,	,,,	0 0 21	· .
238	147 6/19	4.5 ,,	5.1 ,,	,,	350 ,,	,,	0 0 25	
		1	ı		• • • • • • • • • • • • • • • • • • • •			
239	23" 6 strand, 1 ropes	2 wires per 14.8 tons	strand, for tail 16·5 tons	,,	2000 ,,	,;	0.40 68	
	90 tons per s	ands, 24 wii quare inch—	es per strand,	,	e i			
	ing to exist L	Guaranteed Strength of Rope	Aggregate Break- ing Strength of Rope	.'	. , 1		'	:
240	Circum.	_ `	Tons	"	3500 ,,	. '	0 0 21	Inglis Smith & Co. Pty. Ltd.
241	11/	4.3	4.9	,,, (	oir 7000 ,, ₁	4.	0 0 3	
$^{242}$ .	1½"	6.0	. 6.8	,,	6500 ,,	23	$0 \ 0 \ 3\frac{1}{2}$	·
243	13/	8.5	9.7	,, Th	350 ,,	,,	0 0 43	,
244	2"''	10.9	12.4	, , ,	4500 ,,	1	0.0,2	
245	21"	14.2	16.2	<b>,</b>	2000 ,,	. ,,	0 0 61	
246	21/2	17.2	19.7	,,	11,000 ,,	<b>,,</b>	$\begin{bmatrix} 0 & 0 \end{bmatrix} 6^{\frac{1}{10}}$	.
247	Rope, Steel Wir			51	3500 ,,	,,	0 1 0 0 0	)
-	Rope, wire flexil acid, 80/90 to 19 Wires per	ns per square	inch, 6 strands,		!			<b>1</b>
248	13. Circum. 1. 13.	Tons 8·1	Tons	U.K.	1000 ,,	,,	0: 0 5	ή. :
249	2"	11.1	12.7	,,	1000 ,,	,,	0 0 6	Hardware Coy. of
250	21	13.9	15-9	,,	1000 ,,	,,	0 0 63	Australia Pty. Ltd
251 ,, <sup>1</sup> 1 ; 252 ;	2½" and 253—Nil	17.0	<b>19.5</b>	,,	1000 ,,	* 11.7	0 0 7	,

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# BELTING; LEATHER, AND LEATHER GOODS (Items 278, 279 and 284—Period 1/10/34 to 30/9/35).

### 7. SPECIFICATION FOR ITEMS 254 to 256.

The Belts shall be in accordance with Australian Standard Specification No. B. 4/1931 for Vegetable Tanned Leather Belting, and Clause 16 relating to sewing shall be complied with.

8. SPECIFICATION FOR LAMINATED BELTING .- Items 257 to 260.

The Laminated Belting shall be straight and well stretched. The laminations shall be of even grade and thickness. The edging shall be of sufficient thickness to satisfactorily, cover the sticking.

All workmanship and material shall be of the very best quality for the purpose.

9. SPECIFICATION FOR RUBBER BELTING .- Item 265-265B.

The Belting shall be in accordance with the Australian Standard Specification No. B. 5/1933 T.

0.41

10. SPECIFICATION FOR TRAIN LIGHTING BELTING.—Items Nos. 269 and 270.

The Belting shall be in accordance with Australian Standard Specification No. B. 5—1933 T. as applied to transmission belting, except that the surface of the belting shall be so treated to enable it to withstand the frictional heat set up when the belt slips on the train lighting dynamo pulley.

- All inspection and tests will be conducted by and at the cost of the Corporation on its premises.
- 11. The Leather Basils supplied under Item No. 271 shall have an area of not less than 7 sq. ft.

### SPECIFICATION FOR LEATHER BUTTS.

- 12. The Butts supplied under Item No. 276 shall be of uniform thickness and special quality, properly trimmed, and shall be free from flesh cuts, blemishes and brands. The Butts shall be prepared with the constituents as in the sample, and shall be close in grain, very firm and capable of resisting an air pressure of not less than 60 lbs. per square inch. The leather shall not be too dry, as it has to be moulded into shape which bends the Butts at right angle.
- 13. As regards Item No. 277, the Butts shall be trimmed to a uniform thickness of approx.

  1 inch. Tenderer to submit a complete trimmed hide as a sample.
- 14. As regards Item No. 278, the Leather Butts shall be of even grade and thickness in accordance with contract sample and suitable for the manufacture of Westinghouse Brake Washers. They shall be of the very best quality for the purpose.
  - 15. SPECIFICATION FOR LEATHER BUTTS.—Item No. 279.

The Butts shall be free from flesh cuts, blemishes and brands and be of uniform thickness, special quality, and properly trimmed, not to exceed 27" wide, shall be close in grain, suitable for Westinghouse Brake Washers.

16. SPECIFICATION FOR CHROME TRIMMING LEATHER.—Item No. 286.

The Leather shall be supplied in Hides, approximately 54 sq. ft. in each, shall be soft and pliable, free from flesh cuts, blemishes and brands, and the color shall be fast.

As regards contracts with Dunlop Perdriau Rubber Coy. Ltd. and Barnet Glass Rubber Coy. Ltd., the rates are subject to variation as set out for items 1808—1808B.

† As regards items 265 to 270; rates are subject to  $33\frac{1}{2}\%$  discount, and  $2\frac{1}{2}\%$  discount for payment in 30 days.

Orders for items 265 to 270, are to be issued in the following proportions:-

Dunlop 56% ... of Department's requirements, Barnet Glass to be allotted all orders under Items 269 and 270, which are to be taken as part of their proportion. S. House Manager to note and so arrange

\* Contract period 1/10/34 to 30/9/35.

# BELTING, LEATHER AND LEATHER GOODS—continued. ITEMS 265, 265A & 265B, BELTING PRICE LIST. PER LINEAL FOOT.

			All Cont	ractors				Glass and ordriau only
Width	3-Ply.	4-Ply.	5-Ply.	6-Ply.	7-Ply.	8-Ply.	9-Ply.	10-Ply.
1,0	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1"	0 5	0 8	•••		·			
1½" 2½" 3½" 3½" 4½" 5½" 6″	0 71	0 10	•••			,		
2	$0.9\frac{1}{2}$	0 111			•••	'		
24		$1 \ 2\frac{1}{2}$	*1 $5\frac{1}{2}$					
3		1 5	1 10	···	·	,		
34	1 2	1 8	2 1		· · · ·			
4"	1 3	1 10	2 4	3 0	<b> </b>			
4.	*1 9 *2 0	2' 1	2 7	3 2	·			
5"	*2 0	2 5	2 10	3 4				
Đ <u>ặ</u>	•••	2 9	3 2	3 8			•••	
7"	•••	3 0	3 6	4 0	4 6			•••
0,,	••••	3 6	4 0	4 ,6	, 5 0		•••	
8" 9"	•••	4 2	4 8	5 2	5 10	6 7	•••	
	•••	•••	5 6	6 -2	6 10	7 6		
10″	. • • •	**	6 3	7 0	7 9	8 6 .	•••	
11"	•••		6 8	7 6	· 8 4	9 3		
12"	•••	•••	7 0	7 11	8 10	9 11	11 0	
14"	•••	•••	7 9	10 0	11 8	13 0	14 4	
16"	•••	• •••		12 0	13 6	15 0	16 6	18 0
18"	•••		•••	14 0	15 9	17 6	19 3	21 0
20″	•••	***	•••	16 0	18 0	20 0	22 0	24 0
22"		*** , .	*, ***	18 0	20 0	22 0	24 0	26 0
24"	•••	•••		20 0	22 0	24 0	26 0	28 0
26"	•••	***	•••	22 0	24 0	26 0	28 0	30 0
28"	•••	•••		24 0	26 0	28 0	30 0	32 0
30″[	•••		٠	26 0	28 0	30 0	32 0	34 0

ITEMS 257-260. LAMINATED LEATHER BELTING PRICE LIST. PER LINEAL FOOT. Light, about  $\frac{1}{16}$ -inch Thick.

Width.	Per Foot.	Width.	Per Foot.	Width.	Per Foot.	
Inches.	s. d. 1 3	Inches.	s. d.	Inches.	s. d. 4 9	
$\frac{1\frac{1}{4}}{1\frac{1}{8}}$	1 6 1 10 2 2	$2\frac{3}{4}$	3 3½ 3 6	4 <u>1</u> 4 <u>1</u>	5 0 5 4	
2 21	$egin{array}{cccc} 2 & 2 \\ 2 & 6 \\ 2 & 9 \end{array}$	314 324 334	3 9 4 0 · · 4 6	$\frac{5}{5\frac{1}{2}}$	5 9 6 3 6 9	

### MEDIUM, ABOUT \$-INCH THICK.

2 21 25 25 25 3 31	3 3 3 3 4 2 4 6 5 0	31 34 4 4 4 5 5 12	5 4 5 9 6 2 7 0 7 9 8 6	6 61 7 8 9	9 3 10 0 10 9 12 3 13 9 15 3
--------------------------------------	---------------------	--------------------	--	------------------------	---

STOUT	ADOUT	1-INCH	THIOT
SIUUI.	ABOUT	#-INCH	I HICK

3	5 7	7	13 0	14	25 9
3½	6 6	8	14 9	15	28 0
4	7 6	9	16 6	16	30 0
4½	8 6	10	18 3	17	32 0
5	9 6	11	20 0	18	33 9
5½	10 6	12	22 0	20	37 6
6	11 3	13	24 0	24	45 0

### BELTING, LEATHER AND LEATHER GOODS—continued.

ITEMS 257-260. LAMINATED LEATHER BELTING PRICE LIST, PER LINEAL FOOT—continued.

Extra Stout, about \( \frac{5}{8} - \text{inch} \) Thick.

	1	<u> </u>	<del>-</del>	1	
Width	per foot	Width	per foot	Width	per foot
inches	s. d.	inches	's. d.	inches	s. d.
4	9 0	12	26 3	28.	61 9
5	11 0	13	$\begin{array}{ccc} 26 & 3 \\ 28 & 6 \end{array}$	32	70 0
6.	13 3	14	30 9	36	79 0
7	15 3	15	32 9	40	88 6
. 8	17 3	16	35 0	. 44	, 96 0
ğ	19 6	18 .	39 6	48	103. 6
10	21 9	$\tilde{20}$	44 0		
,.11	$\begin{bmatrix} 24 & 0 \\ \end{bmatrix}$	24	52 6		

If ordered endless, to be joined up on the job, an extra charge is made.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
,	Belting, Leather, Copper, sewn—"Non-Waterproof"—				£ s. d.	
†254	Single, up to 4" wide, as ordered	Victoria	1400 sq. ft.	sq. ft.	0 2 6	h
†255	Double, up to 4" wide, as ordered	, ,,	600 ,,	,,	0 5 21	Joshua Pitt Pty. Ltd.
†256.	Double, $4\frac{1}{2}$ " to 6" wide, as ordered, 2 rows stitching	"	100 ,,	,,	0 5 5½ Percentage off Price List fur-	
٠,	Belting, Leather, Laminated, Endless, or otherwise, any widths ordered—				nished with the tender, which shall be firm during the period of this	
∫257	5/16 thick	21	75 ft.	lin. ft.	contract.	<b>ງ</b> -
258	3,	,,	-80 ,,	,,	. , ,	0.2
† <b>{</b> │ 259	½" ,,	,	100 ,,	,,	Less 20%	J
260	5," 8 ,,	,,	60 ,,	,,	17½%	
	Threads for jointing laminated belting-				,	Geo. Pizzey & Son
∫261	25' long, for 5/16" thick belts	Vict.	1 doz.	dozen	0 7 0	Ltd.
262	, , , , , , , , , , , , , , , , , , ,	(partly)	2 ,,	,,	0 7 0	
†{ │263	., , <u>1</u> " ,, ,,	,,	I "	,,	0 8 0	,
264	, , , , , , , , , , , , , , , , , , ,	,,	1 ,,	. "	0 8 0	
	Belting, Rubber, High Speed Transmission, flat (sizes shown in price list above)—			, ,	Percentage off Price Lists	11 - 12 - 12 - 12 - 12 - 12 - 12 - 12 -
†265	Price List No. 141-1/5/34	1)	h	lin. ft.	)	Dunlop Perdriau
7265A	" Titan " Price List No. 6-1/5/34	37	 	,,	‡ less	Rubber Co. Ltd. Barnet Glass
†265в	"Red Transmission Belting" Price List No. M.G. 17-1/8/32 "Wingfcot" Transmission Belting	N.S.W. (partly)		,,	$\int \frac{33\frac{1}{4}\%}{}$	Rubber Co. Ltd. Goodyear Tyre & Rubber Co. of A'asia
	Belting, Rubberised Canvas—	•	,•	'		Ltd.
†266	4" wide, x 4-ply in lengths 9' 4" "Titan"	Victoria (partly)		,,	}	Dunlop Perdriau Rubber Co. Ltd.
†266a †266B	4" wide x 4-ply, in lengths 9' 4" "Red Transmission belting" 4" wide x 4-ply in lengths 9' 4" "Wingfoot" Transmission belting	". N.S.W. (partly)	}1000 lin. ft.	"	$ \begin{cases}                                    $	Barnet Glass Rubber Co. Ltd. Goodyear Tyre & Rubber Co. of A'asia Ltd.

BELTING, LEATHER AND LEATHER GOODS.—continued.

	DDDTTTO, DDTTTDT		,			<del>7***-</del>
Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
†267	Belting, Rubberised Canvas—continued—  3" wide x 4-ply in lengths 5' 8"  "Titan"	Victoria (partly)	) .:	lin. ft.	· }	Dunlop Perdriau Rubber Co. Ltd.
†267л †267в	3" wide x 4-ply in lengths 5' 8" "Red Transmission belting" 3" wide x 4-ply in lengths 5' 8" "Wingfoot" Transmission belting	,, N.S.W. (partly)	} 1200 lin. ft.	"	$ \begin{cases}                                    $	Rubber Co. Ltd. Goodyear Tyre & Rubber Co. of A'asia
†268	3" wide x 4-ply in lengths 6' 2" "Titan"		<u> </u>	,,	h	Ltd. Dunlop Perdriau
†268a	3" wide x 4-ply in lengths 6' 2" "Red Transmission belting"	(partly)		,,	$\begin{cases} 1 & 1 & 5 \\ less \end{cases}$	Rubber Co. Ltd. Barnet Glass Rubber Co. Ltd.
†268в	3" wide by 4-ply, in lengths 6' 2" "Wingfoot" Transmission belting	N.S.W. (partly)		,,	331 %	Goodyear Tyre & Rubber Co. of A'asia
†269 <sup>°</sup>	Belting, 3" wide x 4-ply, canvas duck; treated with rubber composition, un- stitched, for driving train-lighting dynamos "Red Transmission belting"	(partly)	7500 "	,,	† 0 1 5 less 33 ½ %	Ltd.   Barnet Glass   Rubber Co. Ltd.
†270	Belting, 4" wide x 4-ply, canvas duck, treated with rubber composition, un- stitched, for driving train — lighting dynamos—"Red Transmission belting"		1750 ,,	,,	$\frac{1}{1}$ 0 1 10 $\frac{1}{1}$ $\frac{1}{3}$ $\frac{1}{3}$ $\frac{1}{3}$	Adober Co. Bea.
, .	LEATHER.	,				1 14 700
†271	Leather— Basil, large size	Victoria	6000	each	0 1 4	Michaelis Hallenstein
†272 †273 †274	Bag, natural color Bellows, oil dressed Bellows, chrome tanned (in sides or hides as ordered)	>7 >> >>	300 s. ft. 70 cwt. 8 ,,	s. ft. cwt.	$\begin{array}{cccc} 0 & 0 & 11 \\ 7 & 9 & 3 \\ 11 & 5 & 0. \end{array}$	& Co. Pty. Ltd. Zwar Bros. Pty. Ltd. Geo. Pizzey & Son Ltd.
†275	Black, satin hide	23.11	450 s. ft.	s. ft.	0 1 1	Michaelis Hallenstein
†276	Butts, special wax filled	,,	. 25 cwt.	cwt.	14 14 0	& Co. Pty. Ltd.
†277	Butts, Harness of an even thickness throughout, prepared in oil, black or brown	,,	5 ,,	,,	18 4 0	W. Braithwaite
<b>*</b> †278	Butts, special, black, heavy \ \frac{1/10/34-30/9/35}	,,	30 ,;	,,	*14 14 0	Pty. Ltd.
†279 †280	Chrome light only	,, . 		• ,,	*16 16 0	J · · · . Nil
†281 †282	Harness, Brown	Tas.	25 ,,	,,	7 18 8 7 18 8	Bryce & Duncan
†283 †284	Rein, Brown, stained Sole, Trimmed (1/10/34-30/9/35 only)	Viet.	20 ,, 20 ,, 150 ,,	"	7 18 8 10 15 0 *10 5 4	Zwar Bros. Pty. Ltd. W. Braithwaite Pty. Ltd.
†285 †286	Textile, Grey (car blind Material), 36" wide Trimming, Black Chrome	,,	100 l. yds. 1000 s. ft.	l. yds. s. ft.	‡ 0 1 .1	Nil Henry P. Zwar Pty. Ltd.
†287	"Green		150 ,,			Nil i
*288	LEATHER GOODS.  Bags— Cash, large, plain	,	100	each	.0 3 3	Chief Machanical
**************************************	Cosh Hand 16"	***	5		1 11 6	Chief Mechanical Engineer Michaelis Hallenstein
*290	Tool	,,	10	,,	1 1 0	& Co. Pty. Ltd.
†291	Cases, Attache, solid leather, 16" x 9" approx		30	,,	1 5 3	Engineer W. H. Hunter & Coy.
†292	Clogs, strong, split kip, blucher pattern, wooden soles, iron shod, sizes 5 to 10, as	Tas.	175 pairs	pair	0 6 3	Pty. Ltd. Cuthbertson Bros.
293-4	ordered "Sample No. 2193"		1		· .	

‡ Less 2½% payment 30 days.

### FIRE BRICKS, ETC.

- 7. The Fire Bricks shall be carefully loaded into trucks at the station named, and be properly packed with straw so as to prevent damage in transit, failing which the Contractor shall be held responsible and liable for any loss or damage which, in the judgment of the Comptroller of Stores, shall arise or occur owing to the Contractor's failure to properly load and pack the Stores.
  - 8. All Fire Bricks shall bear the manufacturer's name or brand.

Place of delivery——

Item No. 296—delivery shall be made direct to the Newport Power House by the Contractor.

Engineering Products Pty. Ld., item 295, ——— Spencer St., Nonporite Pty. Ld., item 295A———— Hawthorn, Ordish Firebrick Co. Pty. Ld. ———— Dandenong.

Sunshine Firebrick Co., item 297A-Sunshine.

As regards items 295 and 295A, a trial order of 30 cwt. should be placed on Nonporite Pty. Ld. and further ordering will depend on results of test. Storekeeper, Newport Power House, to arrange.

A trial order is to be placed with Sunshine Firebrick Co. under item 297A and further orders will depend on result of test. Storehouse Manager to arrange.

	!	· · ·	<del>, - ` -</del>		<del>, '</del>	
Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	·			,	.£ s. d.	
<b>†</b> 295	Boiler Covering Composition, soft setting	Vict.	110 cwt.	cwt.	1 0 0	Engineering Pro- ducts Pty. Ltd.
†295a	n n' n ;n	,,,	\\ \frac{110}{1}	,,	0 17 6	Nonporite Pty. Ltd.
†296	Blocks, Cellinsulate, 12" x 8" x 1½"		850	each	0 2 0	Engineering Pro- ducts Pty. Ltd.
	Bricks, Fire, Locomotive-				i	
†297	Ordinary, Small, to Item No. 1 of Drawing	, ,,	70,000	100	1 10 0	The Ordish Firebrick Co. Pty. Ltd.
†297a`	No. 1524 Ordinary, Small, to Item No. 1 of Drawing 1524	; ; ;	\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	,,	1 3 0	Sunshine Firebrick Mftg. Co.
. [298	Side Carrier, to Item No. 2, Drawing	, ,,	28,000	"	2 0 0	
1 299	No. 1524 Front Centre, to Item No. 3, Drawing No. 1524	,,	28,000	<b>,,</b>	2 0 0	
	Bricks Fire, for "N" class engines—		1		· , . ,	
$\begin{bmatrix} 300 \\ 301 \end{bmatrix}$	Side Carrier, R.H. to Item 4 of V.R. Drawing 5343 Side Carrier, L.H. to Item 5 of V.R. Drawing 5343	"	850 850	,,	2 0 0 0	
302	Front, to Item 6 of Drawing, V.R. 5343	, ,,	2200	,,	2 0 0	
	Bricks, Fire, for "S" Class Engines-					The Ordish Fire- brick Co. Pty. Ld.
303	Mark "A" Drawing S. 21-24	<b>;</b> ,,	2500	each .	0,23	
† 304	Mark "B" Drawing S. 21-25, 11.6.30	· ; ",	175	,,	0 2,3	
305	Mark "C" Drawing S. 21-25, 11.6.30	l	260	"	0 2 3	J
306	Mark "D" Drawing S. 21-25, 11.6.30	) ; 	350	,, ,,	0 2 3	
	Bricks, Fire, for "X" Class Engines-	,				
307	Mark "E" Drawing S. 21-25, 11.6.30	; , ,,	150	»	0 2 0	
308	1	· · · · · ·	700	,,	0 2 0	
309 1206.—	Mark "G" Drawing S. 21-25, 11.6.30	· " "	175	,, ,,	0 2 0	J.,

### FIREBRICKS, ETC.—continued.

	Item No.	Description	- [	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
		Bricks, Fire, to Drawing No. L3607 (New		•			£, s. d.	
		port Power House)				, , ' '	4	
	310	Ordinary, 9" x 4½" x 3", Item 1	•••	Vict.	]	100	0.16 0	)
	311	Ordinary, 9" x 4½" x 2½", Item 2		,. ,,		· "	0 16 0	·
	312	Lump, 12" x 7" x 1" Item 3	•••	."		each	0 0 9	`
	313	Arch G, Item 4		,,		100	0 16 0	
	314	Arch H, Item 5		,,		,,,	1 4 0	 
	315	Arch T, Item 6		,,		"	0 16 0	
	316	Side Lining E, Item 7		,,		each	0 1 0	· · ·
	317	Side Lining N, Item 8		**		,,	0 1 0	
	318	Side and Back Wall Y, Item 9		"		100	0 16 0	
	319	Baffle K, Item 10		"		each	0 1 0	
_	320	Baffle M, Item 11		,,	<b>7</b> 0.000	,,	0 1 3	.,
†-	321	Baffle F, Item 12		,,	<b>70,000</b>	,,	0 1 0	
	322	Baffle P., Item 13		**		100	1 15 0	<b>,</b>
	323	Baffle "B," P.H. 106, Item 14		,,		each	0 1 0	
	324	Baffle "B," P.H. 207 L.H., Item 15		,, .		100	1 15 0	The Ordish Fire-
	325	Baffle "B," P.H. 207 R.H., Item 16		,,	. ,	,,	1 15 0	brick Co. Pty.
	326	Baffle "B," P.H. 208, Item 17		,,		,,	1 15 0	
	327	Guillotine, No. 2040, Item 18		,,		each	0, 1 0	,
	328	Soot Blower Wedge, No. 7, Item 19		,,	•	100	0 16 0	
	329	Soot Blower, Tile 4, Item 20		,,		each	0 1 6	
	330	Soot Blower, Tile 5, Item 21		17		,,	0 1 6	
	331	Soot Blower, Tile 6, Item 22		,,		,,	0 1 9	
	332	Ash Hopper, Tile 24" x 24" x 3", Item 23	:	,,	]}	,,	0 9 6	
		Bricks, Fire, to Drawing M. N. 170-1-42 (Rolling Stock Branch)—	2		·	,	,	· .
	333	Cone Block, Item 9		, ,,	h	. ,,	0 1 0	3
	334	Straight, Item 12		,,	!	,,	0 0 6	
	335	Cone Block, Item 13		,,		- ,,	0'06	
†	336	Feeder, Item 15		,,	,	100	1 0 0	<del>                                   </del>
	337	Straight, 9" x $4\frac{1}{2}$ " x 3", Item 16		"	See next	,,	0 16 0	• , • •
	338	Nose, Item 17 '		,,		each		٠.
	339	Circle, Item 18		,,	. ,	100	1 15 0	·
	340	Feeder, Item 19	]	,, .	}	.,.	I' 0 0	J

### FIREBRICKS, ETC.—continued.

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	·	FIREBRI	CK	S, ETC	.—continued.			
Item No.	Description			Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
:	Bricks, Fire, to Drawing M. (Rolling Stock Branch)—co	N. 170-1-4 intinued)—	12				£ s. d.	
∫341	Feeder, Item 20	•••		Vict.	}	100	1 0 0	]
342	Straight, Small 9", Item 21	•••		**		,,	0 16 0	
€ \$43	Arch, Item 22	•••		"·		each	0 1 0	
344	Burner, Item 23			"		,,	0 12 6	
345	Burner, Item 24			<i>;</i> ,		,,	0 12 6	
346	Circle, Item 25	•••		,,		100	1 15 0	
347	Key, Item 26	•••		11		,,	0 16 0	
348	Wedge, Item 27			,,		,,	0 16 0	
349	Brick, Item 28	•••		,,		,,	0 16 0	
350	Circle, Item 29	•••		,,		,,	2 10 0	
351	Barrel, Item 30			,,		each	0 6 0	
352	Barrel End, Item 31			"		,,	0 1 3	
353	Wedge, Item 32			",	200,000	100	0 16 0	
351 352 353 354	Wedge, Item 33	•••		,,	200,000	,,	0 16 · 0	
355	Brick, 1½", Item 34			"		,,	0 16 0	<b> </b>   <b> </b>
356	Circle, Item 35	•••		*1		,,	2 10 0	The Ordish Fire
357	Burner, Item 36			,,		each	0 15 0	Ld.
358	Retorts, Item 37			,,		,,	0 15 0	
359	Retort Door, Item 38			,,		,,	0 1 6	
360	Wedge, Item 39			,,		100	0 16 0	
361	Feather Edge, Item 40			"		,,	0 16 0	
362	Brick, 1", Item 41			"		,,	0 16 0	
361 362 363 364 365 366 567 368 368	Door Brick, Item 43	•••		**		each	0 1 0	
364	Door End, R.H., Item 44			,,		,,	0 1 0	
365	Door End, L.H., Item 45	•••		"		,,	0 1 0	
366	Slabs, Item No. 46			,,		,,	0 7 6	
367	Block, Item 47	•••		"		,,	0 15 0	
368	Small, 21", Item 48	•••		,,		100	0 16 0	
369	Small, 1", Item 49	•••		,,		,,	0 16 0	
<b>†37</b> 0	Clay, Fire, Machine ground			,,	2000 cwt.	cwt.	0 2 6	
<del>†</del> 371	Clay, Fire, extra fine ground	l		,,	1100 ,,	,,	0 2 9	J
†372	Furnace Lining, Silacene "Refractive" or suitable			•••	20 ,,			Nil

### FOUNDRY COKE.

### Period 1/10/34 to 30/9/35.

### 7. SPECIFICATION FOR COKE.

The Foundry Coke shall be suitable for efficient foundry use, and shall be reasonably free from dust and small pieces.

The Coke shall show on analysis-

Moisture content, about 1%.

Ash content, about 15%.

Sulphur content shall be less than 1 per cent. Volatile matter shall be less than 2 per cent.

The Coke will be subjected to such tests as may be required by the Comptroller of Stores by and at the cost of the Corporation to ascertain if it is in accordance with this specification, and in the event of its failing to comply it shall be rejected.

The Coke will be ordered in minimum quantities of 150 tons.

The rates do not include wharfage dues of the Melbourne Harbour Trust. The Corporation will arrange clearance.

Delivery will be taken in railway trucks at Victoria Dock, Williamstown, or any other suitable discharging berth at the port of Melbourne at Contractor's option, and payment will be made on the out-turn weights as ascertained over the weighbridges of the Corporation at the place where the ship discharges.

The rate shall be subject to adjustment for variations in Government charges, rail, wharfage and shipping charges, crane dues, subject to the right of the Corporation to cancel the Contract if the rates be increased and deliveries shall be liable to suspension in the event of strikes, lockouts, war, etc.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate	Rate .	Name of Contractor
374	Coke, Foundry, Purified "Mt. Pleasant" (1/10/34—30/9/35).	N.S.W.	750 tons	ton	£ s. d.	Melbourne Steamsi Co. Ltd.

### FILES AND RASPS.

- 7. The estimated requirements are based on the full price list.
- 8. The Files and Rasps for Items 375 to 381 shall be of any description, shape, length or edge ordered.
- 9. The Tenderer shall submit one sample of each 14 in. Hand Second Cut and 14 in. Hand Bastard File for testing purposes.
- 10. ‡ As regards items 375 to 384, the rates include Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 66¾% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

†375	Files, bastard, as ordered, " Eagle & Globe Steel Co. Ltd."	U.K.	<u> </u>		Percentage off the Price Lists submitted with tender, which shall be firm during period of contract.	Eagle & Globe Sti
† 1 <sup>376</sup>	Files, 2nd cut, as ordered, Thomas Firth & John Brown, Ltd. "Chain" Brand	,,	} £700		55%	Co. Ltd.  William Adams
377	Files, smooth, as ordered, Thomas Firth & John Brown, Limited, "Chain" Brand	,,			55%	Co. Ltd.
†378	Files, saw, as ordered, "Eagle & Globe Steel Co., Ltd."	"	£350		571%	Eagle & Globe Sto
379	Rasps, wood, as ordered, Thos. Firth & John Brown, "Chain" Brand	· " ,	]		55%	Co. Ltd.
1380 †{	Rasps, cabinet, as crdered, Thos. Firth & John Brown, "Chain" Brand	,,	£80		55%	William Adams Co. Ltd.
381	Rasps, horse (3 rasp, 1 file), as ordered, Thos. Firth & John Brown, "Chain" Brand	".		, <b></b>	55%	}
₹382	Files, block, valve rubber, bastard cut, 7" x 1½", "B.S.A. Tools Ltd."	"	80	doz.	9 0 0	<b>)</b>
†383	Files, block, valve rubber, bastard cut, 6" x 1½", "B.S.A. Tools Ltd."	,,	20	. ,,	less 53½% 8 2 0	McPhersons Pty.
†38 <b>4</b>	Files, Band, Saw, single *cut, 6" taper, "B.S.A. Tools Ltd."	,,	. 20	,,	less 531%   0 14 0   less 531%	Ltd.

### · WOODEN HANDLES (Various)

- 8. The Mop Handle supplied under Item No. 400 shall have a hole  $2\frac{1}{2}$ " x  $\frac{1}{4}$ " bored at the end for the spike of the Mop.
- 9. As regards Item No. 405, the handle supplied shall have a Metal D. provided with a 4" Rivet through the wooden part and rivet fixed securely to the Metal D.
- 10. The Handles to be supplied under Items Nos. 390 to 399 shall conform to the following dimensions:—

	F . 1 . 1 . 1 . 1 . 1 . 1 . 1 . 1 . 1 .	Eve	Measuremen	ITS.	SHOULDER ME	ASUREMENTS.	
Item No.	Length.	Thickness.	Width.	Length.	Thickness.	Width.	
390	14"	1	$\frac{1-\frac{1}{16}}{1}$	3″	7" 8 3"		
391	16" (small eye)	3/1 116"		3″	-	$1 - \frac{3}{16}$ " $1 - \frac{1}{16}$ "	
392	16" . (large eye)	13 " 16"	I-1/8"	31/	8"	1-3"	
393 394	18"	3" 4" 7" 8	$1 - \frac{1}{16}''$ $1 - \frac{1}{16}''$	3½" 3½"	13" 16" 15"	$1 - \frac{3}{16}''$ $1 - \frac{3}{16}''$	
395	(small eye)	·1-16"	$1-\frac{3}{8}''$	31/2	1-18"	$1-\frac{7}{16}$	•
396 397	(large eye) 24" 30"	$1-\frac{1}{16}$ " $1-\frac{1}{8}$ " $1-\frac{1}{8}$ "	$1 - \frac{3}{8}''$	4″ 5″ 5″	$1-\frac{1}{8}''$ $1\frac{1}{4}''$ $1\frac{1}{4}''$	$1 - \frac{7}{16}''$ $1 \frac{1}{2}''$ $1 - \frac{5}{8}''$	
398	36"	1-8	$1 - \frac{5}{18}''$ $1 \frac{1}{2}''$	5″	1 1	$1-\frac{5}{8}$	
399	(small eye) 36" (large eye)	1-18"	l-7″	5″	11/2"	2"	_

The measurements shown above must not be exceeded by more than  $\frac{1}{8}$  as regards widths and by more than  $\frac{1}{16}$  as regards thicknesses.

As regards item 406, the rate includes Telegraphic Transfer Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the contract period the difference calculated on 45 per cent. of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank. No adjustment for conversion will be made.

### Conditions applicable to items 401-403

- (a) Delivery shall be given in ship's slings Melbourne and wharfage, stevedoring and cartage will be arranged by the Corporation. Bills of Lading shall be made out in favour of The Victorian Railways Commissioners and forwarded to the Comptroller of Stores in sufficient time to avoid storage charges on wharf.
- (b) The minimum quantity to be ordered and shipped is four bags and inspection will be made at the Spotswood General Storehouse where handles will be liable to rejection if not to specification and sample.
- (c) Due allowance will be made for delays in delivery occasioned by fire, lockouts or in strikes shipping or in the industry and the rates shall be subject to variation in the event of alteration in the working week of 48 hours or basic wage of £3 7s. beyond 2/6d. per week, affecting the timber workers in N.S.W. and it shall be the Contractor's obligation to advise the Comptroller of Stores of any alteration in such conditions affecting the contract rate. Any amendment of rate shall apply to all orders undelivered in Melbourne at the time of such alteration.

	•					
Item No.		Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
\$	HANDLES—				£ s. d.	1:03
†385	Adze, spotted gum-" L. Porta & Son"	Vict.	80 doz.	. doz.	0 12 81	Hardware Co. of Aust. Pty. Ltd.
†386	Axe, 32", spotted gum—" Klean Kut No. 1"	Q'land.	300 ,,	,,	0 9 11	Mining Supplies Co.
†387	Broom, Short, 3' 6" x 11" dia	Vict.	80 ,, "	»,	0 2 0	Chief Mechanical Engineer.
†388	Broom, Long, 6' x 1 1 dia	-,,	100 "	,,	0 3 6	S Engineer.
†389	Claw Hammer, spotted gum—"Klean : Kut No. 1"	Q'land.	18 "	,,	0 2 9	Mining Supplies Co.

### WOODEN HANDLES-continued.

		· · · · · · · · · · · · · · · · · · ·		,		
Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Handles, Hammer, first quality spotted gum —"Klean Kut No. 1"—			,		
†390	14"	Q'land.	,50 doz.	doz.	0 2 7	<b>1</b> 1
†391	16" (small eye)	,,	175 ,,	,,	0 2 11	
†392	16" (large eye)	,,	240 ,,	,,	0 2 11	
†393	18"	,,	150 ,,	,,	,0 .3 8	
†394	20" (small eye)	,	80 ,,	"	0 4 2	
†395	20" (large eye)	,,	70 ,,	,,	0 4 2	Mining Supplies Co.
†396	24"	,,	80 ,,	,,	 0 4 8	
†397	30″	,,,	200 ,,	,,	0 6 2	·
†398	36" (small eye)	,,	1000		0 7 9	
<b>†399</b>	36" (large eye)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	450 _ ,,	**	0 7 9	
*400		777-4		17	•	J
1400	Handles, Mop—Ferruled, 4'6" x 1\frac{1}{8}"	Vict.	30 ,,	,, .	0 4 9	Chief Mechanical Engineer
	Handles, Pick—Spotted gum, "Bonzer" XXX—			ر	In ship's slings	, -
<b>†401</b>	D.E., Navvy	N.S.W.	1750 ,,	,,	Melbourne 0 10 0	
<b>†4</b> 02	Miners', "Ballarat"	· <b>,,</b>	90 .,	,, {	0 11 0	Hely Bros. Ltd.
†403	"Coal Miners'," 85A		120 ,	,, (	0 5 6	·
†404	Handles, Shovel, long handled, bent, moun-	Vict.	80 "	,,	0 12 1	Hardware Co. of
†405	tain ash, "L. Porta & Son" Handles, Shovel, S.H. bent, D. top, woolly-	<b>"</b>	200 ,,	,,	0 14 6	Australia
†406	butt, "Titan" Handles, Scythe, hickory, Tyzack's "Horse-	Canada	2 "	,,	4 1 0	McPherson's Pty.,
†407	man" Handles, Hatchet, for No. 2 Brades'	Q'land	2 ,,	,,	0 4 8	Ltd. Mining Supplies
	Hunters' Hatchets, spotted gum, "Klean Kut No. 1"			- 1		Čo.
408-410		• 1	, , ,			

### AUGERS.

7. As regards Items Nos. 415 and 416, the Corporation undertakes to order the quantity shown opposite to these items in the Schedule during the contract period.

The rates include Telegraphic Transfer Exchange between Australia and London at 25½, and if this rate of Exchange be varied during the contract period, the difference calculated on 66½, of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T. T. Exchange is effective as notified by the Commonwealth Bank.

	411	Augers, Screw, "Rid	gways"— 	·	u.к.	8 d	oz.	doz.	0 16	3	<u> </u>	2
	412	1," ,,	•••		,,	60	,,	٠,,	0 16	3		3
1.	413.	. §″ ,,	·		"	200	,,	٠ "	0 18	2		., •
	414	1", Augers, Screw, for repers, 8 threads per and cutting edge	rinch on lead s	screw,	"	30	**	"	1 7	. 6	Briscoe & Co	. Ltd.
†⊀	415	ways"		٠	<b>,,</b>	160	,,	,,	1 2	_		
		418—Nil	* * ***	***	' >>	160	**	"	1 2	<b>2</b>	، " ا	• •

### AXES, HATCHETS, ETC.

As regards Item 420, the rate includes Telegraphic Transfer between Australia and London at  $25\frac{1}{2}\%$ , and if this rate of Exchange be varied during the contract period, the difference calculated on at 60% per cent. of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
\$\frac{1}{2}	Axes, handled, 5 lb. Brades' "Giraffe"	U.K.	750	each	£ s. d. 0 8 0	Briscoe & Co. Ltd.
<sup>1</sup> / <sub>420</sub>	Hatchets, Axe Pattern, handled, Brades' 378	,,	700	,,	0 2 113	Edward Duckett & Sons.
†421	Hooks, Fern, "Gippslander No. 142" "Trojan"	Vict.	175	,,	0 5 0	Scott & Son. Pty.  Ltd.
†4 <u>2</u> 2	Slashers, Straight-handled, "No. 213A" "Trojan"	,,	20	,,	0 8 9	
423	l Nii	I	Ţ	ŀ	1	l ,

### SHOVELS.

As regards items 426 and 429, the rates include Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 50% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T. T. Exchange is effective as notified by the Commonwealth Bank.

					. ,	•
.	Shovels, Steel-	ļ		•		,
†424	Long handled, round mouth, No. 3 "Titan"	Vict.	, <b>35</b> 0	each	0 3 10	Galvanised Products
†425	Long handled, square mouth, No. 3 "Titan"	,,	200	,,	0 3 10	Pty. Ltd.
†426	Long handled, round mouth, rivetted back, No. 3 "Brades" Bright Blade	U.K.	50	,,	0 6 4	Edward Duckett & Sons
†427	Short handled, square mouth, No. 8	•••	50			) Nil
†428	Short handled, square mouth, No. 6		20			<b>5</b> *****
†429	Moulders' smooth back, No. 2 "Brades"	U.K.	40	,,	0 6 103	McPherson's Pty. Ltd.
<b>†43</b> 0	Navvy, round mouth, No. 4. D. handle	Vict.	1000	,,	0 3 10	Galvanised Products
<b>†43</b> 1	"Titan" Square mouth, No. 3 D. handle "Titan"	,,	1500	,,	0 3 10	Pty. Ltd.
†432	Fuelmen's, No. 6, Coal Scoops "Star"	N.S.W. (partly)	400	,,	0 6 11	) ···
.†433	W. Savage & Co. Ltd. Coal, square-mouthed, D handled, No. 6	,, (partiy)	80	"	0 4 11	T. S. Nettlefold &
† <b>434</b>	"Star" W. Savage & Co. Ltd. Coal, square-mouthed, D handled, No. 7	,,	250	,,	0 4 1	Sons.
<b>†43</b> 5	"Star" W. Savage & Co. Ltd. Firemen's, "Star" W. Savage & Co. Ltd.	,,	800	,,	0 5 21/2	<b>ا</b> ا
*436	Steel D's (without stales) for shovel handles "Titan"	Vict.	500	,,	0 0 8	Galvanised Products Pty. Ltd.
437-438	—Nil	١.	ļ	1	1.	 

### SAWS AND HACK SAW BLADES

### 7. SPECIFICATION FOR ITEM No. 450.

The Band Saws shall be high grade and capable of cutting not less than 30 No. sections of 110 lb. Australian Standard O. 75 Carbon Steel Railway Rails.

Tests.—The Band Saws shall be subjected by the Receiving Officer to test at the Permanent Way Material Depot, Spotswood, on a Horizontal Band Sawing Machine with 23 in. dia. Wheels, giving a saw speed of 120 feet per minute.

For the purpose of this test, one length, 12 ft. 6 in., of Band Saw shall be cut from the coil of Band Saw and prepared for test by and at the cost of the Corporation.

When these tests are to be carried out the Contractor will be given 24 hours' notice of the intention, but should the Contractor or representative fail to be present, the test may be carried out in his or his representative's absence.

#### SAWS AND HACK SAW BLADES—continued.

Rejection.—In the event of the Band Saw failing to comply with the above tests conducted by the Receiving Officer, it will be liable to rejection.

8. As regards items 439-445 and 450 the rates include Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 66½% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T. T. Exchange is effective as notified by the Commonwealth Bank.

 Item No.	Description .	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
•	Blades, Hack Saw—Hack Saws Ltd. "Aven"				£ s. d.	
<b>†439</b>	$9'' \times \frac{1}{2}'' \times 23$ G., 18 points per inch	U.K.	400 doz.	dozen	0 1 41	٠ .
<b>†440</b>	10" x ½" x 23 G., 18 points per inch	,,	2500 "	,,	0 1 61	S. Robertson Pty
<del>†44</del> 1	$10'' \times \frac{1}{2}'' \times 23$ G., 22 points per inch	,,	40 ,,	,,	0 1 61	Ltd.
<b>†44</b> 2	12" x ½" x 23 G., 18 points per inch	,,	80 "	"	0 1 10	J
	Blades, Hack Saw, High Speed—				,	
†443	16" x 1½" x 16 G., Jas. Neill & Co., "Eclipse"	,,	25 "	,,	0 10 0	1
†444	Blades, Hack Saw, High Speed, for railway rails, 12" x about 16" x about 23 gauge, 14 points per inch (used with Hack Saw	,,	2200 ,,	,,	less 523% 0 4 81 less 523%	McPherson's Pty.  Ltd.
†445	Frames), Jas. Neill & Co., "Eclipse" Blades, Hack Saw, High Tungsten, for Railway Rails, 17" x 1" x 18 gauge, 10 points per inch, 18 % Tungsten, Jonas & Colver, "Novo"	, , ,	200 "	"	1 17 0	Gilbert Lodge and Co. Ltd.
İ	Saws, Band, narrow, in coils up to 108', and any gauge, as ordered—					
446	§	Vict. (Partly)	1000 feet	foot	‡0 0 <b>4</b>	)
447	<u>1</u> "	,,	450 ,,	,,	10 0 5	
448	. 3"	"	. 50 ,,	,,	‡0 0 6½	F. Leech and Co.
<b>44</b> 9 450	1"	,,	150 ,,	,,	‡0 0 8½	
	gauge, 12 teeth per inch	U.K. N.S.W.	750 , ,, .	.,,,	0 0 101	ال
451	Saws, Circular, any gauge ordered, 30" dia., "Premier Saw Cov."		12 No.	each	2 17 0	The Eagle and Globe
452	Saws, Circular, crosscut, 11 gauge, 22" dia., "Premier Saw Coy."	,,	10 "	"	1 14 0	Steel Co. Ltd.
453-4	56—Nil	ļ				•

‡ Less 5% discount.

### WIRE (IRON AND STEEL) See Appendix "B" for Specification

As regards Item No. 470, the rate includes wharfage, and in the event of the material requiring to be imported into the State of Victoria after the order has been placed, each Bill of Lading should be made out in favor of the Comptroller of Stores of the Victorian Railways. Wharfage will be arranged by the Corporation and the Delivery Order returned to the Contractor in order that delivery may be completed. The amount involved for wharfage will be deducted from the Contractor's invoice.

‡ As regards item 473, the following discounts will be allowed—

As regards Item 473, should there be any rise or fall in "Rylands" current price for wire, the Contract rate shall be increased or decreased, as the case may be, to the satisfaction of the Comptroller of Stores, and such amendments shall apply to all outstanding orders at date of variation.

3

### WIRE (IRON AND STEEL)-continued.

	tem Vo.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate,	Name of Contractor
		WIRE. Wire, Iron, Charcoal, "Ryland's," "Ly-		10	o	£ s. d.	21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	457	saght's " or " Cooke's"— 6 S.W. gauge	Vict. &	15 cwt.	cwt.	0 17 3"	η <sup>1</sup> εν ( )
	458	8 ,, ,,	N.S.W.	3.,,		0 17 9	i i i i i i i i i i i i i i i i i i i
<b>1</b>	459	10 ,, ,,	,,	2	;,,	0 18 ,9	Edward Duckett &
7	460	12 ,, ,,	· ,,	2 ;,	,, .	1 0 3	Sons
	461	14 ,, ,,	,,	1 ,,.	,, '.	0.19 11	
	462 463	16 ,, Charcoal, Galv. 8 S.W.G., for	" "	15 ,, , 60 ,,	./ 99 ./-	1 0 3	Nil',
		Signal Bonds Wire, Iron, Galvanized, "Ryland's," "Ly- saght's" or "Cooke's"—					ו פגוא ו געו
	464	6 S.W. gauge	Vict. & N.S.W.	6 ,, 1	"	0 17 3	j
	465	8 "	"	8 "	,,	0 17 3	
	466	10 ,,	, <b>,,</b>	35 "	,, '	: 0 17 8	Edward Duckett &
	467	12 ,,	,,	15 "	» ·	0 19 11	:
	468	16 ,, '.'	٠ ,,	40 ,,	"	1 4,11	J
	469	Wire, Iron, Tinman's, 6 to 14 s.w. gauge, as ordered	N.SW.	, <b>5</b> ,,	<b>"</b>	0 19 6	Melbourne Wire Works
	† <b>4</b> 70	Wire, Mild Steel, Hard, Black, 6 B.w. gauge ('203"), for spark arresters, to Specification, "Ryland's" or "Lysaght's"	1	30 tons	ton	15 ° 0 0,	Edward Duckett & Sons
	471	Wire, Steel, Galvanized, Stranded, 7/144, to specification, delivered at Batman Avenue		5 miles .		47-111	Nil
	472	Wire, Galvanized, Plain Fencing, No. 8		75 tons	'	30 mg 4 da	Nil ' '
	473	gauge, to specification Wire, Galvanized, Barbed, Fencing, to specification, 12 gauge "Titan"	Vict. (partly)	20 ,,	,,	122 10 0	The Titan Nail & Wire Pty. Ltd.
٠.	†474	Seals, Lead, Truck	Vict.	300,000	1000	0 10 0	Victorian Diemould- ers & Casters Co.
	<b>†</b> 475	Seals, Lead, Small, for sealing signal re- lays, Watt-hour meters, etc.	<b>,,</b> .	600	100	0 0 3	Pty. Ltd.
	476-	480—Nil		Ι,	.,,		l., "

‡ Less 3 % discount—10 days, 2½ % discount—30 days. ...

### BRICKS, BUILDING.

7. The Bricks shall be carefully loaded into trucks at the railway station named and consigned as ordered, and such loading shall be performed by and at the expense of the Contractor, and to the satisfaction of the Comptroller of Stores.

	The Bricks shall be well burnt, sour	nd, hard, t	ruly shaped, an	d of un	iform size an	d colour.
†481	BENDIGO AND DISTRICT. Bricks, Building, delivered into trucks at Bendigo Railway Station	Vict.	30,000	1,000	3 3 0	Bendigo Brick Co.
†482	BALLARAT DISTRICT. Bricks, Building, delivered into trucks at Selkirk's Siding, Ballarat	,,	20,000	" "	. 2 15. 0	James Salkink
†483	MARYBOROUGH DISTRICT. Bricks, Building, delivered into trucks at Selkirk's Siding, Ballarat	<b>,,</b> , .	→ <b>3000</b> ·	***	2 15 · 0	James Selkirk Pty., Ltd.
484_4	86—Nil	,	,			1 10 min 1944

### EXPLOSIVES AND AMMUNITION:

(Period-1/10/34 to 30/9/35)

The rates for Items 487, 493 and 494 include Telegraphic Transfer Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the Contract period, the difference calculated on '60 per cent. of the Contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Common-

Item No. 488, the rate is for case lots of 300 coils, if ordered in less than case lots the price will be 81d. per coil.

The rates for Items Nos. 487, 490, 491, 493 and 494 will be increased as follows in the event of delivery being required in Melbourne or the suburbs-

> Item No. 487-Lots under 500 6 per lot Lots of 500 and over ... 6 ... Items Nos. 490 and 491 6 per case ... ... Item No. 493 l per 25-lb. case 1 • - -... ... ... Item No. 494 ... 2 1 per 50-lb. case ... ... ---

Suburban deliveries can only be made to different districts on certain days, and orders must reach the Contractor at least two days before delivery date.

Country deliveries are made in cylinders per goods train, and a charge of 1s. for the use of each cylinder used will be made.

The Corporation will receive the benefit of any fall in the selling price of Explosives during the Contract period.

	The state of the s	<del></del>				
Item '	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	EXPLOSIVES.				£ s. d.	
487	Caps, No. 6, in boxes of 100, delivered f.o.r. Laverton "Nobel's"	U.K.	100 boxes	box	0 6 0	<u> </u>
488	Fuse, Single Thread, in Coils of 8 yards "Nobel's"	Vict.	3500 coils	coil.	$0 \ 0, \ 7\frac{1}{2}$	
	Fuse, Single Thread, in cases containing 4 reels of 600 yards each, "Nobels"					
489	Bickfords Bendigo Blue	".	120 cases	case of	9 7 6	
· .	* 1 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	د د.		. yaṛds	· · ·	
489a	Sump Red	**	. 60 ,,	"	9 7 6'	Dalgety & Co. Ltd
489в	White	. ,,	,30 ,,	, **.	9 7 6	
489c	" Blue	,,	30 ,,	,,	9 7 6	
490	"Gelignite", 50 per cent., delivered f.o.r. Laverton "Nobel's"	. • • • • • • • • • • • • • • • • • • •	200 cases	case of 50 lb. net	2 14 0	
491	"Gelignite", 50 per cent., delivered f.o.r.	i <b>"</b>	∶3000 . <b>,</b> ,	,,	2 14 0	
492	Laverton (State Coal Mine) "Nobel's" "Samsonite" No. 3, delivered f.o.r. Laverton (State Coal Mine) "Nobel's"	, ,,	250 "	».	2 12 0	J
493	Powder, Nitrate of Potash, Blasting, in 25 lb. cases, delivered f.o.r. Laverton "Curtiss"	U.K.	) .	case	1 6 3	
}	& Harvey "		5 tons	, , ,	. , ,	McMicking & Co
494	Powder, Nitrate of Potash, Blasting, in 50 lb. cases, delivered, f.o.r. Laverton "Curtiss & Harvey"	,,' · ·	], • .	.,,	2 11 6	
495	Powder, Blasting, Black, in 25 lb. or 50 lb. cases, as ordered, delivered f.o.r. Laverton	*****	1000 lb.	71 . 1 . 1 . 1 . 2 . 1 . 1		
†496	AMMUNITION.  Cartridges, Smokeless, 32 calibre, in boxes of 25 or 50—Auto. Pistol	,	5000·No:,	; ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1	Nil
497-4	98—Nil					.',

### PHOTOGRAPHIC MATERIALS.

7. As regards Items 501, 502, 504-506, 508-510, 513, 514, 516-519, 521-525, 527, 529-533 547, 581, 582, and 589-593, the rates include Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 50% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T. T. Exchange is effective as notified by the Commonwealth Bank.

The rates for Items Nos. 502, 513, 514, 516, 517, 519 and 533 are firm for Conversion.

As regards Items Nos. 500 and 548, 2/6 each will be charged by Contractor for Winchesters and credited to Corporation on return of Containers in good order and condition.

, _	Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	499	Albums, 12 leaf, loose leaf, 9½" x 6½"	Vict. (partly)	40	each	£ s. d. 0 2 3	Kodak (A'sia) Pty.
	500	Chemicals, Pure— Acid, Acetic (Glacial) in 80 oz. Winchesters	``	140 lb.	lb.	0 3 2	Ltd.
	501	" Citric	U.K.	3 "	,,	0 1 6	Felton, Grimwade
	502	" Pyrogallic, in paper packets	U.S.A.	25 ,,	,,	0 8 6	& Duerdins Ltd. Kodak (A'sia) Pty.
	503	Alcohol, Absolute	Vict.	12 ,,	16 fluid	0 7 9	Ltd. Felton, Grimwade
	504	Amidol	U.K.	3	lb.	0.12 0	& Duerdins Ltd.  H. B. Selby & Co.
	505	Ammonium Chloride	,,	3 ,,	,,	0 · 0 - 9.	Pty. Ltd.
	506	" Iodide	,,	ι "	,,	1 13 0	Felton, Grimwade
	507	Amylum, Pulverised, in paper packets	Vict.	25 ,,	<b>,,</b>	0 0 4	& Duerdins Ltd. Kodak (A'sia) Pty.
	508	Cadmium, Bromide	U.K.	3 "	,,	0 8 9	Ltd. Felton, Grimwade
	509	" Iodide i	,,	3 ,,	19	1 15 · 0	& Duerdins Ltd H. B. Selby & Co.
	510	Chrome, Alum	,,,	60 ,,	,,	.0 0 .6	Pty. Ltd. Felton, Grimwade
	511	Collodion, 2 per cent., enamel, in tins of 28 lbs.		84 ,,		•••	& Duerdins Ltd. Nil
	512	Copper, Sulphate of	N.S.W.	450 ,,	,	0 0 3	<u> </u>
	513	Dextrine, White	Holland	200 . ,,	,,	0 0 5	Felton, Grimwade
	514	Dextrine, Brown	U.S.A.	40 "	,,	0 0 5	& Duerdins Ltd.
	515	Ether, Sulphuric	N.S.W.	15 ,,	∵,,	0 2 8	Janar III
	516	Hydroquinone, in paper packets	France ·	20 ,,		0 7 9	Kodak (A'sia) Pty. Ltd.
	517	Iodine (Resublimed)	Canada	3 ,,	,,	0 12 6	Felton, Grimwade
	518	Mercury, Bichloride	U.K.	12. ,	,,,	0 6 9	S a Duerdins Ltd.
	519	Metol, in paper packets	France	10 ,,	,,	0 10 6	Kodak (A'sia) Pty.
	520	Opaque "Eastman's," No. 1 size	Vict.	40 tubes	tube	0 1 2	Ltd.
	521	Potassium, Bichromate	U.K.	260 lb.	·· lb.	0 0 10	)
	522	" Bromide	,,	18 "	,,	0 1 7	Felton Criment
	523	,, Ferricyanide, in paper packets	. "	50 ,,	· "	0 · 2 8 ·	Felton, Grimwade & Duerdins Ltd.
	524	,, Metabisulphite, in paper packets	,,	18 ,,	<b>,,</b>	0 0 111	
	525	Powder, Flash, Magnesium Powder	,,	3 ,,	"	0 18 0	Kodak (A'sia) Pty. Ltd.
	526	Soda, Hyposulphite	Vict.	15 cwt.	cwt.	1 5 0	Felton, Grimwade
	527	" Sulphide	U.K.	3 lb.	lb.	0 1 0	& Duerdins Ltd. H. B. Selby & Co. Ltd.

### PHOTOGRAPHIC MATERIALS—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Chemicals, Pure—continued.				£ s. d.	
528	Soda, Sulphite (Anhydrous)	Vict.	220 1Ь.	lь.	0 0 43	Felton, Grimwade
529	" Carbonate (Anhydrous), in paper packets	U.K.	175 ,,	,,	0 0 23	& Duerdins Ltd. Kodak (A'sia) Pty.
530	Oil of Cloves	. ,,	1 ,,	,,	0 8 6	Ltd. Felton, Grimwade
531	Film— Cine, in 100 ft. rolls, "Kodak," Panchro.	<b>,</b> ,	10 rolls	roll	1 2 10	& Duerdins Ltd.
<b>53</b> 2	Cine, Panchromatic, in 100 ft. rolls	, ,,	15 "	,,	1 6 0	
533	"Kodak" Super Sens Cine, Kodacolor, in 50 ft. rolls, "Kodak,"	U.S.A.	3 ,,	,,	1 2 0	
534	Cut Super Speed, 4½" x 3½", "Kodak"	Vict.	l gross	gross	1 7 0	ł
535	" " " 5″ x 4″	(Partly)	1 ,,	,,	2 2 9	
536	.,, ,, 6½" x 4½"	,,	1 ,,	. "	2 16 3	
537	" " " 9 c.m. x 12 c.m	,,	1 .,,	,,	1 18 3	
538	Panchromatic, "Kodak Super Speed,"	,,	1 "	. ,,	1 11 6	Kodak (A'sia) Pty.
539	6½" x 4¾"	,,	ι "	,,	3 3 0	Ltd.
<b>54</b> 0	9 c.m. x 12 c.m	,,	1 ,,	,,	2 0 6	
541	Spools, Photographic Roll—"Kodak" 21 x 31, No. 120, 8 exposures	,,	650 rolls	roll	0 0 111	
542	$2\frac{1}{2}$ " x $4\frac{1}{4}$ ", No. 116, 8 exposures	"	600 ,,	"	$0 \ 1 \ 1\frac{1}{2}$	
543	3½" x 4½", Verichrome, 6 exposures	,,	40 ,,	i. "	0 1 93	
544	$3\frac{1}{4}$ " x $5\frac{1}{2}$ ", No. 122, 6 exposures	<b>,,</b> ···	200 ,,	. "	0. 1 81	
. 545	5" x 4", Verichrome, 6 exposures	<b>"</b>	. 40 ,,	,,	0 2 11	
546	Gelatine, Sheet		60 lb.			Ņil.
547	Globes, Flash Light "Sashalite"	U.Ķ.	100	each	0 2 .0	
548	Glazing Solution, concentrated 1 to 80, in winchesters, "Kodak"	Vict. (Partly)	· 12 quarts	80 ozs.	1 3 7	Kodak (A'sia) Pty. Ltd.
<b>∫</b> 549	Glue, Liquid, in 1 gal. tins, "Davis"	N.S.W.	2 gals.	gal.	0 10 0	
550	" Liquid, in 1 lb. tins, "Davis"	,,	140 tins	doz. }	$\begin{bmatrix} 1 & 4 & 0 \\ less 20 \% \end{bmatrix}$	Davis Gelatine Pty. Ltd.
†551	" Crystal, or any suitable alternative		25 cwt.			Nil
552	Measures, Glass— 2 oz	N.S.W.	2	each	0 0 111	
553	8 oz	,,	18	,,	0 1 6	
554	16 oz	,,	18	,,	0 2 71	•
555	Mounting Tissue, Dry— 24" x 20"	Vict.	3 reams	ream	4 5 0	Kodak (A'sia) Pty. Ltd.
†556	Mounts, 10 sheet, 31" x 25" Board, Rough edge, Grade BX, Brown, Grey, White or	(Partly)	1000	100	4 5 0	
†557	Cream, as ordered Mounts, 4 sheet, 30" x 24", cream, white, or brown, as ordered	,,	175	100	2 15 0	

## PHOTOGRAPHIC MATERIAL'S—continued.

		PHOTOGRAPHIC	MATE	KIALS—cont	inuea.			
_	Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	, Rate	Name of Contr	actor
_	558	Paper, Bromide, Single Weight, any sur- face ordered—"Kodak" 25' long x 25" wide	Vict.	5 rolls	rojj	£ s. d.	100 2 19 0 100 2 19	• •
	559	25' long x 30" wide	(partly)	2 "	. "	0 2 9	-11 (	,
7	560	5½"' x 3½"		900 sheets	1000	25 .6	h, .	, se i e
7	561	$6\frac{1}{2}$ " 'x $4\frac{3}{4}$ " '		16,000 ,,		3.13 6		j s
	562	8½" x 6½"	"	12,000 ,,	. ,,	6.13 0		
	563	10" x 8"	**	9000 ,,		9 11 '0	. ;	. 14
	564	12½" x 10½"	, ,	5 gross	gross	2 6 0		
	565	15½" x 12½"	. ; ( <b>?)</b> * 4	, e		3 .7 11	• • "	
	566	18" x 16"	. ,,	9		5 12 0		
	567	20" * 16"	. "	1	,,,	5 12 0		l³g.
	568	25" x 14½"	",		,,,	6.13 0		8.2
	569	28" x 16"	"	, "	"	8 12 , 0		
	008	Paper Bromide, Double Weight, any sur-	' ''	1 "	"		1. 6.7 5	
		face ordered—"Kodak"	! ., !					T11 🕖
	570	25' long x 25" wide	i " "	5 rolls	roll	1 2 3		
	571	25' long x 30" wide	÷ " "	8 ,,	,,	1 6 3	<b>!</b> } .	¥.62
	572	6½" x 4½"	,, "	l gross	gross	0.12 6		GE 19
	1573	8½" x 6½"	,,	3, 4, 7	.;**	1 2, 5	Kodak (A'sia Ltd.	a) Pty.
	574	10" x 8"	,,	3 ,,	,,	1 12 3		
	575	12½" x 10½"	" "	3 ,,	,,	2.12 10		•
	576	15½" x 12½"	,,	ı··· 3 "	"	3.17 9		,
	577	18" x 16"	,,	3 ,,	"	6 8 10	· ,	.' '
	578	20" x 16"	,,	3 ,,	",	6.810		
	579	25" x 14½"	<b>,</b> ,,	6 ,,	,,	7 13 0		
	580	28" x 16"	,, "	3 ,,	,,	9 17 9		_
		Paper Bromide, Double Weight-	"	"				ъ 
Ê	581	Wellington Cream, Crayon, 12½" x 10½"	U.K."	1 ,,	. ,,	3 15 0		2111
	582	"" 15½" x 12½"	,,	1 ,,	,,	5 8 9		···
	583	Portrait, 8½" x 6½", double weight "Kodak"	1 [	11.	,,,	1 6 11	i	
	584	, 10" * 8" , , , , , , , , , , , , , , , , , ,	(partly)	3. "	1.	1 19 2		11.7
	585	, 12½"'x 10½" ,, ,, ,,		3 ,,	1.	3 '5 1		111
	586			3 ,,	1.	4 18 9	,	4,
	587	" 23″ x 17″ " " " " " " " " " " " " " " " " " " "			,,	10 0 2	40	11
	588	Paper Bromide, Post Caros, "Kodak"	,,	18 "	,,	0 9 10	] . · · · i	

## PHOTOGRAPHIC MATERIALS—continued:

Item No.	Description ;	Country of . Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Plates, orthochromatic backed "Imperial Eclipse"			is .	£ s. d.	
589	4½" x 3½",,	U.K.	l gross	gross	2 0 10	)
590	5" x 4",	,,	. l "	٠,	3 4 10	<b>*</b>
591	6½" x 4½"	,,	10 "	. "	4 1 7	1
592	81 x 61	,,	1 "	. "	7 8 10	
593	12 c.m. x <sub>1</sub> 9 c.m	,,	. 1 "	,,	2 10 5	
594	Plates, Lantern, "Austral," "Kodak" 31," x 31,"	Vict. (partly)	1 "	. "	1 2 6	
	Plates, Photographic, dry, orthochromatic backed, "Austral,"—				, ,	
595	<u> </u>	,,	20 doz.	doz.	0 4 10	
596	4	".,	35 "	"	0 · 8 7 ·	
	Plates, Process, "Austral,"		· .		1	
. 597	6½" x 4¾"	· "	20 ,,	"	0 5 3	
598	$8\frac{1}{2}$ " x $6\frac{1}{2}$ " $\frac{1}{12}$ $\frac{1}{$	, <b>,</b> ,	40 ,,	.,,,	0.10 2	
599	12" x 10"	,,	3 ,	. "	.1 4 4	· ; e.
600	15" x 12",,	'	. 8 "	,,	2 3 1	·
ч.	Plates, Process, Panchromatic, "Austral," "Kodak"—;		; 			Kodak (A'sia) Pty. Ltd.
601	8½" x 6½" ,	,,	8 "	,,	0 10 2	
602	12" x 10"	1)	. 8 ,,	,,	1 4 4	
603	15" x 12"	,, ]	8 ,,	. ,,	2 3, 1	
	Plates, Panchromatic, Super Speed backed, "Kodak"— 1,					
604	6½" x 4¾"	,,	75 "	,,	0 6 0	
605	8½" x 6½"	,,	10 "	,,	0 10 11	,
606	9 cm. x 12 cm	,,	20 ,,	`,,	0 3 9	•
607	5" x 4"		20' ,,	·′,, .	0 4 2	
	Plates, Hyper-Speed, backed-" Kodak"					
608	4½" x 3½"	* 17 -	10 ,,	, ,,	0 2 11	
609	9 cm. x 12 cm	"	. 20 ,,	. "	0 3 9	
610	5" x ;4"	"	20 ,,	,,,	0 4 .2	· i
611	6½" x 4¾"	".	30 ,,	., "	0 6 0	J
612-	316—Nil , 154 (1)	<u>,</u>		, l		

#### TUBES AND FITTINGS.

- 7. The estimated requirements are based on the full list price.
- 8. The Contractor will require to have all Galvanized Tubes supplied under Items marked (M) tested by the Melbourne and Metropolitan Board of Works, and such Tubes shall bear that Board's test marks before delivery.
- 9. All Tubes and Fittings shall be of standard weight and all threads shall be cleanly cut and in accordance with the British Standard Specification of Pipe Threads for W.I. Pipes. (No. 21–1909).
- 10. Galvanizing shall be uniform inside and outside and shall be free from bubbles, scabs, etc. Sherardized Tubes or Fittings will not be accepted

As regards Item 621B, orders are to be placed with McPherson Pty. Ltd. under Item 621bb until Stewarts & Lloyds are able to supply satisfactory tubes of Australian manufacture. Orders should then be placed with Stewarts & Lloyds.

As regards the contract with Stewarts & Lloyds, it is expected that Australian Tubes, etc., will be delivered under Items 617B, 619B, 621B, 623B and 625B, about January 1st, 1935.

As regards the contract with McPherson Pty. Ltd., the rates for Tubes, black, galvanised and steam and Bends, Long Screws and Springs, are firm until 31/3/35 and shall thereafter be subject to amendment should there be any variation in the present prices of gas supplied by the Australian Gas Light Co.; Arbitration Awards affecting Tulloch's employes; shipping freight from Sydney to Melbourne; and steel supplied by Australian Iron and Steel Ltd. It shall be the Contractor's obligation within the meaning of Clause 21, to advise the Comptroller of Stores, from time to time, of any variation. The Corporation reserves the right to cancel any item for which an increased rate is asked.

The rates for Fittings are firm.

\*The discount of 40% for Item 623D is off the list price for 2" Steam Tubing?"

#### Name of Manufacturers-

Items Nos. 617, 619, 621, 623, 623D—Stewarts & Lloyds, Glasgow.

Items Nos. 617B, 619B, 621B, 623B, 625B—Stewarts & Lloyds, Glasgow, or Stewarts & Lloyds, N.S.W., at Contractor's option.

Items Nos. 617A, 617C, 618, 618A, 619A, 619C, 620, 620A, 621A, 621BB, 621C, 621D, 622, 622A, 623A, 623C to 625A, 625C to 626A, 627, 629, 631, 633, 635, 637—Tullochs Phoenix Ironworks Ltd., N.S.W. Items Nos. 628, 630, 632, 634, 636, 638—Henderson's Federal Spring Works, Victoria. Items Nos. 639 to 644—E.W. Fittings Ltd., N.S.W.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate	Rate	Name of Contractor
	:		Anana	- 11 ( )	Percentage; off the "Price Lists" submitted; with the tender and which shall be	
617.	Tubes, Wrought fron, of approved thick ness, in trade lengths, as ordered—Black, \( \frac{1}{2}'' \) and \( \frac{1}{2}'' \) Buttwelded	U.K.	) £	,, 4	firm during the period of the Contract.  less 50%	Stewarts & Lloyds
617a	Black, §"	N.S.W.	180		57%	(Australia) Ltd. McPherson's Pty. Ltd
617в	Black, ½" to 2" Buttwelded Black, 2½" and 3"	U.K. or N.S.W. N.S.W.	,11	,	65}% 57%	Stewarts & Lloyds (Australia) Ltd.,
617c 618	Black, 3½" and 4"		5 5	·. ·.	57%	McPherson's Pty.
618A 619	Black, $5''$ and $6''$ Galv., $\frac{1}{8}''$ and $\frac{1}{4}''$ Buttwelded	U.K.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		57%. 40%	Stewarts & Lloyds (Australia) Ltd.
619à	Galv., 🖁	'n.s.พ.	1100	. , .	461%	McPherson's Pty.
619 <sub>B</sub>	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	U.K. or N.S.W. N.S.W.		. 1	56½% ~ 46½%,,	Stewarts & Lloyds (Australia) Ltd.
620	Galv., $2\frac{1}{2}$ " and $3$ "  Galv., $3\frac{1}{2}$ " and $4$ "	14,15,44.	٠٠٠ ال	12 or.	461%	McPherson's Pty.
620a 621	Galv., 5" and 6" (M) Galv., \( \frac{1}{8} \)" and \( \frac{1}{4} \)" Buttwelded	U.K.	400	11: 30	461% 35%	Stewarts & Lloyds
621A	(M) Galv., 3"	n.s.w.	1	1	45%	(Australia) Ltd. McPherson's Pty. Ltd.
621в	, , ,	U.K. oʻr N.S.W.			511%	Stewarts & Lloyds (Austrália) Ltd.
621вв	(M) Galv., ½" to 2";	N.S.W.	]	- i'-	481%	McPherson's Pty.

1

## TUBES AND FITTINGS .-- continued.

	· or	1000		1 .	<u> </u>	<u> </u>
Item No.	Description	Country of Manuf're	Estimated Requirements	Rate	Rate	Name of Contractor
•	en side of the second		,	,	Percentage off the "Price Lists" submitted with the tender and	
	Tubes, Wrought Iron, of approved thick- ness, in trade lengths, as ordered—		ſ		the tender and which shall be firm during the period of the Contract.	
621c 622	ness, in trade lengths, as ordered— (M) Galv., 2½" and 3" (M) Galv., 3½" and 4"	N.S.W.	1750		$45\%$ $42\frac{1}{2}\%$	McPherson's Pty Ltd.
622a 623	(M) Galv.; 5" and 6"'.  Steam, screwed and socketed, \frac{1}{2}" and \frac{1}{2}"  Buttwelded.	u.K.		•	$\frac{42\frac{1}{2}\%}{37\frac{1}{2}\%}$	Stewarts & Lloyds
623A	Steam, screwed and socketed, $\frac{3}{8}''$		2400	٠.,	461%	(Australia) Ltd. McPherson's Pty. Ltd.
623в	Steam, screwed and socketed, ½" to 2" Buttwelded	U.K. or N.S.W.	,		56½%	Stewarts and Lloyds (Australia) Ltd.
623c	Steam, screwed and socketed, $2\frac{1}{2}$ and $3''$	N.S.W.	J <sub>.</sub>	,	461%	McPherson's Pty.
623р	Steam, screwed and socketed, 13"	U.K.	8000 ft.		*.40%	Stewarts & Lloyds (Australia) Ltd.
624	Steam, screwed and socketed, 3½" and 4"	N.S.W:	} 175	•	461%	)
624A	Steam, screwed and socketed, 5" and 6" Bends, Long Screws and Springs, Wrought Iron, of approved thickness—	, ,,	J . !	-	461%	McPherson's Pty.
625	Galv., 3" and 1"	"	<u>)</u>	ť	$22\frac{1}{2}\%$	
625A	Galv., 3" at the most of some that the	· , , , , , , ,	$ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $		$37\frac{1}{2}\%$	J
625в	Galv., $\frac{1}{2}$ " to $2$ "	U.K. or N.S.W.			50%	Stewarts & Lloyds (Australia) Ltd.
625c	Galv., 2½" and 3"	N.S.W.	J		37½%	) :
626	Galv., 3½" and 4"	,,	} 40	-	22½%	McPherson's Pty.
626a	Galv., 5" and 6" Fittings, Wrought Iron, of approved thick-	<b>'</b> ••	J <sup>.</sup>		$22\frac{1}{2}\%$	Ltd.
627	Black, up to 2" diameter, excluding Flanges	,,	} 80		3311%	J., ,,
628	", ", Flanges only	Vict.	J	. ' ,	20%	Stewarts & Lloyds (Australia) Ltd.
629	Black, 2½" and up to 6" diameter, excluding Flanges	N.S.W.	]		30%	McPherson's Pty.
630	Black, 2½" and up to 6" diameter, Flanges only	Vict.	\rightarrow 15   \rightarrow .	. 4	45%	Stewarts & Lloyds (Australia) Ltd.
631 ·	Galvanized, up to 2" diameter, excluding Flanges	N.S.W	Ĭ		$22\frac{1}{2}\%$	McPherson's Pty.
632	Galvanized, up to 2" diameter, Flanges only		} 175 ∫	.	10%	Stewarts & Lloyds (Australia) Ltd.
633	Galvanized, $2\frac{1}{2}$ " and up to 6" diameter, ex-	,	. 60		22½%	McPherson's Pty.
634'', '	Galvanized, $2\frac{1}{2}$ and up to 6" diameter, Flanges only	4	} [80		40%	Stewarts & Lloyds (Australia) Ltd.
63511	Steam, up to 2" diameter, excluding Flanges		500		$22\frac{1}{2}\%$	McPherson's Pty.
636 of 1	", Flanges only		J		10%	Stewarts & Lloyds (Australia) Ltd.
637	Steam, 2½" and up to 6" diameter, excluding Flanges		} 5		22½%	McPherson's Pty.
638	Steam, 2½" and up to 6" diameter, Flanges only	Vict.	)	.	40%	
	Fittings, Malleable Iron, of approved thick- ness—				. "	'"   "":
639 640	Black, up to 2" diameter Black, 2½" and up to 6" diameter	N.S.W.	50			Stewarts & Lloyds
641	Galvanized, up to 2" diameter Galvanized, 2½" and up to 6" diameter	. "	450	. ,	55% 50%	(Australia) Ltd.
643 644 645-64	Steam, up to 2" diameter Steam, $2\frac{1}{2}$ " and up to 6" diameter 8—Nil	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	$\cdots \frac{2}{2}$		60%	], ;

## SCREWS AND SPLIT PINS.

- 7. The estimated requirements are based on the full list price.
- 8. SPECIFICATION FOR BLACK HEXAGON HEAD SET SCREWS—Items 671-693.

Quality of Material.—The Black Hexagon Head Set Screws shall be manufactured from steel which is in accordance with Australian Standard Specification A1/1931 for "A" grade steel.

Particulars.—The widths across flats of heads of Set Screws up to and including ½" shall be to British Standard "Fine" dimensions and of Set Screws §" diameter and over shall be to Whitworth Standard dimensions, provided that the width across the flats of the heads is one size lower. Set Screws with heads of a size midway between two distinct sizes will not be accepted.

The Set Screws shall be screwed to within a distance from the head not exceeding 3 times the pitch for nominal sizes of  $\frac{1}{2}$  in. and under, and not exceeding twice the pitch for sizes above  $\frac{1}{2}$  in.

The Screw threads shall be in accordance with the requirements of Table 2 for Bolts, British Standard Specification No. 92/1919.

Quality of Material.—The Bright Hexagon Set Screws shall be manufactured from Steel Bars, the quality of which is in accordance with Grade 2 of B.S.S. No. 32/1927 (chemical analysis excepted).

Particulars.—The Bright Hexagon Head Set Screws shall be in accordance with the requirements of British Standard Specification No. 190/1924.

Items 714-719-Price List of "Nettleford's" Split Pins.

Per Gross. 4" 5"  $5\frac{1}{2}''$ 3"  $3\frac{1}{2}$ 41 31' LENGTH. 31 11/ 13' 21'  $2\frac{1}{2}''$  $2\frac{3}{4}'$ s. d. s. d s. d. s. d s. d.s. d.s. d. s. d. Diameter. s. d ... ... ... ... ... ... . . . ... ... ... ... ... . . . 1 10 2 2 • • • ... :.. ... ... ... 2 3 ... ... ... ... ... ... ... ... 3 6 1 ... ... ... 3 4 0 ... 02 ... ... 5 8 ... ... ... 66 16 8 9 10 6|80 ... .... • • • 0 16 17 4 13 0 13 8 15 19 8 10 4 11 0 11 8|12... ... 20 l 17 9 33 20 9|27

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
<b>4</b> 9 650	Screws, any sizes ordered, "Nettlefold's" Wood, Brass, countersunk head— Up to and including 12 gauge 13 to 18 gauge Wood, Brass, round head—	Vict.	£ 550 80	,	Percentage off the Price List submitted with the tender and which shall be firm during the period of Contract. List Price	C. S. Green & Son
651 652 653	Up to and including 12 gauge 13 to 18 gauge Wood, Brass, raised head	,,	150 5 15		+ "7½%	Edward Duckett & Sons

## SCREWS AND SPLIT PINS-continued.

		Country		1	<u> </u>	1
Item No.	Description	of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
					£ s. d.	•
			•		Percentage off	
			,		the Price List	
	Screws, any sizes ordered, "Nettlefold's" —continued.				with the tender and which shall be firm during the period of	
654	Wood, Iron, countersunk head	Vict.	£ 1600		Contract. — 27½%	9
655	Wood, Iron, round head, japanned	]				C. S. Green & Son
656	Stove, Brass, round, countersunk or cheese	,,	20		- 10%	)
	head as ordered, any trade size ordered up to $\frac{5}{16}''$	, ,	175 gross	,	_ 50%	Edward Duckett
657	Stove, Iron, round or countersunk head, as ordered, any trade sizes ordered, up to §"	,,	1700 ,,		_ 50%	& Sons
658	Stove, Iron, round head, 1" x ½"		5 ,,	<b></b>		Nil
659	Stove, Iron, countersunk head, 1" x ½" "McPherson's"	Vict.	5 ,,	gross	0 12 6	1
660 661	$,, ,, ,, ,, ,, \frac{1}{4} \frac{1}{2} \times \frac{1}{2}$	,,	. 5 ,,	,,	0 13 0	
	", ", ", ", ", ", ", ", ", ", ", ", ", "	",	5 ,,	,,	0 13 6	
662	"McPherson's"					
663	2½" x ½"	"	l cwt. l "	cwt.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	McPherson's Pty.
664 665	3" x ½" 5" x ¾"	. ,,	1 ,,	,,	2 9 0	
666 667	Any lengths ordered x \(\frac{3}{8}''\)  Sizes other than Items 662 to 666 inclusive, \(\frac{1}{2}''\), \(\frac{3}{8}''\) or \(\frac{3}{4}''\) diameter, as ordered	, ,, ,, ,,	10 ,, 8 ,, 12 ,,	"	1 13 0 3 6 0 2 9 0	
	Screws, Coach, Square head, Patent pointed					
668	5" x \frac{3}{4}" x l \frac{3}{16}" head "McPhers n's"	,,	130 cwt.	cwt.	1 7 0	h
669	Any lengths ordered by 3" diameter	,,	1 ,,	,,	3 0 0	
670	Sizes ½", ½", ¾" and ½" diameter, other than Item 668, as ordered	,,	100 ,,	,,	2 2 0	
	Screws, Set, Black, Hex. Head-					
671	"McPherson's"	,,	12 gross	gross	0 6 5	
672	l" x ½"	",	18 ,,	,,	0 5 5	
673	11" x 16"	,,	3 ,,	,,	0 5 9	[]
674 675	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	,,	10 ,,	,,	0 6 2	
676	1" - 3"	"	2 ,,	.,	0 6 3	]] .
677	11" " 3"	,,	50 ,, 6 ,,	,,	0 6 6	11 .
678	13" 5 3"	,,,	1 "	,,	$\begin{bmatrix} 0 & 7 & 4 \\ 0 & 7 & 11 \end{bmatrix}$	
679	2" x 3"	,,,	., "	٠,	0 8 6	]
680	2½" x ½"	,,	0 "	,,	0 9 6	]] 2
681	$3^{*}$ $\times$ $3^{*}$	,,	l ''	,,,	0 10 6	
682	1" x ½"	,,	1.30	,,	0 8 8	McPherson's
683	1}" x ½"	,,	1 1 "	,,	0 9 2	Pty. Ltd.
684	$l_{\frac{1}{2}}'' \times \frac{1}{2}''$	, ,,	4 ,,	,,	0 9 8	,
685	] , 1¾" x ¾"	, ,,	i "	,,	0 10 9	
686	2" x ½"	,,	4	",	0 11 6	11
687	$2\frac{1}{2}$ " x $\frac{1}{2}$ "	,,	2 ,,	,,	0 13 0	11
688	13" x 5"	,,	3 .,	,,	1 0 0	Π ,
689	2" x \$"	,,	1 ,,	.,	1 1 6	11
690	2½" x ½"	,,	1 ,	,,	1 3 0	
691 692	2" x ¾" 2½" x ¾"	,,	2 .,	"	1 11 0	
693	1 98" 1"	,,		,,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	11
050	1 27 X 1	۰,,	2 ,,	,,,	2 18 0	ال

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#### SCREWS AND SPLIT PINS-continued.

Item No.		Description	n.		Country of Manuf're	Estima Require		Rate per		Rate		Name of Contractor
	head and	thread "I	Head, Whitw	orth		<del></del>			£		d.	
694	1"	x 3,"	•••	•••	N.S.W.	2 g	ross	gross		13	8	
695 696	1½" 1¾"	x 3" x 3"	•••	•••	,,	2 2	17	*1		15 17	9	
697	2"	^ д х §″	•••	•••	,,	$\frac{5}{2}$	**	"		18	9	
698	, 1"	x 1/2"	***		,,	3	,,	,,	1	0	8	
699	l 1 / "	x ½"	•••		,,	2	,,	,,	1	1	5	
700	11/2"	$x \frac{1}{2}$	•••		,,	2	**	,,	1	4	0	
701 .	$\frac{1\frac{3}{4}''}{2''}$	x ½"	***	••	,,	$\frac{1}{1}$	13	,,	1	6 8	2 3	
702	2	x ½"	***	• • •	23	1	*1	٠,	1	0	٦	
703	21"	x ½*		•	113	2	**	,,	1	14	6	•
704	3″	x ½"	,	•	,,	2	*1	۰,	1	17	8	
705	2"	x 5°			>1	1	1)	,,	2	3	5	
706	217	x 5″			,,	1		,,	2	8	0	McPherson's Pty. Ltd
707	1 <b>1</b> ″	x 3"			"	1	,,	,,	2	9	2	1 37. 200
708	1½"	x 3".	••• ,	•••	,,	1	,,	,,	2	9	2	
709	2"	x ¾"			,,	1	,,	,,	2	15	5	
710	. 21″	x 3"	•••		"	1	"	,	2	18	6	
711	3."	x 3"			,,	1	,,	,,	3	7	0	
712	2"	x 7/8	•••		,,	1	**	.,	3	11	2	
713	21/	x 1"	•••		. "	1	,,	,,,	5	15	0	J
		64 NT-44F-5-13	ı, , ,,		-				which	itted tende h shi durir d of	off List with r and ill be ng the con-	
714	Pins, Split, Any sizes or	dered up to a	nd including $\frac{3}{16}$	" dia.	Vict.	£100	-	3;	6	7½%	-	j
715	,, ,,	" over	3" to 1" dia.	•••	,,	£120		,,	İ	7 1/2 %		Edward Duckett
716		ordered over	₹" dia.	•••	,,	£150		,,	1	7 1/2 %		& Sons
717	6" x ½"		•••		,,	15 gr	ross	,,		71%		J
718 719—	7" x ½" 723—Nil			•••	"	5	**	,,	$\mathcal{L}^2$	7 60%	, 9)	A. E. & F. Tam

#### NAILS, ETC.

- 7. As regards Items Nos. 755 to 766—the Nails shall be free from excessive machine feed marks, and shall be such that the nail when clamped at the mark in a vyce, shall withstand being bent at right angles without cracking or breaking.
  - ‡ Rates for Items 747-749, 755-768, are subject to the following discounts—
    - (1) A cash discount not exceeding 3%, if cash be received within 10 days of date of invoice.
    - (2) A cash discount not exceeding 2½%, if cash be received up to the end of the month following purchase.
    - (3) A cash discount not exceeding 1½%, may be allowed if cash be received within 2 calendar months of the date of the first monthly statement.

As regards Items 747-749, 755-768, if ordered in lots of less than 1 cwt. of any one size, rate shall be 2/- per cwt. extra

As regards Items 755-768, delivery shall be given direct to the Spotswood General Storehouse, if so ordered.

NAILS, ETC.

Item No.	. Description		Country of Manuf're.	Estimated Requirements	Rate per	Rate	Name of Contractor
, <del>5724</del>	Brads, Finishing, Cut, 5"		Victoria	200 lb.	lb.	£ s. d.	John R. Bell & Co.
725	,, ,, ,, 3"		,,	50 ,,	,,	0 0 5	John K. Ben & Go.
<b>†</b> 726	Chaplets, Box, 3"	••• •	U.K.	20 gross	gross	0 10 0	McPherson's Pty.
$\int_{1}^{727}$	,, long 8" x ½"		,,	. 5 ,,	,,	0 14 6	Ltd. H. A. Barnard Pty
728	,, ,, 8" x \frac{3}{8}"	•••	,,	5 ,,	,,		Ltd. 7
	Keys, Steel, Gib head—						
729	3" x 1" x 4"	•••	Victoria	5 doz.	doz.	0 4 6	h
730	½" x ¾" x 4"	•••	,,	10 ,,	,,	0 7 3	
731	3″ x ½″ x 5″ ′	•••	,,	3 ,,	,,	0 13 9	
732 ·	5" x 18" x 5"	•••	,,	5 ,,	,,	0 11 9	H. A. Barnard Pty.
733	3" x 5" x 6"	•••	,,	. 3 ,,	,,	1 1 0	
734	₹" x 5" x 6"	•••	,,	3 ,,	,,	1 10 0	
	Nails, Clout, Wire—						
<b>†</b> 735	∦" x 12 g. briight		,,	1000 lb.	lb.	0 0 3	) · · ·
736	3" x 12 g. galvanized		,,	400 ,,	,,	0 0 33	
737	1". x 12 g. · ,,	•••	,,,	400 ,,	,,	0 0 33	]
† {   738	l½" x 12 g. · "		,,, ,,	480 ,,	,,	0 0 33	
739	1½" x 12 g. ,,	•••	,, `	250 ,,	,,	0 0 33	
†740	Nails, Dogspikes, $2\frac{1}{2}$ " x pattern, sheared type	5 " 'Clyde	"	25 tons	ton	28 9 9	
;-	Nails, Horse-shoe, full cou wells"	nters '' Cap	c-				
<b>74</b> 1	No. 5	•••	U.K.	40 lb.	cwt.	4 18 0	
742	,, 6		,,	300 ,,	,,,	4 6 10	McPherson's Pty.
743	,, 9	•••	,,,	400 ,,	,,	3 11 5	Ltd.
744	,, 10	🤥	,,	200 ,,	,,	3 11 5	
745	,, 12		,,	100 ,,	,,	3 11 5	
<b>†74</b> 6	Nails, Malleable Casting, 4	<i>"</i>	.,	200 ,,	,,	4 7 6	
(747	Nails, Roofing, Galvanized, in 1 cwt. cases— 2" x 10 gauge	Spring-heade	d, Victoria	5 cwt.		‡2 1 0	
748	2½" x 10 gauge			00	"	†2 1 0 †2 1 0	A. E. & F. Tame
749	2½" x 10 gauge		,,	2	,,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	A. D. & F. Taine
(1=0	Nails, Steel, Black, Corruga	ited—	"	25 ,,	,,	12 1 0	ر. ا
750	A"		,	30		1 4 0.	:
	Large 1 to 10			30	. "	1 4 0	John R. Bell & Co.
751	1 9 '	···	,,	60 ,, nt10 days.	٠,,	[·1 4 0·	עו

NAILS, ETC.—continued.

			J, E1C.	-continued.	,	, <u> </u>	·
Item No.	Description		Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Nails, Steel, Black, Corrugate	ed—continued		_		£ s. d.	
752	6"		Victoria	200 cwt.	cwt.	1 4 0	j
† { 753	7"		,,	200 ,,	,,,	1 4 0	John R. Bell & Co.
.754	8"		,,	5 ,,	;,	1 4 0	}
	Nails, Wire, Diamond-head	ed, any lengtl	ns			٠.	•
755	ordered— No. 4 S.W.G.		, ,,	10 ,,	,,	10 19 0	]
756	,, 5 ,,		,,	15 "	,,	‡0 19.0	
757	,, 6 ,,		,,	200 ,,	,,	‡0 19 0	
758	,, 7 ,,		., ,,	80 ,,	,,	‡0 19 0	
759	,, 8 ,,		,,	100 ,,	,,	‡0 19 0	
760	,, 9 ,,		,,	140 ,,	,,,	‡0 19 6	• , -
761	,, 10 ,,	•••	., ,, .	175 ,,	. ,,	‡1 0 0	A To So E Tours
762	,, 11 ,,	•••	,,	40 ,,	,,	‡1 1 0	A. E. & F. Tame
<b>7</b> 63	,, 12 ,,	•	,,	140 ,,	,,	‡1 1 6	:
764	,, 13 ,,		,,	40 "	,,	‡1 2 6	
765	,, 14 ,,	•••	,,	25 ,,	. ,,	‡1 4 6	
766	,, 15 ,,	•••	.,	10 ,,	,,	‡1 7 0	
(767	Nails, Wire, Flat Head, 1"	x 15 S.W. g	ı. ,, .	5 ,,	,,	‡1 7 0	
$\dagger \left\{ _{768} \right.$	,, ,, ,, 2" x	12 S.W. ga.	.,	10 "	, "	‡1 1 6	}
<b>769</b>	Pins, Gimp, japanned, ½"	••	,,	550 lb.	lb.	0 0 7	British United Sho
† ₹ 770	Pins, Gimp, japanned, 5"	•••	,,	100 "	. 31	0 0 7	Machinery Co. o Aust. Pty. Ltd
771	Pins, Gimp, japanned, 3/4"	•••	,,	100 ,	,,	0 0 7	Aust. Tty. Bid
	Pins, Panel, Countersunk				ļ	  -	,
†772	½" x 20 ga.	•••	, ,,	· 100 ,,	,,	0 0 7	A. E. & F. Tame
†773	§" x 19 ga.	•••	,,	.30 ,,	,,	0 0 6	British United Shoe Machinery Co. of
	F# 20 -			100 ,,		0 0 7	Aust. Pty. Ltd. A. E. & F. Tame
†774 1557	§" x 20 ga.		"	200	,,	0 0 5	
†775	¾″ x 18 ga.	••	,,,	200 ,,	. "		Machinery Co. of Aust. Pty. Ltd.
†776	¾″ x 20 ga.	•••	,, ,	. 50 ,,	,,	0 0 7	A. E. & F. Tame
<del>†</del> 777	1" x 17 ga	•••	,, ,	400 ,,	,,	0 0 4	British United Shoe Machinery Co. of
4770	1" x 20 ga.		,,	10 ,,		0 0 7	Aust. Pty. Ltd. A. E. & F. Tame
†778 †779	1 x 20 ga.	•••		700 ,,	cwt.	1 17 0	Edward Duckett &
-	1½ x 10 ga.			200 ,,	lb.	0 0 3	Sons John R. Bell & Co.
†780 +781	12 x 15 ga.	•••	··· ,,	200 ,,	cwt.	1 17 0	Edward Duckett &
†781 +782	1 -	•••	"	900	lb.		Sons John R. Bell & Co.
<b>†</b> 782	2" x 14 ga.	Less 3	,, % discour	1 200 ,, nt—10 days.	, 10.	, 5 0 <b>0</b>	. , , , , , , , , , , , , , , , , , , ,

NAILS, ETC .- continued.

	1			, B10.	- Continued	· ·	<del></del>				
Item No.	Descript	ion		Country of Manuf're	Estimate Requireme		Rate per	Ra	te		Name of Contractor
	Pins, Tapered—				٠			£	s. (	d.	
783	3" x No. 3	•••		U.K.	2 de	oz.	doz.	0	1 4	ı l	· ·
784	4" x No. 4			,,	5	11	,,	0	1 10	,	
785	4" x No. 6	•••		,	10	,,	,,	0	2 4	1	McPherson's Pty.
786	4" x No. 7	•••		,,	3	,,	,,	0	2 8	3	
787	Rivets, Copper, with b		d	Victoria	50 l	b.	lb.	0	2 4	.   1	Edward Duckett &
788	∛ x 6, 7, 8 or 1	0 g., as ordered	d ∴.	,	250	,,	,,	0	2 3	3	Sons Briscoe & Co. Ltd.
789	$\frac{1}{2}$ " x 6, 7, 8 or 1			,,	=0	,,	,,,	0	2 2	2	1
790	5" x 6, 7 or 8 g	., as ordered		,,	95	,,	,,	0	2 5	2	Edward Duckett & Sons
791	3" x 6, 7 or 8 g	., as ordered	•••	,,	70	,,	.,,	0	2 5	2	า ว
792	₹" x 6 g.	•••		,,	15	,,	,,,	0	2 5	2	Briscoe & Co. Ltd.
793	1" x 6, 7 or 8 g	., as ordered		,,,	35	,,	,,	0	2 5	2	1
	Rivets, Copper, without	it burrs									Edward Duckett &
794	3" x 8 or 10 ga.,	, as ordered	•••	,,	70	,,	,,	0	1 10	0	Sons
795	$\frac{1}{2}$ " x 6 or 7 ga.,	as ordered		,,	. 20	,,	,,,	0	1 8	8	7
796	1½" x 4 ga.	•••		,,	. 20	,,	٠. ,,	0	1 8	8	Briscoe & Co. Ltd.
797	Rivets, Copper, without $\frac{1}{2}$ " x $\frac{3}{16}$ " diameter	burrs, round he	ad,	,,	15	,, .	. ,,	0	2 1	1	J .
	Rivets, Tinman's, tinne	ed						•			
<b>∫</b> 798	No. 6'	•••		"	10	"	cwt.	3 1	1 (	6	)
799	" 8	•••	·	,,	10	"	,,	3	8 (	6	
800	" 9	•••		"	40	,,	,,	3	8 6	6	
801	,, 10	•••	•••	,,	25	,,	,,	3	7 (	6	
802	, , 11	•••	ž.,	<b>,,</b> .	140	",	,,	3	7 (	6	
1 803	,, 12	. •••	•••	», ·	.40	,,	,,	3	4 (	0	McPherson's Pty.
804	,, 13	***	•••	23	10	,,	,,	3	2 (	6	Ltd.
805	,, 14	•••	•••	,,	140	,,	,,	3	2 (	6	
806	,, 15			. ,,		"	,,			6	<b>1</b>
807	,, 16	. •••		,,		"	. ,,	1		0	
808	,, 18	•••	•••	,,		,,	,,	2 1			
(809	,, 20		•••	"		,,	,,	2 1		0	J 
<del>†</del> 810	Staples, Wire, Galv., 1		•••	,,	2000	**	lb.	0	0 5	2 <del>1</del>	Thomas Mitchell & Co. Pty. Ltd.
†811	Tacks, Copper, Wire—	·		"	, , ,	,,	,,	ó	1 :	9	7
†812	<u> </u>	***		,,	600	,,	,,	0	1 9	9	Edward Duckett &
†813	7.	•••		,,	60	,,	. "	0	1 9	9	Sons

#### NAILS, ETC .- continued.

Item No.	. Description			Country of Manuf're	Estima Requiren		Rate per	:	Rate		Name of Contractor.
								£	s.	d.	
814	Tacks, Cut, blued, fine-			Victoria	10	lb.	cwt.	2	17	0	Edward Duckett &
$\daggerigg\{_{815}$	. 3″	•••		<b>"</b>	400	,,	,,	2	11	0	J 50113
<b>€</b> †816	½" "Platypus"	•••		,,	1600	,,	lb.	0	0	. 4 5	) ,
۲° 817	§" " Dandy "			,,	600	,,	,,	0	0	$5\frac{1}{8}$	British United Shoe Machinery Co. of
† { 818	3″ " Dandy "			,,	40	,,	,,	0	0	5	Aust. Pty. Ltd.
819	₹" " Dandy "			,,	40	**	,,	0	0	4 7 8	J
† {820	Tacks, Cut, tinned, fine—	•••		,,	180	,,	cwt.	3		0	Edward Duckett &
$^{T} \Big( 821$	3″ '	***		,,	800	,,	,,	3	6	0	Sons
(822	Tacks, Copper, Cut—		•••	,,	100	1)	,lb.	0	. 1	61	British United Shoe
† 823	3." 4.	•••	•	"	1000	,,	,,	0	1	6	
824 825	Tacks, for Gerrard Wire Ty  30—Nil	 ing Machin	 ie	Victoria (partly)	600 80,0	00"	100	0		$\frac{6}{2}$	Gerrard Wire Tying Machines Co. Pty. Ltd.

## HELIOGRAPHIC PROCESS MATERIALS AND CARBONS FOR ARC LAMPS

As regards items 835, 836, and 841 to 843, the rates include Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 50% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T. T. Exchange is effective as notified by the Commonwealth Bank.

As regards items 831 to 834 and 837 to 840 clause 7 of the conditions of contract provides for any adjustment in Customs Duty being reckoned on 50% of the contract rates and not 70%.

	HELIOGRAPHIC PROCESS MATERIALS.		-						,
, 7831	Linen, Ferro Prussiate— 30" wide x 20 yards long	•••	N.S.W.	30 rolls	roll	‡2	3	1	-  } 
T \ 832	40'' wide x 20 yards long	••-	"	<b>3</b> 0 ·,,	. "	‡2	14	9	Max Wurcker (1930)
(83 <b>3</b>	Linen, Heliographic, Gallic Acid Bath— 30" wide x 20 yards long		,,	. 25 ,,	,,	‡2	19	0	Ltd.
$\dagger \left\{ _{834} ight.$	40" wide x 20 yards long	• • • • •	,,	<sup>.</sup> 20 ,	,,	‡3	15	0	
<b>\$</b>	Paper, Ferro Prussiate, base—" Smooth Finish"	L	;		',				
* S35	30"/31½" wide	•••	Ų.K.	l ton	ton	66	0	0	Wiggins Teape &     Alex. Pirie (Export)
836	40" wide	••	,,	1 ,,	,,	66	0	0	Ltd.
(837	Paper, Heliographic, Gallic Acid Bath— 30"/31½" wide x 20 yards long	-	N.S.W.	120 rolls	roll	†0	13	6	h : :
$\dagger \begin{cases} 838 \end{cases}$	40" wide x 20 yards long		partly ,,	120 ,,	,,	‡0	17	0	Max Wurcker (1930)
839	Paper, Sepia, thin, negative— 30" wide x 20 yards long		,,	5 ,,	,,	‡1	6	6	Ltd.
T \ 840	40" wide x 20 yards long ‡ Less 2½ per	cen		5 ,, t payment 30 c	iays.	†1	13	0	U

## HELIOGRAPHIC PROCESS MATERIALS AND CARBONS FOR ARC LAMPS—continued.

Item No.	α Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	CARBONS FOR ARC LAMPS.					422
<b>†84</b> 1	12" long x 13 m.m. dia. solid	U.K.	450	100	2 5 0	<b>1</b>
†842	12" long x 13 m.m. dia. cored, white flame	,,, .,	20	100	3 10 0	British General Electric Co. Ltd.
†843	12" long x 18 m.m. dia. cored, white flame	,,	20	100	4 10 : 0	) · · · · · · · · · · · · · · · · · · ·
844-8	45 Nil.				٠,.	

#### . STAMPS, ETC.

The measurement of all Stamps shall be the "Die" Measurement, and the maximum length of any letter shall not exceed  $\frac{1}{2}$  inch.

Note:—For Items Nos. 853 and 859 the rate is at per half inch. The measurement to be paid for shall be the diameter, or the length, as the case may be, of the face of the Stamp.

	Faces, Rubber, for Stamps, lettered-					
*846	" V.R., cancelled "	Vict.	150	each	0 0 1	1
*847	" Week-end "	,,	50	,	0 0 1	
*848	Goods Clean Receipt	,,	50	,,	0 0 2	H. C. Horton
*849	Goods more or less Receipt	,,	80	٠,	0 0 2	J :
	Refacing Rubber Stamps, including supply of new pad, all kinds of stamps and type—					<u>.</u>
850	Oblong, up to 2" in length, as ordered	,,	240 lines	line	,0 0.8	C. G. Roeszler &
851	Oblong, over 2" in length	<b>,,</b> ,	80 ins. of line	inch of line or part	0 0 4	Son Pty. Ltd.
852	Circular or oval, up to 1½" in length,	, ,,	. 5	thereof each	0 1 8	
853	Circular or oval, over $1\frac{1}{2}$ " in length, as ordered	,,	20 ins.	inch or part thereof	0 '0 5	E. L. Morton
†85 <b>4</b>	Stamps, Dating— No. $1\frac{1}{2}$	U.K.	500	each	$\begin{bmatrix} 0 & 0 & 7\frac{1}{6} \end{bmatrix}$	Sands & Mac-
<b>†</b> 855	No. 2	,,	100	,,	$0.010^{11}_{12}$	Dougall Pty Ltd.
4	Stamps, Rubber, oblong, wooden handle, with wooden back, all kinds of stamps and type—				, , , , , , , , , , , , , , , , , , ,	o!
_∫856	Up to 2", in length, as ordered	Vict.	800 lines	line	0 0 6	h
1 \ 857	Over 2" in length, as ordered	,,	2400 ins. of line	inch of line or part	0  0  2	E. L. Morton
<i>:</i>	Stamps, Rubber, circular or oval, as ordered, wooden handle with wooden back, all kinds of stamps and type—			thereof	et in de la	
858	Up to $1\frac{1}{2}$ " in length, as ordered	,,	60	each	0 1 6	C. G. Roeszler &
859	Over 1½" in length, as ordered '	,,	50 ins	inch or part thereof	0 0 5	Son Pty Ltd.
860	Pads, Self-inking, purple or black, as ordered, No. 1 4½" x 2¾" "Lightning"	N.S.W.	1000	each	0 0 7	Excelsior Supply Co. Ltd.
861-	862—Nil				·	lander en en en en en en en en en en en en en

BOOKS, ETC.

As regards Items Nos. 866 to 869, the paper used in the Copying Books shall be "Averil Star" brand.

Item No.	Description	Country of Manuf're.	Estimated Requirements	Rate per	F	Rate	•	Name of Contractor
					£	s.	d.	
†863	Binders, Instantaneous— Foolscap	N.S.W. (partly)	200	each	0	2	3	Arthur J. Wallace
<b>†864</b>	Large Quarto, 11¼" x 9"	. "	4	,,	0	2	1	Similar J. Wanace
<b>7</b> †865	Small Quarto	U.K.	4	,,	0	1	11	Spicers & Detmold
*866	Books— Copying, Crown Folio, 500 leaves not paged, and no index, ½ basil, "Averil Star"		30	,,	0	8	0	Sands & McDougall Pty. Ltd.
*867	Copying, Crown Folio, 750 leaves paged,  ½ basil, with index, "Averil Star"	,,	25	,,	0	16	6	] Ty. Eld.
*868	Copying, Large Post Folio, 750 leaves	,,	35	,,	1	1	0	Spicers & Detmold Ltd.
*869	paged, ½ basil, with index, "Averil Star" Copying, Large Post Folio, 750 leaves not paged, no index, ½ basil, "Averil Star"	"	50	,,	0	14	8	Sands & McDougall Pty. Ltd.
*870	Foolscap, ruled, 4 cloth, 2 quire	,,	2000	,,	0	0	101	
871	Foolscap, ruled faint, ½ basil, 2 quire	,,	200	,,	0		10	]
* \{ 872 \ 873	Foolscap, ruled faint, ½ basil, 3 quire Foolscap, ruled faint, ½ basil, 4 quire	"	120 175	.**	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$		10 10	
*874	Foolscap, ruled faint, single or double cash, paged or folioed, as ordered, ½ basil	"	15	"	0	7	6	Spicers & Detmold Ltd.
*875	4 quire Manifold, 5" x 8", 100 leaves, in duplicate,	33	6000	doz.	0	8	4	W. J. Carr Pty. Ltd.
****	two sheets of single-sided carbon paper to be supplied with each book	,	20			•	^	
*876	Manifold, 143 x 9", 100 leaves in triplicate, two page index in front, three sheets single-sided carbon paper to be supplied	,,	60	,,	2	2	. 0	Spicers & Detmold
*87.7	with each book Manifold, 143" x.9", 100 leaves in duplicate two page index in front, two sheets single- sided carbon paper to be supplied with	,,	36	,,	1	13	0	}
†878	each book Manifold "Plic" Quarto, 100 leaves in	,,	120	,,	1	4	0	Lamson Paragon Ltd.
*879	duplicate Memo., Foolscap 8vo, 8 sheet, American	,,	15,000	,,	0	I	11	R. B. Shankly Pty.
*880	cloth Memo., Post 8vo, 18 sheet, full rexine	1,	800	,,	0	6	2	Redmond Inglis & Co. Pty. Ltd.
*881	Memo. Post 8vo, 18 sheet, full rexine in- dexed throughout	"	.400	.,	0	8	4	Alex. Cowan & Sons
†882	Shorthand, note	,,	900	,,	0	2	5	R. B. Shankly Pty.
*883	Indices, Foolscap— Marble Cover, one leaf to a letter	,,	100	each	0	0	5	Ltd.
*884	½ basil, cloth sides turned in, on paper to sample. All tabs reinforced with linen as per contract sample, one leaf to a letter	,,	25	,,	0	4	6	Spicers & Detmold Ltd.
*885	½ basil, cloth sides turned in, on paper to sample. All tabs reinforced with linen as	,,	100	,,	0	4	9	J Liu.
*886	per contract sample, two leaves to a letter the basil, cloth sides turned in, on paper to sample. All tabs reinforced with linen	, ,	120	,,	0	5	6	Alex. Cowan & Sons Ltd.
	as contract sample, four leaves to a letter			,	Percen Publish List where remain ring the	hich	ahall du-	
887	Diaries, " Australian "	Vict.	£70		ring the of this Less			Sands & McDougall
†888 889–89	Sheets, Oil, hand made, Large Post Folio 2—Nil	U.K.	3 doz. sheets	doz.	0	1	6	Pty. Ltd. Spicers & Detmold Ltd.

#### BROWN PAPER, TICKET BOARDS, CARDS, ETC.

- 7. The Brown Paper under Item No. 896 shall be supplied flat or folded as may be ordered.
- 8. The Manila Luggage Checks shall be supplied in tiers of four, measuring  $4\frac{3}{4}$ " x  $7\frac{1}{2}$ " over all, slitted to within  $\frac{1}{4}$ " of top and bottom of each check, perforated across  $2\frac{1}{4}$ " from top, and  $\frac{1}{4}$ " from bottom and packed in strawboard boxes each containing 1,000 checks.
- 9. The Royal Pasteboards shall be supplied in bundles of 1 gross each, and a label shall be attached to each bundle indicating the thickness of the Boards contained therein.
- 10. The Royal Surface Boards shall be supplied in bundles of 1 gross each, and a label shall be attached to each bundle indicating the color of the Boards contained therein.
  - 11. The Manila Ticket Boards shall be supplied in bundles of 50 each.
- 12. The Wood Pulp Boards or Straw Board (Items 915 and 916) shall caliper between 070 and 075.
- 13. As regards quality and finish, the Ticket Boards supplied shall be in strict accordance with the contract samples.

Ticket Boards shall caliper not less than '029 nor more than '032.

As regards color, the Ticket Boards supplied shall be in strict accordance with the contract samples, and each delivery shall be marked with the Item No. to which it pertains.

The Ticket Boards shall be supplied trimmed to the exact size ordered, and shall be delivered in wrapped packages of one-half hundredweight each, exclusive of wrapper, and be free from moisture.

As regards items 908-911, 918 and 919, the rates include Telegraphic Transfer Exchange between Australia and London at  $25\frac{1}{2}\%$ , and if this rate of Exchange be varied during the contract period, the difference calculated on 60% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

The whole of the "Powers" cards required during the contract period shall be ordered from Kalamazoo (Aust.) Ltd., and that portion of Clause 11 of the conditions of contract under which the Corporation or the Contractor has the right to give to the other of them notice of termination when the estimated requirements of any item have been ordered, has been deleted from the contract with Kalamazoo (Aust.) Ltd.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
†893	Checks, Manila, Luggage, yellow	Vict.	250,000	1000	0 2 10	Spicers & Detmold
<b>†</b> 894	", " white	(partly) Vict.	40,000	,, '	0 2 71	
*895	", 6½" x 2½", printed one side (four stereos supplied), two perforations. Washered. In gangs of four. Boxed in 1000's	Vict. (partly)	800,000		0 3 4	Spicers & Detmold Ltd.
†896	Paper, Brown, M.F. Finish— Double Imperial, Kraft, 56 lb.	<b>"</b>	15 tons	ton '	29 ·3 4	J
†897	Kraft, 18" wide, 28 lb. to roll	,, ·	10 rolls	٠ ,,	29 3 4	
<del>†</del> 898	Kraft, in rolls, 30" wide, 80 lb, Double Imperial Substance	,,	250 "	,,,	29 3 4	
<del>1</del> 899	Quad. Imperial, Kraft, 58" x 45", 136 lb	,,	10 reams	ream	1 15 5	Australian Paper
†900	M. F. Kraft, 17" x 27", 80 lb	,,	18 "	,,,	1 0 10	Manufacturers Ltd.
†901	" Double Imperial, 120 lb."	,,	3 ,,	,,,	1 11 3	3
†902	Pasteboards, Surface Boards, etc.— Royal Pasteboards, 20" x 25", 3 sheet, 21 lb.	,,	700 gross	gross	0 7 101	
†903	,, 20" x 25", 6 sheet, 48 lb.	,,	100 ,,	,,,	1 1. 0.	).
†904	Royal Surface Board, 20" x 25"—Weight to be specified— Green, coated two sides	Vict.	i5 "	, :	1 2 6	) ,
†905	Red " "	,,	10 ,,	,,,	1 2 6	Canida & MaDanat
†906	Yellow " "	   " <sub>•,</sub>	15 ,,	   ''	1 2 6	Sands & McDougal Pty. Ltd.
<b>†</b> 907	Blue, coated one side only		15 ,,	,,	1 0 6	y



BROWN PAPER, TICKET BOARDS, CARDS, Etc.—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate	Rate	Name of Contractor
140.	•	Manu 16	**ed arrements	per		
	System Boards 251" v 201" "Clare"			,	£ s. d.	
†908	System Boards, 25½" x 30½", "Glory"— Any Standard colors ordered, 140 lb	U.K.	70 reams	ream	4 13 0	1
†909	" " " 110 lb	,,	40 "	"	3 13 0	TIVILLE OF
#910	,, ,, ,, 170 lb	,,	30 ,,	,,	5 13 0	Wiggins Teape & Alex. Pirie
7911	" " " 220 lb	"	3 "	,,	7 6 0	(Exp.) Ltd.
†912	Strawboard— 25" x 30", 12 oz., Plain	Vict.	8 cwt.	cwt.	0 15 6	) ]
†913	25" x 30", 24 oz., Plain	(partly)	25 ,,	"	0 17 6	A
†914	25" x 30", 32 oz., Plain	"	6 ,,	,,	0 17 6	Australian Paper Manufacturers Ltd.
†915	Strawboard, double white lined, 16 oz. Substance, 34" x 44"	,,	30 ,,	,,,	1 1 6	
†916	Pulp Board— Wood Pulp Board, 34" x 44", 50's	,	20 cwt.		•••	Nil.
†917	Royal Pulp Board, four sheet, assorted light tints.	Vict. (partly)	700 gross	gross	0 8 6	Australian Paper
†918	Boards, Cloth lined, 20" x 25", any stan- dard colors ordered.	U.K.	3 ,,	".	2 17 0	Manufacturers Ltd.  Wiggins Teape
†919	Board, Postcard, coated two sided, $22\frac{1}{2}$ " x $28\frac{1}{2}$ ". 49 lb. per gross	,,	15 ,,	,,	2 3 0	& Alex Pirie (Export) Ltd.
†920	Ticket Boards, 23" x 25"—  Buff	Vict. (partly)	2 tons	ton	32 0 0	]
†921	Blue	"	1 "	,,	32 0 0	
†922	Cerise	,,	15 ,,	,,	32 0 0	
†923	Green	,,	3 ,,	,,	32 0 0	Australian Paper
†924	White	,,	70 ,,	,,	32 0 0	Manufacturers Ltd.
†925	Yellow	,,	1 ,,	,,	32 0 0	
*926	Manila Ticket Board, $22\frac{1}{2}$ " x $30\frac{1}{4}$ "	,,	12,000 sheets	100 sheets	}4 10 0	J
*927	Labels, Linen, Large, No. 5	Vict.	3000	1000	0 9 3	Sands & McDougall
*928	", ", Small, 2½" x 2"	,,,	5000	,,	0 5 7	Pty. Ltd.
†929	,, Manila, No. 5, in gangs of four and boxed	Vict. (partly)	800,000	,,	0 2 37	
†930	Labels, Manila, No. 6, in gangs of four and boxed	(partiy)	380,000	,,	0 2 5%	Spicers & Detmold   Pty. Ltd.
931	Labels, Manila, 7" x 3½", in gangs of four and boxed	,,	150,000	,, `	0 3 77	] 
†932	Cards, for "Powers' Machines— Code No. 4	N.S.W.	40,000	,,	0 7 9	<u> </u>
†933	,, 9	,,	20,000	33	0 7 9	
†934	,, 34	,,	1,750,000	,,	0 7 9	   } Kalamazoo
†9 <b>3</b> 5	. ,, 50	,,	2,400,000	٠,	0 7 9	(Aust.) Ltd.
†936	" 52	,,	40,000	**	0 7 9	
†937	54	, <b>,</b> ,	80,000	;,	0 7 9	IJ

#### BROWN PAPER, TICKET BOARDS, CARDS, ETC .- continued.

Item No.	Description					Rate Rate					Name of Contractor	
	Cards, for "Po	wers '' M	achines – cont	inued.				£	s.	d.	-	
†938	Code	55	•••	•••	N.S.W.	140,000	1000	0	7	9	h	<i>.</i> 
†939	,,	59	•••		**	200,000	٠,	0	7	9		77.1
<b>†94</b> 0	,,	60	•••	•••	,,	120,000	,,	0	7	9	H	Kalamazoo (Aust.) Ltd.
941	N. e. i.				,,		,,	0	7	9		
942	Extra f	or colore	d cards		· **	:	,,	0	1	0	IJ	
943	Nil.							'				

## SANITARY PAPER (TOILET).

7. The Corporation undertakes to order up to the quantities shown opposite to Items 944 and 945.

†944	Paper, Sanitary, Toilet—  Ordinary, in 10-oz. rolls, branded "Victorian Railways" on each sheet, perforated, approx. 570 sheets per roll, 4\frac{1}{8}" x 5"	Vict. partly	2500 dozen rolls	doz. rolls	0	2	3	Spicers & Ltd.	Detmold
†945 †946	Oval, in cases of 100 rolls, branded "Victorian Railways" on each sheet, sheets perforated and rolls slotted, 8-oz. rolls, 440 sheets per roll  8-lb. Sulphite, in packets, for "Safix"	N.S.W. partly	175 cases 400 doz.	case			3	British Paper Ltd.	Anstru!! Co. Pty
	refills, 950 sheets per packet	٠,,	pkts.	pkts.	0	5	10	IJ	•

#### TYPEWRITING AND DUPLICATING MATERIALS

- 7. The spools under Items 950-958 shall fit the machine for which the ribbon is ordered.
- 8. As regards item 960, the rate includes Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 40% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T. T. Exchange is effective as notified by the Commonwealth Bank.
- .  $\ddagger$  As regards items 947 & 948, the rates are subject to a discount of  $2\frac{1}{2}\%$  for payment within 30 days.
- \* As regards items 962 & 963, the rates are for lots of 1000. If ordered in larger quantities the rates are—

					Item 963	Item 962
In lo	ts of	5000		•••	£6 2 6	£1 5 0
,,	,,	10000		•••	£6 0 0	£1 2 6
,,	,,	20000	•••	•••	£5 15 0	£1 0 0
,,	,,	50000	& up	•••	£5 10 0	£0 17 6

As regards items 960a and 966a, trial orders are to be placed on Ramsay & Hall Pty. Ltd., and further allotment will depend on result.

†947	Erasers, Circular	•••	· Vict. (partly)	250 doz.		l '			Damas Class Cs
†948	,, Octagonal (Special use only)	•••	,,	5 ,,	,,	‡ o	ì	111	J Ltd.
†949	Ink, Black, Duplicating, 1st quality	•••	N.S.W.	700 lb.	lb.	0	2	6	F. T. Wimble & Co.

Less  $2\frac{1}{2}\%$ —payment 30 days.

#### TYPEWRITING AND DUPLICATING MATERIALS—continued.

Item No.	Description .	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Ribbons, Typewriter, "Hall Mark"—				£, s. d.	
†950	Copying, any colors ordered, suitable for Barlock, Royal, and Imperial Machine, fitted with new spools		20 doz.	doz.	0 7 5½	
†951	Copying, any colors ordered, suitable for Barlock, Royal, and Imperial Machines, fitted with 2nd hand spools	,,		,,	$0 7 5\frac{1}{2}$	
† †952	Copying, any colors ordered, suitable for all other machines, fitted with new spools	,,	40	,,	$0 7 5\frac{1}{2}$	
†953	Copying, any colors ordered, suitable for all other machines, fitted with 2nd hand spools		40 ,,	,,	0 7 51	Ramsay & Hall Pty. Ltd.
<b>†</b> 954	Non-copying Record, Black, fitted with new spools	,,	50	,,	$0 7 5\frac{1}{2}$	Tty. Dia.
, <b>†</b> 955	Non-copying Record, Black, fitted with 2nd hand spools	,,	30 ,,	,,	$0 7 5\frac{1}{2}$	• .
<b>†</b> 956	Copying, narrow, bi-colored, any colors ordered, suitable for Barlock, Royal and			,,	0 7 $5\frac{1}{2}$	
†957	Imperial machines, fitted with new spools Copying, narrow, bi-colored, any colors ordered, suitable for Barlock, Royal and Imperial machines, fitted with 2nd hand spools	,,	2 "	,,	0 7 5½	
*958	Ribbons, Typewriter, Purple, for "Ditto" machines	N.S.W.	5	each	0 8 6	Pencarbon Co. (Aust.) Ltd.
†959	Pads, Ink for E.D. Mimeograph		300 .			. Nil
†960	Stencils, Foolscap Folio, Indestructible	U.K.	]	quire	0 5 0	John Withers & Son
†960 <sub>A</sub>	in boxes of 5 quires "Swallow" Stencils, Foolscap Folio, Indestructible "Dri-Sten"	Vict. (partly)	} 1200 qrs.	,,	0 5 0	Pty. Ltd. Ramsay & Hall Pty. Ltd.
†961	", ", Quarto ",	•••	100 ,,			Nil
	Sundries for Model F2B Addressograph					•
*962	Plates, in lots of 1000	Vict.	25,000	1000	*1 7 6	Spicers & Detmold
*963	(see note) Frames, in lots of 1000 (see note)	"	5000	,,	*6 5 0	} ^Ltd.
*964	Ribbons, Purple		20			Nil
†965	Tapes, Ticket Dating, Black Record, 11/8" x 21' long	Vict. (partly)	200 doz.	doz.	0 11 0	Ramsay & Hall Pty. Ltd.
†966	Varnish, Obliterating, for dry stencils, in	Vict.	<u> </u>	bottle	0 0 9	John Withers & Son
‡966a	l oz. bots.  Varnish, Obliterating, for dry stencils, in 1 oz. bottles.	Vict. (partly)	}200 bots.	,,	0 0 9	Pty. Ltd. Ramsay & Hall Pty. Ltd.
†967	Varnish, Obliterating, for wet stencils, in 1\frac{1}{4} oz. bots.		20 ,,			Nil
968	Nil .		İ			

## PRINTERS' INK, ETC.

- 7. Ink to be supplied under Item No. 969 shall not contain any Resin Oil Varnish.
- 8. The Ink to be supplied under Items Nos. 969 to 978 shall be high grade quality and dense colors.
- 9. The Ink to be supplied under Items Nos. 979 to 989 shall be true as regards quality and color to sample exhibited by corporation.

## PRINTERS' INK, ETC .- continued.

Item No.	Description		Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
†969	Ink, Printing, Letterpress— Black		Vict.	1400 lb.	lb.	£ s. d.	S. Cooke Pty. Ltd.
1970	Blue, Celestial, Ultramarine	•••	N.S.W.	110 ,,	"	0 4 6	F. T. Wimble & C
†971	Persian Orange		Vict.	30 ,,	,,	0 5 0	Ltd.
†972	Bronze Blue, in 1-lb. tins		,,	10 ,,	,,	0 3 0	S. Cooke Pty. Ltd.
†973	Green, Veredene		N.S.W.	70 ,,	"	0 3 9	F. T. Wimble & Co.
†974	Red		,,	500 ,,	,,	0 3 9	Ltd.
†975	Violet		Vict.	15 "	,,	0 5 0	R. Collie & Co. Pty
†976	Violet, Copying		(partly) N.S.W.	3 ,,	,,	0 7 6	Ltd. F. T. Wimble & Co.
†977	Quick drying, 1st quality Half- Dense Black	tone	, .		,,	0 3 0	Ltd.
†977A	Quick-drying, 1st quality Half- Dense Black, "No. 1 Process"		Vict. (partly)	200 ,,	"	0 5 0	
†978 ·	Quick Drying, 1st quality, Half- Mid Photo Brown Red shade; s ple "A"		**	80 .,	35	0 4 9	R. Collie & Co. Pty
	Ink, Flat, Smooth, Ticket Printing, Le	tter-					
*979	press— Blue		,,	12 ,,	٠,,	0 2 4	}
*980	Blue, Pale		Vict.	90 ,,	,,	0. 2 0	S. Cooke Pty. Ltd.
*981	Brown		,,	25 ,,	,,	0 2 4	R. Collie & Co. Pty
*982	Buff		,,	12 ,,	,,	0 2 0	Ltd. S. Cooke Pty. Ltd.
*983	Cerise		Vict. (partly)	700 ,,	,,	0 2 3	R. Collie & Co. Pty.
*984	Green		Vict.	650 ,,	,,	0 2 0	Ltd. S. Cooke Pty. Ltd.
*985	Maroon		Vict.	12 "	,,	0 2 4	R. Collie & Co. Pty.
*986	Orange		(partly) Vict.	650 ,,	,,	0 2 2	Ltd.
*987	Red		,,	100 ,,	<b>,,</b>	0 2 6	S. Cooke Pty. Ltd.
*988	Violet	•••	Vict.	80 ,,	,,	$0 \cdot 2  4$	R. Collie & Co. Pty.
*989	Yellow		(partly) Vict.	. 18 ,,	· ,,	0 2 0	Ltd. S. Cooke Pty. Ltd.
†990	Glue, Rubberised or Flexible		,,	300 ,,	,,	0 0 9	l)
†991	Dryers, Cobalt Elastic		Vict. (partly)	25 ,,	,,	0 3 6	
†992	Transparent Tint Preparation		(partiy)	30 ,,	,,	0 2 0	R. Collie & Co.
†993	Solution, Lye, in 1-gallon returnable	jars	Vict.	12 gals.	gal.	0 3 6	Lia.
†994	Solution, Roller Wash, in 4-gallon tir	ıs	Vict. (partly)	360 ,,	,,	0 2 5	]
†995 †996	Varnish, Letterpress, Lowering Wire Stapling, 4 lb. to coil, 22 gaug	 e	Vict. Vict. (partly)	24 ,, 168 lb.	lb.	$\begin{array}{cccc} 0 & 6 & 6 \\ 0 & 0 & 7 \end{array}$	S. Cooke Pty. I
†997 †998	,, ,, 19 gaug		(partry)	168 ,, 336	,,	0 0 6	Moreland Wire Co.
*999	Paper—Manilla—Oiled, Cylinder, 45" in rolls of approximately 100 lbs.		U.S.A.	5 rolls	100 в.		S. Cooke Pty. Ltd.
1000	Page Cord, in 4-oz. balls	•••	Vict.	12 doz.	doz.	1 0 0	F. T. Wimble & C

## CONDUIT PIPE AND FITTINGS.

7. All Conduit Pipes and Fittings shall comply with B.E.S.A. Specification No. 31/1923.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Pipe, Conduit, Plain, enamelled— "Amalgamated Conduits, Ltd."				£ s. d.	
[100]	§*	Vict.	18,000 feet	100 ſt.	0 8 4	1
1002	· • · · ·	,,	1500 "	. 15	0 13 1	Warburton, Franki
1003	1"	,,	1500 ,,	,,	1 0 6	(Melb.) Ltd.
1004		,,,	600 ,,	. ",	1 19 0	J •
	Pipe, Conduit, Screwed, enamelled—"Amalgamated Conduits, Ltd."	,				
(1005	§*	,,	7500 ,,	,,,	0 16 8	}
† { 1006	¥"	,,	9000 .,	۰,	1 0 2	Falk, Stadelmann Co. Ltd.
1007	1* ,	,,	1600 ,,	۱,	1 13 0	IJ
<b></b>	1 <u>1</u> "	,,	<b>45</b> 00 ,.	٠,,	2 11 7	1
† 1009	1½"	,,,	150 ,,	,,	4 1 9	Associated General   Electric Industries
1010	2″	33	400 ,,	,,,	6 7 3	Ltd.
†1011	Pipe, Conduit, Welded, unenamelled, §" "Amalgamated Conduits, Ltd."	,,,	450 ,,		0 12 3	British Genera Electric Co. Ltd.
	Fittings, Conduit, Plain-					
†1012	Boxes, § straight through, "F.G.S."	,,	60	each	0 0 8	William Adams & Co
†1013	Elbows, §", "Ring Grip."	,, ,	150 doz	doz	0 2 2	Ltd. Brooks, Robinson,
. [1014	Elbows, ¾", "Ring Grip"	,,	40 ,,	,,	0 3 3	Pty. Ltd. William Adams &
†{ 1018	Elbows, 1", "Ring Grip"	,,	20 ,,	,,	0 7 6	Co. Ltd.
†1016	Elbows, 1½",	U.K.	10 ,,	,,	0 10 5	The Lawrence & Han-
†1017	Sleeves, §", "Ring Grip"	Vict.	40 ,,	,,	0 1 11	son Elec. Co. Ltd. Remingtons Pty.
†1018	Tees, §", "Ring Grip"	,,	70 ,,	,,	0 2 11	Ltd.
	Fittings, Conduit, Screwed-					
(1019	Bends, 3", internal threads "Thomp-	N.S.W.	10 ,,	,,	0 5 11	]
† { 1020	Bends, 1", son,	,,,	25 ,,	,,	0 9 0	John Danks & Son Pty. Ltd.
1023	Bends, 1½" ,, Scrougall"	,,	15 ,,	,,	0 13 10	] .
<b>(</b> †1022	Boxes, 👫, 3-way	Vict.	25 ,,	,,	0 7 0	Noyes Bros. (Melb.)
†1023	Bushes, reducing, 3/2" to 5/8"	U.K.	· 20 ,,	,,	0 1 5	Pty. Ltd. The Lawrence & Han-
1024	Elbows, § 7	N.S.W.	40 ,, .	. "	0.2.7	son Elec. Co. Ltd.
1025	Elbows, 3"   "Thompson, Scrougall"	,,	50 ,,	,,	0 3 2	A. H. Gibson (Elec-
† {		,,	20 . ,,	,,	0 5 5	trical) Co. Pty. Ltd.
1027	Elbows, 14"	,,	5 ,,	,,,	0 9 4	]
1028	Elbows, 1", inspection	,,,	5 ,,	- ,,	0 7 5	Noyes Bros. (Melb.)
†{ <sub>1029</sub>	Elbows, 1½", inspection	,,	5 ,,		0 10 3	Pty. Ltd.

#### CONDUIT PIPE AND FITTINGS-continued.

Item No.		Description		Country of Manuf're	Estim Require		Rate per		Ra	te	Name of Contractor
	Fittings Conduit	, Screwed—contin	wed—		·.	,		£	s.	d.	
<b>(1030</b>				Vict.	5	doz.	doz.	0	1	2	,
1031	Ť	***	•••	***	30	,,	,,	0	ı	3	
† { 1032	1	•••	•••	,,	5	"	,,	0		6 <del>1</del>	Brooks, Robinson, Pty. Ltd.
1033			•••	,,	. 5	"	,,	0		10	
(1034	1		***		700		gross	0	0	8 <del>3</del>	) 
103				,, '	200	,,	ř	0		103	
1036	, * ·	•••	•••	,,	100	,,	"	0	1	63	;
t₹		***	***	,,		,,	,,			-	British General Electric Co. Ltd.
1037	, · ·	•••	•••	,,	20	**	,,	0	4	5	
1038	' ' "	•••	•••	,,	5	**	. "	0	5	5	
[1039		•••	;	,,	5	"	. ,,	0		11	J
1040	Sleeves, ¾"	•••	.***	N.S.W.	20	<b>,,</b> .	doz.	0	2	7	
† √ 1041	Sleeves, 1"	•••	•••	"	10	**	,,	0	3	6	.,
1042	Sleeves, 11/2"	•••	•••	,,	3	,,	,,	0	4	10	
1043	Sleeves, 1½"	"Thompson, Scro	ugall,"	,,	5	,,	,,,	0	7	. 0	William Adams & Co. Ltd.
(1044	Tees, §"			,,	. 10	**	,,	0	3	2	& Co. Ltd.
† { 104	Tees, ¾"	•••		,,	. 10	,,	. "	0	4	6.	
104	Tees, 1"	•••	•••	,,	10	٠,	. ,,	0	7	8.	
104	7-1050—Nil										1.

#### ELECTRIC CABLES AND WIRES.

Period 1.10.34 to 30.6.36, excepting Items 1065-1069 and 1127 to 1129, which are for period 1.10.34 to 30.9.35.

See Appendix "C" for Specification.

Time for delivery will be allowed for importation of the Stores under Items Nos. 1063 to 1067 and 1127 to 1129. The rates do NOT include wharfage dues of the Melbourne Harbor Trust, but in order that the Corporation may receive exemption from wharfage dues, the Bill of Lading for each shipment shall be made out in favor of the Comptroller of Stores. Wharfage will be cleared by the Comptroller of Stores and Delivery Order returned to the Melbourne Office of the Contractor to enable him to complete delivery.

As regards Items Nos. 1088 to 1105, the rates include Telegraph Transfer Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the contract period, the difference calculated on 45 per cent. of the contract rates shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

As regards Item 1129, the rate includes Telegraphic Transfer Exchange between Australia and London at  $25\frac{1}{2}$  per cent., and if this rate be varied at the date of delivery, the difference calculated on £4 8s. 0d. per 1000 yds. which is also based on the metal basis shown below, shall be to the Corporation's account.

#### ELECTRIC CABLES AND WIRES-continued

As regards Items 1078 to 1087, 1115 and 1116, rates include Telegraphic Transfer Exchange between Australia and London at  $25\frac{1}{2}$  per cent., any variation in this rate, at the date of delivery, to be adjusted on 45 per cent. of the contract rates.

This also applies to Items 1130, 1131, 1134 to 1138, excepting that the adjustment is to be made upon the following c.i.f. values:—

				£, s. d.	
Item 1130	•••		•••	9 11 per	100 yards
Item 1131	•••	•••	•••	16 4	**
Item 1134		•••	•••	1 2 10	,,
Item 1135	•••	•••	•••	2 5 8	"
Item 1136	•••	•••	•••	2 18 11	,,
Item 1137	•••	·	•••	1 0 7	**
Item 1138	•••		•••	1 18 3	"

As regards Items 1072 to 1077, 1106 to 1114, 1127 and 1128, 1132 to 1133, 1141 and 1142, the rates are firm in respect of Exchange.

† As regards Item No. 1129, the rate is based on E.C. Wire bars at £35 5s. 0d. per ton. Adjustment is to be made in accord with the London Metal Exchange prices published in sterling in Bagot and Thompson's list at the time the order is received at the works in England.

The rate is also based on Lead at £11 per ton, and adjustment is to be made in accordance with the settlement price of Colonial Lead as published in Bagot and Thompson's list at the time the order is received in England.

The amounts of variation are as follow:-

Variation per 1000 yards per 20/- alteration in the price of :-

_		Copper	Lead
		s. d.	s. d.
Item No. 1129	 •••	0 11	 $2  1\frac{1}{2}$

Contractor to advise rate at which order has been accepted.

† As regards Items Nos. 1063-1069, 1117-1126 and 1139-1140, the rates are based on the price of £44 1s. 3d. per ton, which is the equivalent in Australian currency of the London Metal Exchange price in English currency for E.C. Wire bars at £35 5s. 0d. The rates are to be varied up or down by one-tenth of a penny per lb. of copper for each complete 20s. or part thereof by which the price in Australian currency of E.C. Wire bars, on the date of receipt or order, is greater than £44 19s. 11d., or less than £44 per ton respectively. The equivalent in Australian currency of the London Metal Exchange price of E.C. Wire bars is the London Metal Exchange price for E.C. Wire bars as issued by the Australian Mines and Metals Association on that day increased by the same percentage as is quoted by the Commonwealth Bank or substituted authority as the buying rate for T.T. on London. If no price of wire bars is issued by the Association on any day, the last price issued prior to that day shall apply. In the event of a dispute concerning the published price of wire bars the figures advised by the Australian Mines and Metal Association as last received by them from the London Metal Exchange prior to the day of the receipt of the order shall be mutually accepted.

If no buying rate is quoted by the associated banks for T.T. on London on any day, the rate last published earlier shall apply. In the case of a dispute concerning the published buying rate for T.T. on London, the figures advised by the associated banks as last published by them prior to the day of receipt of the order shall be mutually accepted.

† As regards Items 1088 to 1105, rates are based on the price of £36 per ton for Electrolytic Copper Wire Bars. The rates are to be varied up or down by 0.2d. for every £1 or part thereof, in the rise or fall of the price of bars ruling at the date of the receipt or each order by the Contractor, as published in the Melbourne "Argus." If no price is publised on the date of receipt or order, the price last published shall apply.

As regards Items 1063, 1064 and 1065, the rates are for orders or not less than 3 cwt. For lesser quantities extras will be charged as follow:—

Jnder	336	lb, Extra	0.5d.
,,	200	,,	1.0d.
,,	100	,,	1.5d.
,,	50	,,	2.5d.
,,	25	"	4.5d.
,,	10	,,	6.5d.
	5	**	12.5d.

ñ:

#### ELECTRIC CABLES & WIRE—continued. .

As regards Items 1066 and 1067, the rates are for orders of not less than two ton lots.

As regards Items 1068 and 1069, the rates are for orders of not less than 200 No.

As regards Items 1139 and 1140, the rates are for orders of not less than 3 cwt. For lesser quantities extras will be charged as follow:—

,Under	336	lb.	•			1.0d. ⋅
"	200	lb.	to	100 lb.	,,	1.5d.
, , »	100	lb.	to	50 lb.	,,	2.5d.
, ,,	50	lb.	to	40 lb.	,,	
, ,,	40	lb:	to	30 lb.	,,	8.0d.
,,	30	lb:	to	20·1b.	,,.	11.0d.
,,	20	lb.	to	10.1b.	,,,	14.0d.
,,	10	lb.	to	5 lb.	**	17.0d.;
"		lь.			**	26.d.

As regards Item No. 1065, the rate is for an order of not less than 3 cwt. at a time. It will often expedite delivery if ordered in standard drums or packages. A schedule of standards is given below—Special cutting always entails delay.

As regards Item No. 1129, the minimum quantity to be ordered is 500 yards

#### SCHEDULE OF STANDARD PACKAGES.

	Item No.	Size	Stand	lard Packing
	,	Size	Length	Net Weight
1065		91/.044	yards 1,925	lb. 3,170

#### Time for Delivery

Items Nos. 1063 to 1067, 1139-1140, three to four weeks to be allowed for delivery.

Items Nos. 1068-1069, five to six weeks to be allowed for delivery.

Items Nos. 1088 to 1105, sufficient time to be allowed, if required, to import stock for initial orders.

Items Nos. 1127-1129, twelve to thirteen weeks to be allowed for delivery.

#### Names of Manufacturers.

Items Nos. 1063 to 1069, 1117 to 1126, 1139, 1140—Metal Manufactures Pty. Ltd., New South Wales.

Items Nos. 1072 to 1077, 1141, 1142—London Electric Wire Co., & Smith's Ltd., England.

Items Nos. 1078 to 1087-Henry Wiggins & Co. Ltd, England.

Items Nos. 1115 and 1116-British Permel Enamel Wite Co., England.

Items Nos. 1130, and 1131-Johnson & Phillips Ltd., England.

Items Nos. 1088 to 1094—British Driver Harris Co.

Items Nos. 1095 to 1105-General Electric Co. of England.

Items Nos. 1106 to 1114-British Insulated Cables Limited, England.

Items Nos. 1127 and 1128-Liverpool Electric Cable Co. Ltd.

Item No. 1129-British Insulated Cables Ltd.; England.

Items Nos. 1132, 1132A, 1133—British Insulated Cables Ltd. England.

Item No. 1134-Callender Cable and Construction Co. Great Britain.

Items Nos. 1135 to 11-38-Macintosh Cable Co. Ltd.

As regards Items Nos. 1063 to 1067, also 1127 to 1129, the rates do not include wharfage dues of the Melbourne Harbor Trust, and the Contractor should be requested on each order to arrange for the material to be consigned and Bill of Lading made out in favor of, The Victorian Railways Commissioners in order that the Shipping Clerk may arrange for exemption of wharfage, the delivery order to be returned to the Company to enable it to complete delivery.

As regards Items Nos. 1063 and 1064, arrangements are to be made at the time of placing of orders for inspection, measuring and weighing, to be conducted by the Permanent Testing Officer of the Postmaster-General's Department, resident at Port Kembla, and to forward certificates of inspection, etc., quoting the order number, to the Comptroller of Stores. A copy of each order and such information as is called for should be forwarded to the Superintending Engineer of the Postal Department, Sydney, New South Wales, with a request that this be done at the Department's expense simultaneously with the placing of order. A copy of this schedule has already been forwarded

## ELECTRIC CABLES AND WIRES—continued.

Item No.	Description	Country of Manuf're.	Estimated Requirements	Rate per	Rate	Name of Contractor
_					£ s. d.	,
	Cable, Hard-drawn, Stranded Copper—	. 1	)			
1051	7/036, Area 0.007 sq. in	•••	Nil			
1052	7/048, Area 0 0125 ,,	•••	Nil			
<b>9</b> 1053	7/064, Area 0 0225 ,,	•••	Nil			
1054	7/·080, Area 0·035 ,,	•••	Nil		***	
1055	7/·097, Area 0·05 ,,	•••	Nil	. ;**		
1056	7/·118 Area 0·075 ,,	•••	Nil <sub>.</sub>		•••	Nil
1057	19/072, Area 0 075 ,,	•••	Nil		.12.	,
1058	19/·083, Area 0·10 ,,	****	Nil			<u>'</u>
1059	19/·101, Area 0·15 · "	•••	Nil .			·
1060	37/093, Area 0.25 ,,	•••	Nil	. •••	١	
1061	37/·116, Area 0·375 ,,	•••	Nil			·
1062	61/103, Area 0.5 ,,	•••	Nil			,
1063	Wire, 0.193 Hard Drawn Copper	N.S.W.	40,000 ft.	lb.	†0 0 8.5	j
1064	Wire, 0.25 sq. in. Contact, Hard Drawn	" .	18,000 ,,	,,	†0 0 9	· · · · · · · · · · · · · · · · · · ·
1065	Copper (Drawing F. 1460) Cable, copper, 91/044 annealed, flexible,	"	9000 yds.	,,	†0 0 11.3	
1066	area 0.14 sq. in. Wire, copper, to Specification, 150 lb. per	**	3 tons	ton	† 78 1 3	British Insulated' Cables Ltd.
1067	mile Wire, copper, to Specification, 200 lb. per mile	<b>,,</b> .	6 ,,	,,	† 77 1 3	Cables Bid.
1068	Sleeves, Jointing, Copper, to Specification No. 5 (Long)	• 99	450	1000	†8 0 0	.;
1069	No. 6 (Long)	· ,,	. 350	,	†6 10 0	}
*1070	Tapes, Copper, No. 3, to Specification	•••	150 lb.			<sub>Nil</sub> .
*1071	Binders, Copper, No. 3, to Specification	•••	1500 ,,			J**"
	Wire, Nickel, Copper Alloy—"Eureka"					
1072	Resistance Wire,	U.K.	J	1ь.	0 3 0	).
1073	16 ,,	, ,,		,,	0 3 0	
1074	18 "	,, ,,		,,	0 3 3	The Liverpool Elect-
£075	24 "	,,	} .15 ,, 	,,	0 4 0	ric Cable Co. Ltd.
1076	26 ,,	,,		,,	0 4 3	
1077	28 ,,	,,	} ·	,,	0 4 6	Į
1078	Wire, Nickel, Chromium—" Brightray" 12 S.W.G	,,	8 ,,	,,	0 9 2	)
1079	13 ,,	<b>,,</b> .	5 ,,	,,	0 9 5	.
1080	14 ,,	,,	5 ,,	,,	0 9 9	   } Johnson & Phillips
1081	16 ,,	,,,	8 ,,	.,, -	0 10 2	Ltd.
1082	5 18 <b>"</b> ;		.5 ,,	,,,,,	0 10 10	]

## ELECTRIC CABLES AND WIRES-continued.

Item No.	, .	Description		Country of Manuf're	Estimated Requirements	Rate per	≀ ):Råte	Name of Contractor
ļ	Wire, Nickel, C	Chromium—" Brighti	ay "—				£ s. d.	
1083	20 ,,	• •••	•••	U.K.	8 lb.	1ь".	0 11 9	ή
1084	22 "	·	•••	,,	5 "	,,	0 12 9	
1085	23 "	•••		,,	5 ,,	,,,	0 13 8	  }Johnson & Phillip
1086	26 ,,	•	•••	,,	35 ,,	,,	0 16 8	Ltd.
1087	27 "	•••		,;	8 ,,	,,,	0 18 2	
1088	Strip Nickel, Cl	nromium—" Nichrom 1/32"	ie IV."	U.K.	1 ,		† 1 11 11	
1089	·004 x	•		(partly)	1			
1090	·005 x			**			1	
1091	· 006 x		•••	"	,	,,	† 1 · 4 11	
1092	·007 x	•	•••	**	1 ,,	,,	† 1 3 2	<u> </u>
			•••	<b>,,</b> '	6 "		† 1 1 5	
1093	·012 x	•		» · ·	3 "	,, '^	† 0 16 8,	
1094	006 x Wire, Copper,	tinned, (fuse)-" G.E	.c."—	", .	1 "	* ,,	† 1 2 2	
1095	16 S.W	.G	•••	"	15 ,,	,,	0 1 23	
1096	18 ,.	•••	•••	"	35 ,,	,,	. 0 1 34	British General Electric Co. Lt
1097	20 ,,	•••	•••	"	25 ,,	.;	0 1 43	i i i i i i i i i i i i i i i i i i i
1098	22 ,,			"	15 ,,	,,	0 1 61	
1099	24 "	. •••	***	,,	12 ,,	,,	0 1 6	
1100	26 "	•••	•••	,,	1 ;,	<b>"</b> ,	0 1 7	, ,
1101	28 ,,	•••	•••	**	1 ,,	,,,	0 1 73	
1102	29 ,,	•••		,,	15 "	,,,	0 1 9	
1103	32 ,,	•••	<i></i>	,,	1 ,,	,, '	0 2 3	
1104	36 ,,	•••		"	2 ,,	.,	0 2 5 <del>1</del>	
1105	40 "	<b>.</b>	•••	,,	ι "	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0 3 5	
1106	Wire, Copper, 22 S.W	Enamelled—: .G.—" Prescot "	•	"	70 ,,	,,	0 1 2	]; 
1107	. 24 ,	, ,,	•••	. "	70 ,,	,,	0 1 4	
1108	. 28 ,	, ,,	•	79	35 ,,	,,	0 1 6	•
1109	20	, ,,	•••	,,	" [35 ,,	,,	0 1 6	3
1110	91	, ,,	•	,	16 ,,	,,	0 1 61	Associated Gener
1111	32 ,	•	•••	"。	80 ,,		0 1 7	Electric Industrial
1112	33 ,		•••	,,	0	,,	0 1 7	, 1500.:
1113	34 ,				ດະ	**		
1114	26			**	0.4	,,		]
1115		"D. 12		" U.K.		"		,
	46 . ',	•	•••	J.IX.	٥ ,,	,,	0 4 6	Johnson & Phillip

## ELECTRIC CABLES AND WIRES-continued.

Item No.			Descri	ption			Country of Manuf're	Estim Require		Rate		Rate		Name of Contractor
<b>(1117</b>	Wire, Co	opper, S.W.G		.—" K	Kembla 	"	N.S.W.	10	lb.	lb.	£ to		d. o	1
1118	10	,,	,				,,	5	,,	,,	†0	1	2	·
1119	. 11	,,				•••	,,	120	,,	,,	<b>†</b> 0	1	0.5	
1120	12	):			•••	•••	,,	10	17	,,	<b>†</b> 0	1	0.5	
1121	14	,,					,,	350		,,	40	'n	1	
$\left\{\begin{array}{c} 1122 \end{array}\right\}$	15	199	•••		•••		· ,,	180	,,	, ,,	†0	1	2	Associated General Electric Industries
1123	16	,,			•••	•••	,,	500	13	,,	<b>t</b> 0	1	3	Ltd.
1124	. 17	, , , , , , , , , , , , , , , , , , ,	•••			,	,,	. 250	,,	,,	<b>†</b> 0.	1	4	
1125	18	"			•••	•••	"	500	"	,,,	to	1	5	
1126	20	"	on 1	4 lb.	drum	•••	,,,	420	,,	, ,,	10.	1,	7	]]
1127	dance	with		Depar	tment'	in accor- s Specifi- '35)	U.K.	300		1000 yds.	96	8	0	The Liverpool Electric Cable Co, Ltd.
1128	dance	with		Depar	tment's	in accor- s Specifi- /35)		100	,,	,,	62	8	3	The Cable Co. Eld.
1129	waxed partm	) and	r, enam lead co Specific	overed ation	No. 50	n (bees ostal De 30a 0/9/35)	,,	1000	,,	,,	<b>†</b> 5	18	<b>0</b>	British Insulated Cables Ltd.
	Wires,	Сорре	r, flexib	le—				,					1	
<b>[1130</b>	23/	0076	twin, o	ffice	•••		. "	7000	33	100 yds.	0	14	3	Johnson & Phillips
1131	40/	0076	**	,,	•••	••	,,	3000	17	yus.	1	3	5	Ltd.
†1132	40/·(u	076 nder o	twin, a	sbesto ding) '	s cov "Helsh	ered fle	,,	1250	,,	,,	2	0	0	Associated General
†1132a	40/.0 (tr	0076 wisted	twin, a pairs) '	sbeste ' Hels	os cov by"	ered fle	,,	500	,,	**	2	0	0	Electric Industries Ltd.
†1133	40/·00	elsby	hree co	ore, a	sbestos	covere	U.K. (partly)		0 "	. **	2	17	0	
†1134	1		win, wo	rksho	p, ". Ca	ıllender ''	. ,,	350	0 "	,,	1	12	8	Noyes Bros. (Melb.) Pty. Ltd.
<b>\$</b>	Wire, co	pper, ed out	flexible, tside she	in bla	ack or	chamaleo onite"	n							
1135	11/	·012,	3 core,	cab ty	re		,,,	80	0 "	**	3	5	4	1
1136	16/	012,	3 core,	cab ty	re		,,	80	0 "	,,	4	. 4	3	Brooks, Robinson
<b>∫1137</b>	11/	·012,	twin, c	ab tyr	re ·		"	70	0 ,,	,,	1	9	5	Pty. Ltd.
1138	16/	·012,	,,	,, ,,			,,	350	00 "	,,	2	14	8	J
	Wire, C	Сорре	r, Strip	, D.C	.C.—					, .				
1139		·375″	x ·187	5″	•••		n.s.w	. 20	cwt.	lb.	†0	) 1	2	7 British Insulated
1140	1	.375*	x · 125	•	•••		,,	10	) "	١,,	10	1	3.	

#### ELECTRIC CABLES AND WIRES-continued. .

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
11 <b>41</b>	Wire, Copper, D.S.C., in 5 lb. or 7 lb. reels, as ordered— 23 S.W.G	U.K.	24 lb.	. ,,	£ s. d.	
1142 1143-	26 S.W.G	,, .	60 ,,	,,	0 3 5	The Liverpool Electric Cable Co. Ltd.

## ELECTRIC, POWER AND LIGHTING ACCESSORIES.

As regards items 1169 to 1171, 1173, 1175, 1177 to 1179, 1181, 1186, 1188, 1189 to 1193, 1195-1197 and 1213, the rates include Telegraphic Transfer Exchange between Australia and London at  $25\frac{1}{2}\%$ , and if this rate of Exchange be varied during the contract period, the difference calculated on 40% of the Contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

As regards items 1198 and 1199, the rates are firm for exchange and conversion.

As regards items I195 to 1197, the rates are firm for conversion, but are subject to exchange as per above.

As regards the contract with the British General Electric Co. Ltd., in the event of any alterations in Customs Duty and Primage Duty subsequent to the date of the tender or in the existing method of assessing the same, the difference will be to the Corporation's account, adjustment to be made in accordance with clause 7 of conditions of contract.

Sufficient time to be allowed to meet initial orders on British General Electric Co. Ltd.

	•	The second secon		dell oil billio	ii Othu	aı ı	1160	riic (	20. TITT.
	†1147	Adaptors, Bayonet	Vict.	700	each	0			H. Rowe & Co. Pty.
1	1148	Bases, Porcelain, for lightning arresters, to Drawing No. 10a/45	,	750	***!	,		,3 1 -	.Nil
	†1149	Bases and Shields, Radiator, Cruciform type, for "Hecla" Standard Radiators	»	300 sets	seť	.0	<b>2</b>	1 	Brooks, Robinson Page Ltd.
i	*1150	Blocks, Porcelain, for R.S.A. terminal to Drawing No. 2.A.2.		1500		٠.	·	. ,	Nil "
	†1151	Blocks, base, wood, 9" x 3"	,,	20 doz.	dozen	0	2	11 <del>1</del>	
	†1152	" " " 6″ x 3″	,,,	50 ,,	,,	'¹Ö;	. 2	5	Brooks, Robinson P.
	†1153	,, ,, 3" dia	,,	100 ,,	22	0	0.	$9\frac{1}{2}$ .	J · .
•	†1154	Clips, Battery, Test, Universal 25 amp. with Red I.R. Covers		<sup>1</sup> 2 gross	:		•••	**	Nil
	†1155	Clips, Battery, Test, Universal, 25 amp. with Black I.R. Covers	•••	1 "	,				
		Elements, Radiator, "Hecla" Standard, Cones, wired complete—		•		•,		.,	<b>₩</b>
	1156	1000 Watt. Rating at 110 Volts	".	20	each	0	4	9.	<b>)</b>
ļ	1157	1000 ,, ,, 230 ,,	"	100	,,	0	4	9	
t «	1158	1000 " " 250 "	"	100	,,	0	4	9	British General
• 1	1159	700 ,, ,, 110 ,,	, ,,	. 20	(2), (	0	4	9	Electric Co. Ltd.
	1160	700 ,, ,, 230 ,,	" :	20	"	0	4	9	
İ	-116i	700 ,, ,, 250 ,, ,,	,,	60	,,	0	4.	9 .	IJ, .

## ELECTRIC, POWER AND LIGHTING ACCESSORIES-Continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	F	late	Name of Contractor
					£	s. d.	
Ì	Fuses, Ironclad—						
<b>†</b> 1162	15 amp. 500 volt., "T. & H."	Vict.	220	each	0	2 5	The Lawrence & Han- son Electrical Co.
£1163	30 amp. 500 volt	,,	••••	,,		•••	Ltd. Nil—Item 1162 to be used and gauge of wire adjusted.
†1164	60 amp. 500 volt., "T. & H."	,,	35	,,	0	8 11	
	Fuses, Factory Type, with bases, back con-		•				British General Electric Co. Ltd.
†1165.	nected, "T. & H."— 5 amp., suitable for 250 V	,,	1200	doz.	Ó.	9 5.8	J
†1166	15 amp., suitable for 500 V	,,	750	each	0	1 101	
†1167	30 amp., suitable for 500 V	,,	100	,,	0	$1 \cdot 10\frac{1}{2}$	Remingtons Pty.  Ltd.
<b>†</b> 1168	60 amp., suitable for 500 V., without studs	,,	120	,,	0	5 5	
•	Fuses, Cartridge, "Zed" type.—		:				. '
†1169	10 amp., 250 volt	U.K.	80	,,	0	$0   8\frac{1}{2}$	
†1170	15 amp., 250 volt	,,	400	,,	0	$0.8\frac{1}{2}$	Siemens (Australia) Pty. Ltd.
†1171	25 amp., 500 volt	., "	80	,,	0	1 3	J
†1172	Holders, E.S. batten, "Ring Grip No. 56"	Vict.	175	٠ ,,	0	$1  2\frac{1}{2}$	William Adams & Co.
†1173	Holders, E.S., for Benjamin Reflectors, complete with flanges, "Benjamin"	U.K.	100	,,	0	6 0	The Lawrence & Hanson Electrical Co. Ltd.
†1174	Hand Lamps, portable, fitted with B.C.	Vict.	130	,,	. 0	,6 6	Noyes Bros. (Melb.)
†1175	holder Holders, B.C. Brass Batten	U.K.	1400	,,	0	$0  5\frac{1}{1}$	Pty. Ltd.
†1176	Holders, Bayonet, batten, with shade carrier ring, Bakelite, "Ring Grip"	Vict.	200	doz.	0	9 3	John Danks & Son Pty. Ltd.
. (1177	Holders, Bayonet, keyless, with shade ring	U.K.	350	each	0	0 5.6	Entush General
†   1178	carrier, ½", "S1035 Magnet" brass Holders, Bayonet, keyless, with shade ring	,,	1000	,,,	0	0 5.6	Electric Co. Ltd.
†1179	carrier, §", "S1037 Magnet" brass Holders, Bayonet, keyless, with shade ring	,,	1400	doz.	0	5 7	Associated General Electric Industries
, †1180	carrier, cord grip, "G.A.C." Holders, Bayonet, keyless, with shade ring	N.S.W.	600	,,	0	6 2	Ltd.
†1181	carrier, cord grip, Bakelite, "G.E. Ageite" Holders, Porcelain, tapped ½" Goliath Screw for Benjamin Reflectors, complete with flanges	U.K.	200	,,	0	5 11	Noyes Bros. (Melb.) Pty. Ltd.
1182	Plugs and Sockets, Wall— 2 pin, 5 amp						Nil. To be ordered under item 1184
†1183	2 pin, 10 amp						J under nem 110±
†1184	3 pin, earthing, Flatpin, 10 amp. rating "Ring Grip 54"	g, Vict.	1050	each	0	1 21	Ltd.
. †1185	les in the transfer of the tra	N.S.W.	200	doz.	0	6 10	Associated General Electric Industries Ltd.
<b>†</b> 1186	11000, 101	U.K.	250	each	0	2 10	The Lawrence & Hanson Electrical
1187	Reflectors, Vitreous, Enamelled— 6½" dia. Benjamin type, No. 8347, "Seyo Atomized Aluminium"	Vict.	60	,,	0		Co. Ltd.  Noyes Bros. (Melb.
1188		U.K.	60	,,	0	5 10	Drty. Ltd.

## ELECTRIC, POWER AND LIGHTING ACCESSORIES—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
:	Reflectors, Vitreous, Enamelled—continued				£ s. d.	
1189	12" tapped for 1" pipe, B.C. Holder, for outdoor use, Benjamin, "Seaflux 2126"	U.K.	15	each	0 12 6	1
1190	14" B.C. Holder, "Benjamin, No. 4362"	,,,	40	,,	0 9 9	<u> </u>
1191	15" E.S. Holder, Benjamin, "Seaflux 2130"	, ,,	70	"	0 17 6	Siemens (Aust.) Piy
1192	18" E.S. Holder, Benjamin, "Seaflux 2132"	, ,	80	,,	1 0 0	*
1193	Elliptical Angle Type, Benjamin, "Seaflux 2086"	*,,	10	<b>,</b>	0 18 6	]
1194	Reflectors, Enamelled, 12" x 1½" hole, "Bedd" A100, type "A.G.E. 1" Reflectors, Enamelled Iron—	Aust.	100	".	0 5 3	Associated General Electric Industries
1195	10" x 1\frac{1}{3}" hole	Conti- nental	450	doz.	0 8 9	Ltd.
† 1196	12" x 1½" hole	"	60 .	"	0 15 9	British General Electric Co. Ltd.
[1197	15" x 1 <sup>1</sup> / <sub>3</sub> " hole	,,	250	,,	1 6 0	]
†1198	Reflectors, Shade, Opal, 10" x 11" hole	Japan	175	each <sub>.</sub>	$0  0  6\frac{1}{2}$	W. G. Watson & Co
†1199	Roses, Ceiling, 2 plate, vitreous porcelain	Germany	700	,,	0 0 4	Ltd. Falk, Stadelmann & Co. Ltd.
†1200	Roses, Ceiling, 3 plate, "Bakelite," "Ring Grip" Shades, Opal, enclosed, "Crown Crystal,"	Vict.	60	doz.	0 6 11	Siemens (Aust.) Pty. Ltd.
. 1201	No. 17 series— 10" dia	n.s.w.	70	each	0 6 11	The Lawrence &
1202	12" dia	,,	70	,, .	0 9 2	Hanson Electrical Co. Ltd.
1203 1204	Cover-all Canopy cover Plates and Chains, in bronze finish, for use with Items Nos. 1201 and 1202—  4" 2 piece ventilated with ceiling plate and 6 feet chain 6" 2 piece ventilated with ceiling plate	Vict.	70 70	set	0 3 5	Noyes Bros. (Melb.) Pty. Ltd.
†1205  .	and 6 feet chain Switches, Ironclad type, 3 pole "Standard" 15 amp., suitable for 500 V	" N.S.W.	20	each	0 6 0	
†1206	30 amp., ,, ,, ,,		50		0 8 4	·
†1207	60 amp., ,, ,, ,, Switches, Ironclad type, Double Pole	,,	12	"	1 3 7	
†1208	"Standard"— 15 amp., suitable for 500 V	,,	40	,,	0 4 8	W. G. Watson & Co.
<b>†</b> 1209	30 amp., ", ",	,,	60	"	0 6 0	
†1210 †1211	60 amp., "," "," Switches, Double Pole, Tumbler, 10 amp., suitable for 250 V., "Ring Grip 77"	Vict.	20 120	doz.	0 16 11 1 17 0	John Danks & Son Pty. Ltd.
†1212	Switches, Single Pole, Tumbler— 5 amp., 250 Volt, Bakelite, "Ring Grip 92"	79	3000	,,	0 9 3	<b>)</b>
†1213 †1214	8 amp., 250 Volt, Bakelite, "Magnet S255" Switches, 2 way, 5 amp., 250 Volt, "Ring	U.K. Vict.	250 150	each doz.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	British General Electric Co. Ltd. H. Rowe & Co. Pty.
†1215	Grip 93" Switches, Ceiling, 5 amp., 250 Volt "Ring	"	500	,,	1 11 9	Ltd. John Danks & Son
†1216	Grip 63" Switch and Fuse Combination, all insulated (not iron clad), 10 amp., D.P., suitable for use on 250 Volts, "Standard"	N.S.W.	. 80	each	0 4 8	Pty. Ltd. W. G. Watson & Co. Ltd.
1217-	1235—Nil				.	

#### LOW VOLTAGE LAMPS AND TORCH ACCESSORIES.

7. As regards Items Nos. 1239, 1261 and 1262, the rate includes Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 40% of the Contract rate shall be to the Corporation's

contract period, the difference calculated on 40% of the Contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

As regards Items Nos. 1238, and 1240 to 1260, the rates include Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 66½% of the contract rate shall be to the Corporation's account, to be adjusted on the rate ruling at date of delivery.

As regards Item No. 1237, the contract rate is firm and the Contractor will not be under obligation to supply any quantity in excess of the estimated requirements.

obligation to supply any quantity in excess of the estimated requirements.

As regards Items Nos. 1258 to 1260, sufficient time to be allowed if required, to meet initial orders.

As regards Items 1236 and 1236a the Chief-Electrical Engineer to conduct tests of batteries and submit report. Trial order to be issued on Widdis Diamond Dry Cells Pty. Ltd.

		·				
Item No.	Description .	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
†1236	Batteries, Torch, dry, cylindrical, single cell "Ever Ready" "Diamond"	N.S.W.	25,000	each	.f. s. d 0 0 23 0 0 2.85	Ever Ready Co. (Aust.) Ltd.
1237	Electrolyte, dry, for Edison Batteries	U.S.A.	10 cwt.	cwt.	22 8 0	Dry Cells Pty. Ltd. F. W. Fisher
†1238	Lamps, Electric, for hand torches—	U.K.	370	each	0 0 3	
•	2.5 Volt., Clear "Philips"	U.K.		each		Warburton Franki (Melb.) Ltd.
†1239	3.5 Volt., Clear "Ever Ready"	,,	5000	,,	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Ever Ready Co. (Aust.) Ltd.
†1240	2.5 Volt., focussing type "Philips"	,,	700	,, .	0 0 4	Warburton Franki
†1241	3.5 Volt., focussing type "Philips"	,,	500	,,	0.04	(Melb.) Ltd.
†1242	Lamps, Electric, for Automobiles— 6/8 Volts, 2 and 21 C.P., double		20			Nil
, \( \)1243	filament 6/8 Volts., 2 C.P., D.C. "Mazda"	,,	200	each	0 0 71	η <sub>ν</sub>
1244	6/8 Volts., 2 C.P., S.C. "	,,	600	>>	0 0 71	Associated General Elec. Indust. Ltd.
1245	6/8 Volts., 4 C.P., S.C		20	>,		Nil (Item 1244 to be
†1246	6/8 Volts., 21 C.P., D.C. "Mazda"	,,	200	,,	0 0 111	used)
†1247 †1248	6/8 Volts., 21 C.P., S.C. ,, 6/8 Volts., 32 and 32 C.P., D.C., double filament "Mazda"	,,	175 80	,,	0 0 111	Associated General Elec. Indust. Ltd.
†1249   1250	6 Volts., 48 to 50 C.P., S.C. ,, 12/16 Volts., 2 C.P., D.C. "Osram"	"	175 ' 400	"	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Siec. Mudst. Etc.
† 1251	12/16 Volts., 2 C.P., S.C. "	,,	400	,,	0 0 7	British General Elec. Co. Ltd.
1252 1253	12/16 Volts., 6 C.P., D.C. ,, 12/16 Volts., 21 C.P., S.C. "Mazda"	"	80 300	,,	$\begin{bmatrix} 0 & 0 & 7\frac{1}{2} \\ 0 & 0 & 11\frac{1}{4} \end{bmatrix}$	
1254	12/16 Volts., 21 C.P., D.C. ,, 12/16 Volts., 2 and 21 C.P., D.C., double filament "Mazda"	,,	. 80 24	,, ,,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Associated General
1256	double filament "Mazda" 12/16 Volts., 48 to 50, C.P., D.C. "	,,	300	,,	0 0 111	Elec. Indust. Ltd.
$\dagger \left\{ _{1257}  ight.$	12/16 Volts., 48 to 50, C.P., S.C. "	,,	250	,,	0 0 111	]
†1258 †1259 †1260	Lamps, Electric, Switchboard, Pencil type—  4 Volt "Philips"  6 ,, ,,  12 ,, ,,	"	120 120 120	", "	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Brooks Robinson Pty. Ltd.
†1261	Torches, Hand, Electric, with lamp and without cells— "Ever-ready No. 1828," nonfocussing	,,	120	. ,,	0 3 6	Ever Ready Co.
†1262 12 <b>63</b> –	"Ever-ready No. 2288," focussing	,,	120	,,	0 4 3	∫ (Aust.) Ltd.

#### INSULATORS AND INSULATING MATERIALS.

#### 9. SPECIFICATION FOR PORCELAIN INSULATORS.—Item No. 1335.

The term "parcel" shall mean any quantity of finished insulators presented for examination and test at any one time.

The drawing referred to in this Contract is Victorian Railways A. 405.

The insulators shall be made of highly vitrified glazed porcelain.

. The insulators shall be glazed all over excepting the thread and the head or the edge of the outer petticoat, which may be left unglazed.

The insulators shall be in accordance with the drawing referred to, and this drawing shall form a part of this Specification. The Receiving Officer shall have the right to measure any number of insulators in any parcel.

The insulators and the glazing shall be free from cracks, blow holes, nodules, excrescences, or other defects. They shall be uniform in texture throughout, non-porous, with smooth exterior and interior surface, and shall be finished in accordance with the best commercial practice.

The thread shall be in accordance with the drawing referred to, well centred, smooth, of uniform pitch, and such that the standard gauge shown in the drawing can be easily screwed into the insulator up to the crown. When in position on the specified standard gauge the insulator shall not be noticeably loose nor show a perceptible amount of play or rocking.

Any number of insulators from any parcel may be tested in the following manner:

The insulator shall be inverted and immersed in acidulated water to within a quarter of an inch of the lip of the outer petticoat, and filled with acidulated water to within a quarter of an inch on both sides of the lip of the inner petticoat.

While so immersed, and after 72 hours' immersion, each insulator shall be tested with an electro-motive force of 400 volts, and shall have an insulation resistance of 100,000 megohms in the case of No. 1 insulator and 10,000 megohms in the case of No. 2 insulator when tested (a) across the inner petticoat and (b) across the outer petticoat respectively.

The Receiving Officer may test any number of insulators from any parcel. If after the examination and testing of any parcel of insulators, five (5) per centum out of any such insulators do not meet the requirements of this Specification, the whole parcel shall be rejected, and no such parcel or any part thereof shall on any account be again presented for examination and testing; and this stipulation shall be deemed to be and treated as an essential condition of the Contract.

The insulators shall be delivered securely and properly packed in good, strong cases, each containing 100 insulators. Each case shall be branded with the Order No. and contents.

#### 10. SPECIFICATION FOR SHEET MICA.—Item No. 1341.

General Particulars.—The mica is required for the manufacture and repair of electrical heating appliances in particular, and other electrical apparatus in general.

Quality.-It shall be of the highest grade phlogopite mica, known as clear amber.

Properties of Tests.—(a) DIELECTRIC STRENGTH—The dielectric strength determined on sheets approximately 10 mils in thickness shall not be less than 2000 volts per mil.

- (b) Heat Resistance—Samples of the mica shall show no signs of deterioration when heated in a furnace at 900 degrees C. for 2 hours.
- (c) Loss of Weight—The loss of weight determined from weighings before and after the heat resistance test shall not exceed 0.5 per cent.

Size and Thickness.—The size of the sheets required is (6) six inches by four (4) inches, and the thickness shall not be less than (20) twenty mils.

Two tenders have been accepted for Insulation Sheet under Items 1309 to 1311. "Excellite" is only to be used for high temperatures, i.e., above 500 deg. C., or heavy current work. For all other purposes "Zelemite" is to be used.

As regards the contract with the British General Electric Co. Ltd. in the event of any alterations in Customs Duty and Primage Duty or in the existing methods of assessing same, the difference will be to the Corporation's account, adjustment to be made in accordance with clause 7 of the conditions of contract.

Sufficient time is to be allowed the British General Electric Co.; if required, to meet initial orders. A statutory declaration is to be furnished by the Corporation that the insulation material supplied is used in the manufacture or repair of electrical apparatus.

As regards Items 1271 to 1307, 1315, 1318 to 1322, 1340 and 1347, the rates include T.T. Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the Contract period, the difference calculated on 40% of the Contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

#### INSULATORS AND INSULATING MATERIALS—continued.

As regards Items 1309 to 1312, the rates include T.T. Exchange at  $25\frac{1}{2}$  per cent. and 22 Belgas to the £1 sterling, any variations in these rates on the date of delivery to be adjusted on 40 per cent. of the contract rates.

The rates for Items 1318 and 1319 are firm as regards Conversion.

The Contract rates for Items 1308 and 1326 are firm as regards T.T. Exchange, Customs Duty and Primage Duty.

As regards Items 1323, 1324, and 1341 the rates include T.T. Exchange between Australia and London at  $25\frac{1}{2}\%$ , plus  $2\frac{1}{2}\%$ , and if this rate of Exchange be varied during the Contract period, the difference, calculated on 40% of the Contract rates, shall be to the Corporation's account, due allowance being made for the added  $2\frac{1}{2}\%$ , and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

						<del></del>	
	tem No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
		14	.,			£ s. d.	, 70
		Ebonite Rod-	,	,	.,	~	
Çı	1271	₹ dia	U.K.	5 lin. ft.	lin. ft.	0 0 2	} '-
]	1272	1	,, ,,	18 "	. "	0. 0 23	J. 7. (1)
t { ]	1273	₹″ "	,,	8 ,	. ,,	0 0 6	E.C. Menzies  Electrical
	1274	I" ,,	,,	40 ,,	,, '	.; 0 0 10½	Pty. Ltd.
\ ;	1275	11, 51 y	"	30 ,,	,,	0 1 42	J
		Fibre, Rod, Round, Red, Grey or Black, as ordered—	! !				
۲	1276	<u>‡</u> ″ dia	,,	10 lb.	lь.	0 11 4	) · · · ·
	1277.	g" ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	,,,	3 ,,	,,	0 7 3	
	1278	1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	, ,,	18 ,,	, ,,	0 6 6	70.31
	1279		,,,	12 ,,	, , , , , , , , , , , , , , , , , , ,	0 5 9	
†{	1280	1″ "	,,	12 ,,	. <b>,,</b> , 1	0 6 2	Mica & Insulating Supplies Co.
	1281	114" , , , , , , ,	, ,,	1 ,	. "	. 0 . 9 10	,
	1282	1½" ,,	», ,	. 1 "	. 733 \	. 0, 13, 11,	]. :
l	1283	2" ,,	, ,,		٠,,	1 17 6	J
· t3	1	Fibre, Sheet, Red, Grey or Black, as ordered—		_		et all i	
t	1284	16" to 3" thick, as ordered approx. 6' x '4 " Diamond "	,,	550 ,,	10 " 2	0 1 5	British General Electric Co. Ltd.
ſ	1285	, ½" thick	,,	550 ,,	,, ,	0 1 9½	٠ .
	1286	· §	,,	50 ,, ,	. **	0 2 3	
	1287	8" 15 · · · · · · · · · · · · · · · · · ·	. '99	5 "	,,,	0 2 5	Mica & Insulating Supplies Co.
ا . ل	1288	1" 5, 5 0 0	. ,	, <b>4</b> 00 ,,	,,	0 2 9,	]
,	11.	Insulation Cloth, Empire (36" wide)—		,	., .		J. J. C. C
1 <sup>+</sup>	1289	5 mils. thick in 25 yd. rolls	. ,,	280 yards	lin. yd	0 1 23	" '
†	1290		, /	250 ,, ,		0 1 4.8	
. 1	1291	10 ,, ',, ',	., ,,	20 "	,,	0 1 7.8	Electric Co. Ltd.
†	1292	Insulation compound, "Chattertons"	. ,, ,	80 lb.	lb.	0 110.4	[] ' <sub>[*-</sub> /

## INSULATORS AND INSULATING MATERIALS—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
į.	Insulation, "Elephantide," in rolls, 50" to 54" wide—		; ; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;;	tus !	r Arsaud	
1293	5 mils, Grade "B"	U.K	8 16.	'lb':	0 1 4	5 <u>1</u> )
1294	5 mils, Grade 3	,,	40 ,,	1, 1 ; 3	00 1 6	
1295	5 mils, Grade 4		61,	. 5 2 . 2/13 1	140 . L 16	
1296	10 mils, Grade "B"	<b>31</b>	70 ,,	,,	0 1 2	3 <u>1</u>
1297	10 mils, Grade 3	,,	70 ,,	,,	0 1 4	
1298	10 mils, Grade 4	"	20 ,,	,,	0 1 6	52
1299	15 mils, Grade "B," in rolls 50" to 54" wide	<b>??</b>	6 ,,	,,	0 1 1	Mica & Insulating Supplies Co.
1300	15 mils, Grade 3	,,	70 "	,,	0 1 2	2 <u>1</u>
1301	15 mils, Grade 4	,,	80 ,,	,,	0 1 5	<b>[1</b> ]
1302	20 mils, Grade "B"	,,,	6 ,,	,,	0 1 1	2
1303	20 mils, Grade 3	"	100 ,,	,,	0 1 2	2
1304	20 mils, Grade 4	,,	70 ',,	33		11.
1305	30 mils, Grade "B," in sheets 6' x 3'	٠,,,	15 sheets	sheet	0 4 0	
1306	30 mils, Grade 3, in sheets 6' x 3'	,,	175 ,,	**	0 4 3	<u> </u>
1307	30 mils, Grade 4, in sheets 6' x 3'	,,	40 ,,	,,	0 4 8	British General Electric Co. Ltd.
†1308	Insulation, presspahn, in sheets, 32" x 24", 10 mils.	**	. 20 ,,	lb.	0 1 (	Johnson & Phillips Ltd.
,	Insulation, Sheet, Ebony grade-"		·			•
†1309	{" thick (6 m.m.) 47" x 49" "Excellite"	Belguim	} 80 sq. ft.	sq. ft.	0 2 8	The Lawrence & Han-
†1309A	thick (6 m.m.) "Zelemite"	S. Aust.		٠ ,,	0 2 1	son Electrical Co. Ltd. British General Electric
†1310	3" ,, (10 m.m.) 47" x 49" "Excellite"	Belguim	}100 ,,	,,	0 3 3	Co. Ltd.
†1310a	3" .,, (10 m.m.) "Zelemite"	S. Aust.	J	22	, 0 3 ,3	son Electrical Co. Ltd. British General Electric Co. Ltd.
†1311	1/2" ,, (12 m.m.) 47" x 49" "Excellite"	Belguim	} <sub>175</sub>	. ,".	0 4 5	The Lawrence & Hanson Electrical Co. Ltd.
†1311a	'½" ,, (12 m.m.) "Zelemite"	S. Aust.		٠,,,	' ·0' <sup>7</sup> 4' · ~4	British General Electric Co. Ltd.
†1312	3" ,, (20 m.m.) 47" x 49" "Excellite"	Belguim	600 ,,	. "	0 5 3	The Lawrence & Han- son Electrical Co. Ltd.
	Insulation, Sheet, Grey, "Zelemite"—					Son Biccarical Co. Eker.
↑ †{	‡" thick	S. Aust.	50 lb.	· "	0 1 1	Chritish General
1314	5." ,,	,, ·	·50 ,,	,,	0 2 2	Electric Co. Ltd.
†1315	Insulation, Tape, adhesive, black, ½" in 2 oz. rolls		900 ,,	lb.	0 1 3	Electric Industries Ltd.
†1316	Insulation, Tape, adhesive, black, $\frac{3}{4}$ " in 8 oz. rolls wrapped in tin foil, 23½ yds approx.		2000 ,,	,,	0 1 4	Dunlop Perdriau Rubber Co. Ltd.
†1317	Insulation, Tape, adhesive, grey, 3 in 8 oz. rolls, nett weight, wrapped in tinfoil,		·400 ,,	٠ ، ، ،	0 2	Barnet Glass Rubber Co. Ltd.

# INSULATORS AND INSULATING MATERIALS—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Insulation, Tape, Empire, bias cut, in Yellow or Black—		-		£ s. d.	
<sub>+</sub> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	½" wide, 5 mils, seamed	U.S.A.	2 grs. yds.	gross yds.	0 2 6	British General
(1319)	wide, 7 mils., seamed	,,	60 ,,	,,,,	0 4 8	Electric Co. Ltd.
1320	3", wide, 7 mils., seamless	U.K.	130 , ,	. "	0 5 1	ή , ·
† { 1321	1" wide, 7 mils., seamed	,,	2 ,,	"	0 6 10	Mica & Insulating Supplies Co.
1322	1" wide, 7 mils., seamless	",	25 ,,	,,	0 6 10	1 ]
1323	1" wide, 15 mils., seamed	,,	18 "	,,	0 10 -6	J
†   1324 †1325	2" wide, 7 mils., seamed Insulation, Tape, Mica Flexible, 14" x 4 mils.	Aust.	20 30,000 yds.	100yds	0 13 6 0 8 6	W. G. Sleightholm
†1326	Insulation, Tape, Rubber, pure, ½" wide, in ½ lb. cartons	U.K.	25 lb.	,lъ.	0 3 4	W. T. Henley's Tele- graph Works Co. Ltd.
*1327	Insulators, Porcelain— Base, for Traction Motor connection box, to Drawing No. F. 2105	Vict.	850	each	0 2 3	Sunshine Porcelain Rotteries Pty. Ltd.
*1328	Brush Yoke, to Drawing No. F. 2104	,,	80	,,	0 2 1	Aust. Porcelain In-
† <b>*</b> 1329	Button, $1\frac{3}{4}^{m'} \times 1\frac{1}{2}^{m'} \times \frac{3}{8}^{m'}$ hole	,,	10,000	"	$0  0  1\frac{1}{2}$	
<b>†*133</b> 0	Cleat, $2\frac{1}{2}''_{  } \times 1''$ (two wires) pairs		1200	, · <b>,,</b>	0 0 3	Potteries Pty. Ltd.
<b>†*1331</b>		, ,,	800	,,,	0 0 5	Australian Porcelain Insulator Co.
†*1332	Pin Type, 6,600 volt, grooved top, brown	,,	40	,,	0 2 1	Pty. Ltd.
†1333	Pin Type, conference No. 600/0·1	,,,	80	,,	0 0 63	British General
†1334 †1335	Pin Type, conference No. 600/0 0 Pin Type, to Specification and Drawing A. 405. No. 1	,,	'250 15,000	, <b>,,</b>	0 0 5½	Nil
†*1336	Reel	,,,	500	each	0 0 ,6.	h .
†*1337	Shackle, 13" x 21" x 3" hole	,,	800	,,	004	Aust Bornolain
†*1338	Shackle, large, 4" dia. x 3" high x \frac{5}{8}" hole	, ,,	700	, ,,	0 1 0	Aust. Porcelain Insulator Co.
†1339 *1340	Strain "Egg type," 1000 V., 3½" long Tube, Ballsok, I" dia. x 12" long x ¾" hole	u".K.	· 36 250	"	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Mica & Insulating
†1341	Mica, Sheet, 6", x 4", Phlogopite, clear	,,	80 lb.	lb	1 .8 6	Supplies Co. W. G. Sleightholm
†1342	amber, to Specification Mica, Sheet, Clear, 6" x 4" (cut to size)	Aust.	, 50 ,,	,,	0 17 6	E. C. Menzies
<b>\$</b> †1343	Mica, Sheet, 8" x 4½" (cut to size), Indian	"	30 ,,	"	1 4 0	Electrical Pty. Ltd.
†1344 h	Ruby Mica, Sheet, Aust. spotted, 4" x 4" (cut to size)	,,	15 ,,	,,	0 9 3	W. G. Sleightholm
<b>†*</b> 1345	Mica Washers, $1\frac{13}{16}$ outside dia. x $\frac{15}{16}$ hole (outside edges to be polished)	,,	300 ,,	<b>"</b>	0 6 4	. ,,
†*13 <b>4</b> 6	Mica Washers, 2½" outside dia. x ½" hole (outside edges to be polished)	<b>,,</b>	500 ,,	***	0 7 6	Mica & Insulating Supplies Co.
†1347	Micanite Sheet, Flexible, 40" x 40" x 7 mils.	,,	50 ,,	,,	0 4 0	]
*1348	Micanite Tube, $\frac{21}{32}$ x $\frac{27}{32}$ , 17 long	,, .	1750	each	0 0 11	W. G. Sleightholm
1349-	1357—Nil	! '	1.			ass. s781 1781

Bondone SIA): ProgVARNISHES, F. C. Sect. 1 Je. 7

See Appendix "D" for Specification.

See Appendix "D" for Specification.								
Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor		
			1 20 (4)	arid , -	£ 's. 'd.	1,111		
	Varnish—	'	٠	1. 4. 1.	,			
†1358.	Carriage (Hard Drying), Specification D1 in ½ gallon or 1 gallon tins, as ordered,	Vict.	).	Imp.	0. 9.0	Permalac Paint & Varnish Products		
†1358A	"Permalac" Carriage (Hard Drying), Specification D1	N.S.W.	2500 gals.		0' 8'7	Taubmans Pty. Ltd.		
٠٠,	' in ½ gallon or 1 gallan tins, as ordered, "Taubmans"		] .	1, .		15.17		
. †1359	Durable (Wearing Body), Specification D1, in \frac{1}{2} or 1 gallon tins, as ordered,	Vict.	) <u>.</u>		0 9 3	Permalac Paint & Varnish Products		
†1359A	"Permalac" L. Durable (Wearing Body), Specification	N.S.W.	2750 ,,	. ,, ,,	096	Taubmans Pty. Ltd.		
	Dl, in 1 or 1 gallon tins, as ordered, "Taubmans"	,	} .	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	14, 1 % 14 . 1			
†1360	Copal, Specification, D2, in ½ gallon or 1	,,	175 ,,	',,''	0 6 0			
†1361	gallon tins, as ordered, "V.V.C." Oak, Specification D3, in 1 gallon or 1 gallon tins, as ordered, "V.V.C."	,, ,, f	250 "	<b>39</b>	0 5 10	Victoria Varnish Co.		
†1 <b>3</b> 62	Gold Size, Specification D4, in ½ gallon or 1 gallon tins, as ordered, "Oxymel"	Vict.	800 ,,	"	0 8 0	The Oxymel Oil & Paint Co. Pty. Ltd.		
†1363°;	Japan, Black, in ½ gallon or 1 gallon tins, as ordered, "Permalac,"	, ,,,,	100 "	. "	0 .7 0	Permalac Paint & Varnish Products		
†1364	Liquid Japan Drier (Terebine), Specification D6, in I gallon tins, "Sherwin Williams"	N.S.W.	)	33	054			
†1364A	Liquid Japan Drier (Terebine), Specification D6, in ½ gallon tins, "Sherwin Williams"	<b>2)</b>	\frac{1500}{,}	, <b>,,</b>	0,6,.1,	James McEwan & Co. Pty. Ltd.		
†1365	Paper, Specification D7, in ½ gallon or 1 gallon tins, as ordered, "Mirror,"	Vict.	2 "		0 9 6	S. Smith & Co.		
†1366	Spirit, White or Brown, as ordered, Specification D8, in ½ gallon or 1 gallon tins,	. "	15 "	,,	0 6 0	E. L. Yencken & Co. Pty. Ltd.		
†1367	as ordered "Goodlass Wall" Knotting, Specification D9, in 1 gallon tins, "Lewis Berger & Sons"	n.s.w.	]	, 1377	0,12,0	H. J. Corder, Pty.		
†1367A		1 33	80 ,	',r ** t;	0.12 9	Ltd		
†1368	French Polish, in ½ gallon or 1 gallon tins, as ordered, "Goodlass Wall"	Vict.	800 ,,	٠ ,,	0.7.0	E. L. Yencken & Co. Pty. Ltd.		
†1369	French Polish, White, in ½ gallon or 1 gallon tins, as ordered, "Mirror"	***	15 ,,	,,,	0 11 6	S. Smith & Co. Pty.		
†1370	Insulating, Quick Air-drying, Black, in 1 or 4 gallon tins, as ordered, "Docker's"	N.S.W.	400.; "	»,	0 .6 4	William Docker		
†1371	Insulating, Quick Air-drying Clear, in 1 or 4 gallon tins, as ordered, "Taubmans"	., ,,	, 50 ,,	<b>,,</b>	0 7 6			
†1372	Varnish, Insulating, Black, Stoving, to Specification, in 4 gal. tins, "Taubmans"	* ,,	280 ,,	<b>"</b>	0 7 6	Taubmans Pty. Ltd.		
†1373	Varnish, Bronzine, in 1 gallon tins, "Lewis Berger & Sons"	. ,,	] .	,,,,	~o′5 8 <sup>†</sup>	John Donles & Care		
†1373 <i>,</i>		,,	775 ,,	7.	0 6 5	John Danks & Son Pty. Ltd.		
†1374	Varnish, Core-plate, Clear, Quick Air-dry-	,	10,12		કોલીંક જ	} 		
†1375	ing, to Specification, in 1 gallon tins Thinners, for Items No. 1374, in 1 gallon tins		. 5 ,,	٠	•••	Nil		
1376-	1378—Nil.	١,	I ,	l .	١.	1 1845 ar. 1		

#### LIQUID DISINFECTANTS.

- 7. The Disinfectant to be supplied under Items 1379 and 1380 shall have a Rideal Walker Coefficient of not less than 5.
- 8. A 1% emulsion of the disinfectant on standing for 24 hours shall show no unsaponified oil on the surface, and also no appreciable sediment at the bottom.
- 9. When supplied in drums, each drum shall have an outlet on the end of the drum to facilitate discharge.

The rates for Items 1379 and 1380 are based on 7d, per gal, for Tar Oil, and the Contract rates shall be increased or decreased by ½d, per gal, for every variation of 1d, per gal, in the buying price of Tar Oil. The Contractor will be under obligation to supply up to 600 gals. (if ordered) before the amended rates operate.

Documentary evidence of the alteration of the maket price of Tar Oil to be submitted to the Comptroller of Stores.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Disinfectant, Liquid, to be supplied in good sound containers—				£ s. d.	
† <b>{</b> 1379	Low Grade, in 40/44 gallon returnable drums	Vict. (partly)	4000 gals.	Imp. gal.	0 1 4	
1380	Low Grade, in 4 gal. tins	"	2000 ,,	,,	0 1 51	A. B. Gibson & Sons Pty. Ltd.
†1381	Oil, Disinfectant, for use in Urinals, in 4-gallon tins "Pynex"	Vict.	700 ,,	,,	0 1 4	Pty. Ltd.
†1382	Deodorising Fluid, for Lavatory Cars, in 40/44 gal. returnable drums "Gibsonia"	Vict. (partly)	600 ,,	,, ,,	0 3 6	
1383-	Nil					

#### CANDLES, MOLASSES, SOAP, ETC.

#### SPECIFICATION FOR SOFT SOAP-Item No. 1393.

The soft soap supplied under this contract shall be of the best quality and description, and shall contain not less than 40% of fatty acids. The Soap must not become liquid at a temperature of 90 deg. Fahr., while on being cooled to 32 deg. Fahr. for twenty-four hours no liquid must separate from it. It shall contain not more than three-tenths of 1% of free caustic alkali.

Any fish oil or marine animal oil used in the manufacture of the soap must be deodorised, and no scenting material such as oil of mirbane shall be present.

The soap will be tested with cold water, and should dissolve readily and have a good lather when stirred

A sample shall be taken from each delivery or part thereof of soft soap delivered under this contract, and such sample on analysis shall agree in all respects with this Specification, and shall be similar to the accepted sample in color, textures, and in all other respects not defined in the Specification.

SPECIFICATION FOR SPECIAL AND COMMON YELLOW SOAP.— Items Nos. 1396 and 1397.

The soap shall be of the best quality and description and shall be the product derived from the action of a solution of alkali on fats, oils or resins. It shall contain not less than fifty-nine per centum (59%) of fatty acids of which not more than one-third may be resin acids, and shall contain not more than three parts per centum of carbonate of soda, and not more than one-tenth of one part per centum of free caustic alkali, and it shall not contain any other substance save water, perfume and harmless colouring matter. It shall be of good pale yellow colour and free from offensive odour.

The amount of fatty and resinous acids shall be ascertained by testing pieces cut from the centre of inside of bar.

A sample shall be taken from each delivery or part thereof of special and common yellow soap delivered under this contract, and such sample on analysis shall agree in all respects with this specification and shall be similar to the accepted sample in color, texture and in all other respects not defined in the specification.

#### CANDLES, MOLASSES, SOAP, ETC .- continued.

		ſ	1	ı —	1	1
Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Candles, Stearine, full weight or short chamber, as ordered—"Electrine"				£, s. d.	
∫1384	In 1 lb. packets, 6's	Victoria	200 1ь.	lb.	0 0 8	]
† { 1385	In 1 lb. packets, 12's	,,	1600 "	,,	0 0 8	J. Kitchen & Sons Pty. Ltd.
1386 †1387 1388	In 50 lb. or 100 lb. containers, 12's Glycerine, pure, in 4 gal. tins "Apollo" Molasses, in 40-gallon drums, supplied by Corporation at Spencer-street Receiving Depot	22 22 	2750 ,, 250 ,, 10 tons	"	$ \begin{array}{c cccc} 0 & 0 & 8\frac{1}{2} \\ 0 & 0 & 7 \\ & \cdots \end{array} $	Nil
†1389	Soap, Liquid Cleanser, in 4-gallon tins, for use in floor scrubbing "Carbolocide"	Victoria (partly)	175 gals.	gal.	0 1 6	A. B. Gibson & Sons Pty. Ltd.
<b>†139</b> 0	Soap, Powdered, in ½-lb. or 1-lb. packets, as ordered		12,000 lb.	lb.	0 0 51/2	
†1391	Soap, Sand, in boxes of 72 x 14 oz. bars, wrapped "Cameo"	N.S.W.	300 boxes	box	0 8 9	Australian Soaps Ltd
†1392	Soap, "Solvol," 6 oz. wrapped	Vict.	5000 cakes	doz.	0 3 0	J. Kitchen & Sons
†1393	Soap, Soft, to specification, in casks 3 to 4 cwt. "Kitchen's"	,,	600 cwt.	cwt.	1 3 9	f Pty. Ltd.
†1394	Soap, Toilet, in cakes, wrapped "Butter- milk"	,,,	700 lb.	lb.	0 0 5	Arthur Tilley
†1395	Soap, Toilet, in ½ oz. tablets, double- wrapped, perfumed "Violeties de Parme"		]	gross	0 5 0	J
†1395a	(car equipment, etc.)  Soap, Toilet, in ½ oz. tablets, double-wrapped, perfumed, "Bouquet of Roses" (for Chalet, Mt. Buffalo)	"	250 gross	,,	0 5 0	
$\dagger$ $\begin{cases} 1396 \\ \end{cases}$	Soap Special, Yellow, in bars, in boxes of approximately 1 cwt., to specification,		25 cwt.	cwt.	1 1 0	J. Kitchen & Sons Pty. Ltd.
1397	unwrapped "Prize Medal" Soap, Common, Yellow, in bars, in boxes, of approximately 1 cwt., unwrapped, to specification "Prize Medal"		. 600 "	,,	1 1 0	J
†1398 †1399	Soda Crystals, Washing, in bags Tapers, Wax, thick, 22" long "Prices Patent Candle Co."	U.K.	350 ,, 100 lb.	ib.	0 6 6 0 2 0	H. Segal Edward Duckett & Sons
1400-l	402—Nil.	1	1		ļ	1

#### CHEMICALS, ETC.

# 7. SPECIFICATION OF ACID, SULPHURIC, FOR STORAGE BATTERIES.— Items Nos. 1418 to 1426.

The Sulphuric Acid shall comply with Australian Engineering Standards Association Specification C. 60.

#### 8. SPECIFICATION FOR CALCIUM CARBIDE.—Items Nos. 1433 to 1434B.

The Calcium Carbide required under these items shall be delivered in air-tight metal containers, and shall be reasonably free from dust and fine particles.

The Calcium Carbide shall be reasonably free from deleterious or inert impurities, and when tested shall be of such purity that one kilogram (35.3 ounces avoir.) of the carbide, on the application of excess water thereto, shall yield not less than 250 litres (8.825 cub. ft.) of acetylene gas when collected over water saturated with sodium chloride and at temperature of 15.5 deg. C.

The acetylene gas delivered under this contract shall be tested for purity when it shall contain over 99 per cent. by volume of acetylene gas (C2H2), and moreover, when further tested for phosphine gas (PH3), shall contain not more than 0.05 per cent. by volume thereof.

The Carbide supplied under Items Nos. 1433 to 1433B shall be in lumps of the size known as 50/80 millimetres, and not less than 95 per cent. of the carbide shall be of that size.

The Carbide supplied under Items Nos. 1434 to 1434B shall be granulated of the size known as 7/15 millimetres, and not less than 95 per cent. of the Carbide shall be of that size,

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#### CHEMICALS, ETC .- continued.

#### 9. SPECIFICATION FOR MURIATE OF AMMONIA.—Item No. 1440.

General Description.—The material required under Item 1440 is Crystallised Ammonium Chloride (commonly termed Sal-Ammoniac or Muriate of Ammonia) containing not less than 99 per cent NH4Cl

Standard of Purity.—The material shall conform with the following requirements:—

- (a) The crystals and tabloids respectively shall be clean and free from odour.
- (b) 10 grammes of the material, added to 30 cubic centimeters of distilled water at 20 deg. C., should rapidly dissolve with occasional shaking to a clear solution.
- (c) The ash remaining after volatilization, by heating in a platinum dish 3 grammes of the material, should not amount to more than 0.75 per cent.
- (d) Lead, copper, and other metals. 10 cubic centimetres of 10 per cent. solution of material in distilled water should show no appreciable darkening on the addition of an equal volume of hydrogen sulphide solution.
- (e) The material shall contain-
  - (i.) Not more than 0.2 per cent. of sulphates, calculated in the form of sulphuric anhydride SO3.
  - (ii.) Not more than 0.01 per cent. of iron, calculated in the form of oxide Fe<sub>2</sub>O<sub>3</sub>.
  - (iii.) Not more than 0 001 per cent. of compounds of arsenic, calculated as the element As.

Packing.—The material shall be packed in strong, sound kegs or cases, each containing 2 cwt. The kegs or cases shall be made of dry well-seasoned new wood, of sufficient strength and suitably secured to prevent any loss of contents by leakage. The kegs or cases shall be well lined with strong brown paper.

Any delivery of second-hand, repaired, damaged, or broached kegs or cases will be liable to rejection.

Marking.—All containers shall be legibly marked in stencil, with the name of the material, the net weight of the contents, the brand or brand name, if any, and the name of the manufacturer.

- 10. Samples.—Samples shall be taken from each delivery of the items enumerated and these samples when tested in the laboratory shall conform to the specification (if any) and the specific gravities (if any) set out in the schedule.
  - 11. SPECIFICATION FOR ORANGE SHELLAC-Item No. 1445.

The Shellac shall comply with the Australian Commonwealth Engineering Standards Association Specification K. 38.

12. Acids.—The Specific Gravity at 60 deg. F. of the acids shall be as shown hereunder:—

Item. No.	Acid	Specific Gravity at 60 deg. F.
1407	Hydrochloric	Not less than 1:1725
1408-1411 1412-1413	Muriatic Nitric	Not less than 1.166 Not less than 1.400
1414	Nitric C.P	Not less than 1.400
1416-1417	Sulphuric	Not less than 1.820
1418-1421	Sulphuric for Batteries	From 1.100 to 1.215
1422-1425	Sulphuric for Batteries	From 1.216 to 1.400
1426	Sulphuric C.P	Not less than 1.840

13. SPECIFICATION FOR CAUSTIC SODA FOR SODA CELLS.—Item No. 1450.

The Caustic Soda shall be supplied in powdered form in tins, each tin containing sufficient Soda for one renewal— $36\frac{1}{2}$  ozs. plus or minus 1 oz.

The Caustic Soda shall contain not less than 98 per cent. of sodium hydrate; not more than 1 per cent. of carbonate; and not more than 0.5% of Sulpates and Chlorides.

Tins shall be of robust construction, to prevent damage to contents during transportation and storage, and shall be hermetically sealed.

As regards items 1418 to 1425, 7s. for jars and 7s. each for crates will be charged and credited if returned in good order and condition to the Contractor's works free of cost within 3 months.

Each delivery of empties should be properly reviewed, in order that due credit will be obtained, and steps should be taken to cancel any debits raised for jars found to be broken.

Each Jar of Battery Acid contains from 3 to  $3\frac{1}{2}$  gallons, and it is preferable that either weight or gallons be ordered rather than jars, which vary somewhat in size. 1206.—6

#### CHEMICALS, ETC .- continued.

It should be noted that the Commonwealth Fertilizers and Chemicals Ltd. refused to sign a contract for Items 1418 to 1425, and the arrangement may be terminated by the Corporation at any time should it so desire. Rates cover delivery to Shelter Shed, North Melbourne, for any quantity including 12 jars or more in one delivery, smaller lots being charged cartage extra, at Master Carriers' Association rates.

The containers for the items shown below shall be charged for by the Contractors on delivery, but credited to the Department on return in good order and condition at the Metropolitan Receiving Depot :-

> Bottles at 2s. each.—Item Nos. 1412, 1416, 1426, Bottles at 2s. 3d. each.—1404, 1405, 1429. Bottles at 2s. 6d. each.-1408. Bottles at 4s. each.—Item Nos. 1407, 1414, 1428. Jars at 7s. each and crates at 7s. each.—Items Nos. 1418 to 1425 (see above). Jars at 7s. each.—1409-1411, 1413, 1417, 1439. 7-9 cwt. drums £10 each.—Item 1448.

Other drums, Li each.—Item 1448.

As regards item 1446, a charge will be made for containers if other than brown paper bags and allowed on return in good order.

As regards Items 1433 to 1434B, rates are for delivery at Receiving Depot, but exclusive of stevedoring and wharfage, and sufficient time is to be allowed for importation to enable Bill of Lading to be made out in favour of Victorian Railways Commissioners so that wharfage may be cleared by Corporation. Storehouse Manager and Shipping Clerk to arrange.

Provided that satisfactory service be given, the business is to be equally divided between the three contractors.

As regards Items 1403, 1406, 1430-1432, 1435, 1440, 1441, 1443-1445, and 1451, the rates include Telegraphic Transfer Exchange between Australia and London at 25½ per cent. and if this rate of Exchange be varied during the Contract period, the difference calculated on 50 per cent., of the Contract rate shall be to the Corporation's account, and shall apply to any store that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

Rates for Items 1403, 1443-1445 are firm as regards conversion.

\*As regards Item 1448, payment is to be made on basis of £9 2s. 6d. per ton of 4.13 per cent. NaOH, any variation in this percentage as result of analysis of each delivery to be adjusted on pro rata basis.

Items 1433-1434B-Name of Manufacturer-The Australian Commonwealth Carbide Co. Ltd.

‡As regards item 1415, rate is subject to 32% discount for payment within 7 days of delivery and rate is firm for conversion and exchange.

Item No.	Description .	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
1403	Acetone, in bottles	Germany	5 lb.	lb.	£ s. d. 0 1 6	
1404	Acetic, chemically pure, glacial, in Winchesters.	Vict.	15 ,,	<b>"</b>	0 3 3	Felton, Grimwade and Duerdins Ltd.
1405	Dipping, Jewellers, in Winchesters,	, ,,	175 "	,,	0 1 9	
1406	Gallic	U.K.	110 ,	,,	0 3 9	]
1407	Hydrochloric, chemically pure, in Winchester quarts	Vict.	550 ,,	,,	0,15	Henry H. York and Co. Pty. Ltd.
1408 <sub>.</sub>	Muriatic, Hydrochloric, or Spirits of Salts, as ordered— In Winchester quarts	<b>.</b> 51	20 cwt.	cwt.	1 5 0	<u> </u>
1409	In lots of 6 jars or less	,,	5 ,,	,,	1 4 0	W. and G. Dean
1410	In lots of 7 to 18 jars	,,,	25 ,,	, ,,	1 3 0	Pty. Ltd.
1411	In lots over 18 jars	,,,	150 ,,	<b>,</b> ,	1.30	IJ···

# . CHEMICALS, ETC .- continued.

	CHEMI	CALS, E	. I.C.—continue	:u.		
Item No.	Description .	of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Nitric-				£ s. d.	
1412	In Winchester quarts	Vict.	150 lb.	lb.	0 0 10	1
1413	In lots of 6 jars or less	,,	850 ,,	,,	$0 \ 0 \ 7\frac{1}{2}$	
in 1414	Chemically pure, in Winchester	,,	300 ,,	,,	0 1 8	and Co. Pty. Ltd. Ltd.
7 1415	quarts Oxalic, in 1 cwt. Kegs or Bags	Japan	10,000 ,,	,,	‡0 0 9	Shoppee Winning
	Sulphuric					and Co.
1416	In Winchester quarts	Vict.	175 ,,	,,	0 0 2	Julian II Wall
1417	In lots of 6 jars or less	,,	1800 ,,	cwt.	0 9 0	Henry H. York and Co. Pty. Ltd.
	Sulphuric, for Storage Batteries, delivered ex Contractors' Works to Shelter Shed, North Melbourne, in 3-gallon jars—					
1418	S.G. 1 100 to 1 215— In lots of 6 to 18 jars	,,	)	lb.	$0 \ 0 \ 1\frac{3}{4}$	
1419	In lots of 19 to 35 jars	,,	]	,,	$0 \ 0 \ 1\frac{1}{2}$	
1420	In lots of 36 to 51 jars	,,		ton	14 10 0	
1421	In lots of 52 jars and over S.G. 1.216 to 1.400—	,,		,,	12 0 0	Commonwealth
1422	In lots of 6 to 18 jars	,,		lb.	$0. \ 0 \ 2\frac{1}{4}$	Fertilisers and Chemicals Ltd.
1423	In lots of 19 to 35 jars	,,		,,	0 0 13	:
1424	In lots of 36 to 51 jars	,,		ton	15 10 0	
1425	In lots of 52 jars and over	11	ļj	"	12 10 0	J .
1426	Sulphuric, chemically pure, in ½-gallon stoppered bottles, each containing 9 lb	,,	360 tb	lb.	0 1 5	Henry H. York and Co. Pty. Ltd.
1427	Aluminium Sulphate (Ice Works)	,,,	112 ,,	,,	0 0 2	Hardie Trading Pty. Ltd.
	Ammonia, Liquid, 890 S.G				·	
1428	In Winchester quarts	**	900 ,,	,,	0 0 8	H. B. Selby and Co. Pty. Ltd:
1429	Chemically pure, in Winchester quarts	,,	6 qts.	Win. quart	0 4 0	Felton Grimwade
. 1430	Beakers, Pyrex Squat, 600 ccs	U.K.	3 doz.	dozen	1 7 0	and Duerdins Ltd.
1431	Borax, Lump, in 1 cwt. bags	,,,	1 4000 11	lb.	0 0 27	
<b>1432</b>	Borax, Powdered, in 1 cwt. bags	. ,,	4000 lb.	,,	0 0 28	W. and G. Dean Pty. Ltd.
1433	Calcium, Carbide, Lump, in about 2-cwt drums, 50/80, "I.X.L."	. Tas- mania		ton	26 4 0 ex wharfage and landing charges	
1433а	Calcium, Carbide, Lump, in about 2-cwt drums, 50/80, "I.X.L."	,,,	120 tons	,,	26 4 0 ex wharfage and landing charges	
1433в	Calcium, Carbide, Lump, in about 2-cwt drums, 50/80, "I.X.L."	,,		,,	26 4 0 ex wharfage and landing charges	
	<b>.</b>	Less 3‡%	_7 days.	,	,	

## CHEMICALS, ETC .-- continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
1434	Calcium, Carbide, Granulated, in 2-cwt. drums, 7/15, "I.X.L."	Tas- mania		ton	26 4 0 ex wharfage and landing	
1434a	Calcium, Carbide, Granulated, in 2-cwt. drums, 7/15, "I.X.L."	"	18 tons	,,	charges 26 4 0 ex wharfage and landing	Allen - Liversidge (Australia) Ltd
1434в	Calcium Carbide, Granulated, in 2-cwt. drums, 7/15, "I.X.L."	1,		,,	charges 26 4 0 ex wharfage and landing	
1435	Calcium Chloride, 70/75% in 600 lb. drums (Ice Works)	U.K.	5 ,,	,,	charges 8 8 0	Brunner Mond and Co. (Austra- lasia) Pty. Ltd.
1436	Carbon, Bi-Sulph., in 5 gal. drums of 64 lb. in crates	Vict.	2000 gals.	drum 64 lb. nett	1 14 6	
	Carbon, Tetra Chloride, S.G. 1.6—					Honor II V. d
1437	In 40 gal. drums	,,	12 cwt.	lb.	0 0 10	Henry H. York
1438	In 5 gal. drums	,,	70 "	,,	0 0 10	Ltd.
1439 †1440	Formalin, Liquid, in 3 gal. jars Muriate of Ammonia, 99/100% (Sal Am- moniac) No. 1 Fine, in 2 cwt. kegs	uK.	1200 lb. 25 cwt.	,, ton	$\begin{bmatrix} 0 & 0 & 7\frac{1}{2} \\ 31 & 1 & 0 \end{bmatrix}$	Brunner Mond
1441	Muriate of Ammonia, 99/100% (Sal Ammoniac) Lump, in 1 cwt. kegs	"	5 ,,	,,	60 9 0	and Co. (Austra- lasia) Pty. Ltd.
1442	Salt, Common White, fine, for Caseharden- ing		30 "			Nil
1443	Shellac, Brown, in cases of 165 lb	India	600 lb.	IЬ.	0 1 8	Robert Bryce and
1444	Shellac, Button, for French Polishing, in cases of 165 lbs.	,,	350 ,,	",	0 1 8	and Co. Pty.  Ltd.
1445	Shellac, Orange	,,	450 ,,	1,	0 1 7½	Felton Grimwade and Duerdins Ld.
1446	Silver, Nitrate of, Crystal, in paper bags	Vict.	25 ,,	oz.	0 1 11	Kodak (Austra- lasia) Pty. Ltd.
†1447	Soda, Caustic, Lump, minimun 94 per cent. NaOH, in drums	,,	30 tons	ton	26 0 0	Ty. Eta.
†1448 :	Soda, Caustic, Liquid, 41.3 per cent. NaOH, in drums of 16 or 10 to the ton, or 7/9 cwt. each	"	20 ,,	,,	*9 2 6	Commonwealth Fertilisers and Chemicals Ltd.
†1449	Soda, Caustic, Powdered, 1-lb. tins, 98/99 per cent., NaOH, in case lots	Vict. (partly)	1750 tins	doz.	0 6 9	J
1450	Soda, Caustic, Powdered, for Soda Cells, to Specification, in tins of 36½ ounces, plus or	.,	3500 ,,	tin	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Associated General Electric Indus
<b>1451</b>	minus 1 oz. Sodium, Bi-Carbonate	U.K.	440 lb.	lb.	0 0 2	tries Ltd. 🚭
1452	Sulphur, Flowers of	Vict.	250 ,,	,,	0 0 2	Pty. Ltd. H. B. Selby & Co.
1453	Tri-Sodium, Phosphate (for Electro-	(partly) Vict.	250 ,,	,,	0 0 41	Pty. Ltd. Henry H. York & Co.
1454	Platers use) Tubes, Glass, charged with 90 per cent. Sulphuric Acid, with blue bead, for Conical Fire Extinguishers, to Litho. No.	(partly)	1500	each	0 1 3	Pty. Ltd. Felton Grimwade
1455	148/25 amended 28/1/28 Tubes, Glass, charged with 90 per cent. Sulphuric Acid, with red bead, for Cylindrical Fire Extinguishers, to Litho. No. 148/25 amended 28/1/28	».	<b>35</b> 0 .	"	0 1 3	& Duerdins Ltd.
1456-	1458—Nil		1.		Ì	

#### COPPER PRODUCTS

(See Appendix "E" for Specification).

With the exception of Items 1459 to 1486, and 1504, 1508a 1509, the rates include wharfage—and in the event of the material requiring to be imported after receipt of an order, and if the quantity involved is sufficient to warrant action being taken, it is desired that the material be consigned to the Comptroller of Stores of the Victorian Railways Department in order that the benefit of free wharfage may be obtained. Officers ordering to arrange accordingly.

Wharfage will be cleared by the Corporation and the Delivery Order returned to the Contractor to complete delivery. The amount involved will be deducted from the Contractor's invoice.

Delivery.—Items Nos. 1459 to 1503, 1505 to 1507 and 1509, at the Metropolitan Receiving Depot, Spencer-street.

Items Nos. 1504, 1508 and 1508a at the Corporation's Jolimont Workshops Store, Batmanavenue, Melbourne, and the weights as ascertained at the time of delivery at these depots shall be accepted.

† As regards Items 1459 to 1486 and 1509, the rates do not include wharfage and are based on the price of £45 per ton, which is the equivalent in Australian currency for Electrolytic Copper Wire Bars and are to be varied up or down by 1/10th of a penny per lb. of tubes for each complete 20s. or part thereof by which the price in Australian currency of wire bars on the date of receipt of order is greater than £45/19/11d., or less than £45 per ton respectively.

The equivalent in Australian currency of the Londan Metal Exchange price for Electrolytic Copper Wire Bars is the London Metal Exchange rate for E.C. Wire bars as issued by the Australian Mines and Metals Association, plus the percentage as is quoted by the Commonwealth Bank as their buying rate for T.T. on London.

If on any day no price of wire bars is published or if no T.T. Exchange rate is quoted, the rates last issue shall apply in either or both cases.

In the case of a dispute concerning the published buying rate; for telegraphic transfer on London, the figures advised by the Commonwealth Bank as last published by them prior to the day of receipt of the order, shall be mutually accepted.

Extras for small quantities.—Items 1459-1486 and 1509.

Weight per lineal foot in lbs.

				,, 0.2	, Por			
Weight of each Item.			under 0.10	0.10 and under 0.25	0.25 and under 0.5	0.5 and under 1.5	1.5 and under 5.0	5.0 and over.
Under 20 lb. 20 lbs. and under 50 lb. 50 lbs. and under 100 lb. 100 lbs. and under 200 lb. 200 lbs. and under 500 lb.	  		2.5 1.5 0.7 Nil Nil	4.0 2.0 1.0 0.5 Nil	Extra in 6.0 3.0 1.5 0.7 Nil	9.0 4.5 2.0 1.0 0.5	12.0 8.0 4.0 2.0 0.7	16.0 12.0 8.0 4.0 1.0

Orders will be subject to confirmation before acceptance with the reservation that in the event of an increased rate being required, the Corporation may determine the contract in so far as the item in question is concerned, if it so desires.

Orders under 3 cwt. will be packed and delivered with orders over 3 cwt. If separate delivery of orders under 3 cwt. be required, packing and forwarding charges will be extra to Corporation's account.

Delivery.-Five to six weeks shall be allowed for delivery.

† As regards Items 1488 to 1501 and 1508 (Austral Bronze Co. Ltd.) the rates are based on Electrolytic Copper Wire Bars at £35 per ton, plus T.T. Exchange at 25% which is the Australian equivalent price of E.C. Wire bars and are subject to the corresponding variation in the Australian equivalent price of Electrolytic Copper Wire bars according to the London metal quotations as published in the Argus on date of receipt of order and the buying rate for T.T. on London.

If on any day no price of wire bars is published, or if no Telegraphic Transfer Exchange rate is quoted, the rates last issued shall apply in either or both cases.

In the case of a dispute concerning the published price of wire bars the figures advised by by the Australian Mines and Metals Association as last received from London Metal Exchange prior to the date of acceptance of order shall be mutually accepted. Similarly in the event of a dispute concerning the Telegraphic Transfer Exchange rate, the figures advised by the Commonwealth Bank as last published by them prior to date of receipt of order shall apply.

# 524 COPPER PRODUCTS—continued.

 $\dagger$  As regards Items 1502 and 1503, the rates are based on £45 per ton, which is the Australian equivalent of the London price for Electrolytic Copper Wire Bars published in the Argus and are to be varied 1/10th of a penny per lb. of sheets for each complete 20s. or part thereof per ton by which the Australian equivalent price published in the Argus on the date of receipt of order is greater than £45 per ton or less than £45 per ton respectively. If on any day no price of wire bars is published, the price last published shall apply. If no buying rate is quoted by the Commonwealth Bank for T.T. on London on any day, the rate last published shall apply.

† As regards Items 1505 to 1507, the rates are based on £44/13/9d. per ton, which is the equivalent in Australian currency for Electrolytic Copper Wire Bars, and are to be varied up or down by 1/10th of a penny per lb. of copper for each complete 20s. or part thereof by which the price in Australian currency of wire bars published on the date of receipt of order is greater than £44/19/11d. or less than £44 per ton respectively. Same stipulations and adjustments in this regard apply as shown for Items 1459 to 1486, and 1509 above.

Rates quoted are for orders of not less than three standard coils of approximately 130 lb. each at one time. Orders for quantities of less than three coils will be charged ½d. per lb. extra.

Delivery .- One month from receipt of order.

† As regards Items 1504 and 1508a the rates are based on Electrolytic Copper Wire Bars at a minimum of £40 per ton. Any rise in the price of Electrolytic Copper Wire Bars above £40 per ton, as published in the *Argus* on that date of receipt of order, will be added to the contract rates.

As regards the Contract with the Austral Bronze Co., should there be any variation in the N.S.W. State basic wage from  $f_3/8/6d$ , per week during the Contract period, the Contract rates, with the exception of that for Item 1487, shall be varied in accordance therewith at the rate of 4s. 6d. per ton for every 1s. per week increase or decrease in the basic wage, the amended rates to apply to all incomplete orders at the date of such amendment.

The rate for Item 1487 is firm as regards E.C.W. bars and wages.

As regards Items 1508 and 1508a 75% of requirements should be ordered on Austral Bronze Co. and 25% on Brass Co. of Australia. Estimated requirements have been amended accordingly.

Item No.		. 1	Descriptio	n		Country of Manuf're	Estima Requires		Rate per		Rate	Name of Contractor
1459		'Metal	Manuf	rawn, in 1 actures Pt outside	y. Ltd."		2	cwt.	lb.	£	s. d.	
1460	18	,,	<u>5</u> "	**	···	,,	15	,,	, ,,	†0	1 5.	
1461	16	,,	1"	,,	••••	,,,	· 1	,,	,,.	†0	1 5.9	
1462	16	,,	5 <b>"</b>	,,		,,	1	,,	,,	†0	1 5.9	
1463	16	,,	3/ 8	**	•…	٠,,	10	,,	,,,	†0	1 4.5	
1464	16	,,	1 "	**	•••	,,	12	,,	٠,,	<b>†</b> 0.	1 4.2	
1465	14	<b>"</b> .	1/2"	**		,,	20	,,	,, ,	<del>1</del> 0	1 3.6	
1466	14	,,	<u>5</u> "	<b>"</b> .	,	,,	20	"	,,	†0	1 2.9	
1467	14	,,	3 °	**	•••	,,	18	"	,,	†0	1 2.9	Co.
1468	14	,,	$1\frac{1}{2}''$	,,	•••	,,	1	. ,,	• • • • • • • • • • • • • • • • • • • •	†0	1 1.5	
1469	12	,,	1"	, ,,		,,	70	,,	,,	†0	1 1.8	
1470	12	,,	1 <del>1</del> ″	,,		,,	40	,,	,,	†0	1 1.1	
1471	12	,,	$1\frac{1}{2}''$	19	•	,,	12	,,	,,	<b>†</b> 0	1 0.9	·
1472	-10	"	1½"	11	٠	. ,,	25	,,	,,	†0	1 0.9	<u> </u>
1473	10	,,	13"	· "…		٠ ,,	50	,,	,,	†0	1 . 0.9	
1474	10	,,	2,"		·	, ,,	15	٠ ,, .	<b>,</b> , .	10.	1 0.9	]



## COPPER PRODUCTS-continued.

Item No.	Description		Country of Manuf're	Estim Require		Rate		Raf	te	Name of Contractor
	Copper Tubing, Solid Drawn, in I lengths, "Metal Manufactures Po —continued	y. Ltd."			_		£	8,	d.	
1475	10 S.W. gauge, 21" outside of	Dameter	N.S.W.	15	lb.	lb.	†0 	1	0.9	
1476	10 ,, $2\frac{1}{2}$ ,		,,	1	,,	,,,	†0	1	0.9	
1477	8 " 1" "		,,	25	,,	"	10	1	2.3	
1478	<sup>3</sup> / <sub>16</sub> ". 4" "		"	1	**	,,	<b>†</b> 0	I	0.9	
1479	3." 5 <u>1</u> " ,,	.	,,	60	"	,,	†0	1	1.4	
1480	3." 5½" ,,		,,	80	**	,,	†0	1	1.4	
1481	₹″ 3½″ ",		"	1	"	,,	†0	1	0.9	Co.
1482	<u></u> 4¾″ ,,		"	1	,,	,,	<b>†</b> 0	1	1.4	
1483	$\frac{1}{4}$ " $5\frac{1}{2}$ " ,		,,	. 1	,,	,,	†0	1	1.4	
1484	1" 6" ,,	.	,,	5	"	,,	†0	1	1.4	
1485	½" 6½" ,,	.	"	5	"	,,	†0	1	i.8	
1486	5.0 410			200	,,	,,	0	1	1.4	
		· Auctral	"	25			0	1	$3\frac{1}{2}$	
1487	Copper Phosphor, 15 per cent., 'Bronze'	Austrai	**	20	; »	**		1	02	
1488	Copper Rod, Electrolytic-Austral	Bronze	,,	} 25		,,	†0	0	101	-
1489	3" diameter	•••	,,	3	"	,,,	<b>†</b> 0	0	101	
1490	<del>5</del> ″ ,,		,,	20	,,	"	<b>†</b> 0	0	10‡	
1491	3″ ,,		. , ,,	, 80	, ,,	,,	<b>†</b> 0	0	10 <del>1</del>	
1492	<u>1</u> " ,,		,,	400	,,	,,	<b>†</b> 0	0	101	
1493	<b>7</b> ″		**	3500	».	١,,	<b>†</b> 0	0	101	Austral Bronze Co.
1100	Copper Rod for Loco. Fire Boxes	Rolled-								
1494	7" diameter 1"		,,	1 40	ton	ton	†89 †89			
$1495 \\ 1496$	1-1/16" ",		"	10	"	,,	189	5	5 0	11
1497	$1\frac{1}{8}''$ ,,	. •••	,,	3	,,	. ,,	189			
1498	1-3/16" ,,	•••	**	5	cwt.	,,	†89 †89			
1499	$1\frac{1}{4}''$ ,, $1\frac{3}{4}''$ ,		"	10	"	,,	189			11
1500 1501	l 1¼" ",		,,	3	,,	1	<b>†</b> 89	ŧ	5 0	J
1502	Copper Sheet, best hard rolled, N	os. 10 to	,,	25	**	lb.	10	.1	$3\frac{1}{2}$	
	34 Birmingham Sheet Gauges,	" Austral		ļ			1			
	Bronze," in any of the following to	aue sizes								11 .
<b>\$</b>	and gauges as ordered— 10 to 26 gauge 8' x 4', 8' x 3'	6' x 4'.				1				
<u>.</u>	$6' \times 3'$ , $6' \times 2'$ , $6' \times 2\frac{1}{2}'$ , $4' \times 1$	2'.								Geo. White & Co.
	27 to 30 gauge, 6' x 2', 6' x 1½ 31 to 34 gauge, in strips not	', 4′ x 2′.								Pty. Ltd.
	in width	0001 12	!			į				
1503	Copper Sheet, best soft rolled, N	os. 10 to	,,	70	,,	,,	<b>†</b> 0	1	$2\frac{1}{2}$	J
1000	34 Birmingham Sheet Gauge,	" Austral					1		_	
	Bronze," any size and gauge or	dered, as	i							
	shown for Item 1502			1000	11-		10	ο	111	Extended Matala
*1504	Copper Angle for contactor tips	, "Brass	Vict.	1200	10.	,,	10	·	111	Extruded Metals Pty. Ltd.
1505	Copper Strip, Hard Drawn, No. 10	S.W.G.,	N.S.W.	360	feet	,,	10	1	2	1
	21" wide, to be supplied in stan	dard coils	i]	1						British Insulated
	of 130 lb., "Metal Manufact	ures Pty.	1				ľ			Cables Ltd.
	Ltd."	4	1.	i		1 .				11

#### COPPER PRODUCTS-continued.

Item No.	., - Description	Country of Manuf're	Estimated Requirements	Rate per	Rate .	Name of Contractor
1506	Copper Strip, Hard Drawn, No. 10 S.W.G., 1½" wide, to be supplied in standard coils of 130 lb. or in straight lengths of not less than 12 feet, "Metal Manufactures Pty. Ltd."	N.S.W.	2000 feet	lb.	£ s. d.	British Insulated Cables Ltd.
1507	Copper Strip, Half Moon, to Drawing No. 1131, manufactured from new material, and in coils of approx. 80 to 112 lb., "Metal Manufactures Pty. Ltd."	,,	4000 ,,	,,	†0 1 10	
1508	Copper Strip, for Pantographs, to Specification, "Austral Bronze"	" ]	18,750 lb.	,,	†0 0 11	Austral Bronze Co
1508a		Vict.∫	`6250 lb.	,,	†0 0 11½	Extruded Metals Pty. Ltd.
1509 1510-	Copper Tube, Seamless, 1 143" internal dia., 13 S. W.G. (to Specification), "Metal Manufactures Pty. Ltd."	N.S.W.	6000 feet	,,	†0 1 1.8	Knox, Schlapp & Co.

#### METALS.—ALUMINIUM, ANTIMONY, BRASS, LEAD AND ZINC.

(See Appendix "F" for Specification).

Delivery.—All materials specified in this schedule shall be delivered to the Metropolitan Receiving Depot, and the weights as ascertained at the time of delivery at that depot shall be accepted.

† As regards Items Nos. 1515 to 1568 (Austral Bronze Co. Ltd.), the rates are based on Electrolytic Copper Bars Wire at over £25 to £35 per ton and will vary by 2s. 4d. per cwt. when the published price of Electrolytic Copper Wire Bars in the Argus newspaper on the date of receipt of order by the Contractor, is over £35 to £45, and a further 2s. 4d. per cwt. for every £5 or part per ton additional increase in the published price at such date.

† As regards Items Nos. 1604 to 1617, the rates are based on Electrolytic Copper Wire Bars at £45 per ton which is the Australian equivalent of the London Metal Exchange price for Electrolytic Copper Wire Bars, and will vary up or down by one-tenth of a penny per lb., for each complete £1 or part thereof by which the Australian equivalent price of Wire Bars published in the Argus newspaper on the date of receipt of an order is greater than £45 per ton or less than £45 per ton. If on any day no price of Wire Bars is published the price last published shall apply. If no buying rate is quoted by the Commonwealth Bank for T.T. on London on any day, the rate last published shall apply.

† The Lead (Item No. 1618) shall be paid for at the latest cabled London market spot price for pig lead quoted in the Melbourne morning daily newspapers at date of receipt of the order (unless, in the judgment of the Comptroller of Stores, the price quoted as aforesaid does not correctly represent the spot market price for pig lead prevailing on the day of the date of such cabled market spot price) plus £4 per ton, always provided that if, in the judgment of the Comptroller of Stores, the cabled market spot price quoted as aforesaid in the Melbourne morning daily newspapers, or any of them, does not correctly represent the market price for pig lead prevailing on the day of the date of such cabled market price, then the market prevailing on such day shall be determined by the Comptroller of Stores on evidence satisfactory to him, and such determination by the Comptroller of Stores shall be final and binding, and the rate of payment for the lead referred to on the particular order shall be in accordance with the price so determined by the Comptroller of Stores, plus £4 per ton. The rate is based on 25½% Telegraphic Transfer between Australia and London, any variation at the date of receipt of order to Corporations account and shall only apply to the London cable spot price referred to.

† The Lead (Item No. 1620) shall be paid for at the published daily official price of the Aust. Mines and Metals Association for spot pig lead, on the date of receipt of order, plus £13 per ton.

† The Zinc (Item No. 1624) shall be paid for at the mean of the spot and forward prices of spelter on the London market as published in the "Argus" on the date of receipt of order, plus £8 per ton.

The rates for Items No. 1625 and 1626 are firm.

As regards the contract with the Austral Bronze Co. Ltd. should there be any variation in the N.S.W. State basic wage from £3 8s. 6d. per week during the contract period, the contract rates shall be varied in accordance therewith at the rate of 4s. 6d. per ton for every 1s. per week increase or decrease in the basic wage, the amended rates to apply to all incomplete orders at the date of such amendment, and it shall be the obligation of the Contractor within the meaning of clause 21 of the conditions of contract to advise the Comptroller of Stores of such alteration.

# METALS—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
†1513	Aluminium, Ingot		15 cwt,		£ s. d.	)
†1514	Antimony, Ingot, Regulus of, 99.5 per cent.		500 ,,			Nil
	pure					
<b>*</b>	BRASS. Brass, Rod, Hexagon, in 6' to 8' lengths, Whitworth Standard—"Austral Bronze"					
1515	min. max. 0·187" 0·190" width across flats	N.S.W.	J .	cwt.	†3 14 8	<b>η</b> .
1516	0.250" 0.253" ,, ,, ,,	,,		,,	†3 14 8	
1517	0.334" 0.338" ,, ,, ,, for \frac{1}{8}" nuts	,,		,,	†2 18 4	
1518	0.440" 0.445" ,, ,, ,, ,, 3, ",	,,		,,	†2 18 4	
1519	0·498" 0·502" ,, ,, ,, ,, 1 "R.S.A.	,,	.	,,	†2 18 4	·
1520	special nuts 0.520" 0.525" width across flats for \frac{1}{2}" ,,	,,	-	,,	†2 18 4	•
1521	0.595" 0.600" ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	,,	,	,,	†2 18 4	
1522	0.705" 0.710" ,, ,, ,, ,, ,, ,, ,,	,,		,,	†2 18 4	
1523	0.750" 0.755"	,,		,,	†2 18 4	
. 1524	$0.815''$ 0.820" width across flats for $\frac{7}{16}$ " nuts	,,	•	,,	†2 18 4	
1525	0.915" 0.920" ,, ,, ,, ,, ½" ,,	,,	].	,,	†2 18 4	
1526	1.002" 1.010" ,, ,, ,, ,, ,, ,, ,,	,,	-   \} 400 ,,	**	†2 18 4	
1527	1.092" 1.100" ,, ,, ,, ,, §" ,,	,,		. ,,	†2 18 4	
1528	1.192" 1.200" ,, ,, ,, ,, ,, ,, ,,	, ,,		,,	†2 18 4	
1529	1.292" 1.300" ,, ,, ,, ,, 3" ,,	,,		,,	†2 18 4	<u>;</u>
1530	1.382" 1.390" ,, ,, ,, ,, 13" ,,	"		,,	†2 18 4	Austral Bronze Co.
1531	1.468" 1.480" ,, ,, ,, ,, ,, ,, ,,	,,		,,	†2 18 4	Ltd.
1532	1.658" 1.670" ,, ,, ,, ,, 1" ,,	,,	·	,,	<b>†</b> 2 18 <b>4</b>	
1533	1.845" 1.860" ,, ,, ,, 11" ,,	,,		٠,,,	†2 18 4	
1534	2.035" 2.050" ,, ,, ,, 11" ,,	**		,,	†2 18 4	
1535	2.200" 2.220" ,, ,, ,, 13" ,,	**	·	,,	†2 18 4	
1536	2.390" 2.410" ,, ,, ,, ,, ,, ,, ,, ,, ,,	,,		. ,,	†2 18 4	
<b>∌</b> <sup>1537</sup>	2.555" 2.580" ,, ,, ,, ,, 18" ,,	,,		<b>,,</b> .	†2 18 <b>4</b> .	
$\frac{1537}{1538}$	2.735" 2.760" ,, ,, ,, ,, 13" ,,	,,		,,	†2 18 4	
	Brass, Rod, Round, in 6' to 8' lengths for general use, or drop forgings, as ordered— "Austral Bronze"	<i>.</i>		ļ	;	
1539	18" diameter	**		,,	†3.18 4	
1540	3/ ,,	• ••		,,	†3 10 0	
1541	<u>1</u> " ,,	, ,,,	See next.	,,	†2 18 4	
1542	5″ . ,,	,,		,,	†2 18 4	·
1543	g", i	. "	4	] ,,	†2 18 4	1

Victoria Carette

## METALS—continued.

528

Item No.	Description		Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Brass, Rod, Round, in 6' to "Austral Bronze"—contin	8' lengths nued				£ s. d.	
1544	ης″ diameter		N.S.W.		cwt.	†2 18 4	1
1545	1." , "		,,		,,	†2 18 4	
1546	9." 16"· · · · ·		,,		,,	†2 18 4	4
1547	5″,		,,		. " .	†2 18 4	
1548	16" ,,		,,		,,	†2 18 4	
1549	₹″ ,,		,,		,,	†2 18 4	
1550	13." ,,		,,	·	,,	†2 18 4	•
1551	7" "	•••	,,		,,	†2 18 4	;
• 1552	18″ ,,	•;•	,,		,,	†2 18 4	
1553	1″ ,,	•••	,,		,,	†2 18 4	
1554	11/8" ,,	•••	, ,,		,,	†2 18 4	
1555	1 13 " ,,		,,		,,	†2 18 4	
1556	11,4" ,,		,,,	175 cwt.	"	†2 18 4	Austral Bronze Co.
1557	13." ,,		,,	175 cwt.	,,	†2 18 4	Ltd.
1558	1½",,		,,		,,	†2 18 4	
1559	15″ ,,		,,		".	†2 18 4	
1560	13" ,,		,,		"	,†2 18 <b>4</b>	
1561	17,,		.,,		,,	†2 18 4	
1562	2″ ,,		. ,,		,,	†2 18 4	
1563	21," ,,		,,		,,	†2 18 4	
1564	2½" ,,		. ,,.		,,	†2 18 4	
1565	25," ,,		.,,		,,	†2 18 4	
1566	23," ,,	<i></i>	.,,		,,	†2 18 4	
1567	3″ "		.,,		,,	†2 18 4	
1568	Brass Rod, Square, in 6' to 8	3' lengths—	. "	, l "	,,	†2 18 4	
	Brass Sheet, hard rolled, as "Defence Dept.—Ammur	s specified— nition Factory"					
1569	6' x 2' x 30 B. gauge		. Vict.		lb.	0 1 3	h
1570	6' x 2' x 28 B. gauge		. ,,	,	,,	0 1 2	
1571	6' x 2' x 26 B. gauge		. , ,,		,,	0 1 03	
1572	6' x 2' x 24 B. gauge		,,		.,	0 1 01	Noyes Bros. (Melb.
1573	6' x 2' x 22 B. gauge		., ,,	1	,,	0 1 0	ll Tiy. Dia.
1574	6' x 2' x 20 or 18 B. gauge		,,	See next	,,	0 0 113	
1575	6' x 2' x,16, 14 or 12'B. ga	uge	į . ",	page	,,,	0 0 11	1 · 3-11A

# METALS—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
1576	Brass, Sheet, hard rolled, as specified— continued 6' x 2' x 10 B. gauge	Vict.	) }.	lb.	£ s. d.	
1577	6' x 2' x any of the following thicknesses as ordered: $-\frac{3}{16}''$ , $\frac{1}{4}''$ , or $\frac{5}{16}''$	, 27		,,	0 1 3	
<b>3</b> -1578	6' x 3' x 24 B. gauge	. "		,,	0 1 11	<b>                                     </b>
1579	6' x 3' x 20 or 18 B. gauge	,,		•,	0 1 0	i
1580	6' x 3' x 16, 14 or 12 B. gauge	,,		,,,	0 1 01	[·]
1581	6' x 3' x 10 B. gauge	,,	30 cwt.	,,	0 1 01	
1582	4' x 2' x 30 B. gauge	,,		,,	0 1 3	
1583	4' x 2' x 28 B. gauge	**	,	,,	0 1 2	
1584	4' x 2' x 26 B. gauge	,,		,,	0 1 03	<u> </u>
1585	4' x 2' x 24 B. gauge	,,	:	,,	0 1 01	
1586	4' x 2' x 22 B. gauge	,,		,,	0 1 0	
1587	4' x 2' x 20 or 18, B. gauge	<b>"</b> .		,,	0 0 113	11
1588	4' x 2' x 16, 14 or 12 B. gauge	,,		,,	0 0 111	Noyes Bros. (Melb.) Pty. Ltd.
1589	4' x 2' x 10 B. gauge Brass, Sheet, annealed as specified— "Defence Dept. Ammunition Factory"	;,, ;	<b> </b>	,,	0 0 111	
1590	6' or 4' x 2' x 30 B. gauge	'>>		,,	0 1 3	<u> </u>
1591	6' or 4' x 2' x 28 B. gauge	,,		,,	0 1 2	,
1592	6' or 4' x 2' x 26 B. gauge	,,		,,	0 1 0	
1593	6' or 4' x 2' x 24 B. gauge	,,		,,	0 1 01	
1594	6' or 4' x 2' x 22 B, gauge	,,		,,	0 1 0	•
1595	· 6' or 4' x 2' x 20 or 18 B. gauge	,,		,,	0 0 113	
1596	6' or 4' x 2' x 16, 14 or 12 B. gauge	."		,,	.0 0 117	
1597	6' or 4' x 2' x 10, 9 or 8 B. gauge	,,	} 14 ,,	,,	0 0 111	
1598	6' x 2' x 3" or 1" thick	,,	;	,,	0 1 3	
1599	4' x 1' x ½", ½", ¾", ½" or 1"	,,		,,	0 1 3	
1600	6' x 3' x 22 B. gauge	,,		,,	0 1 1	,
<b>2</b> 1601	6' x 3' x 20 or 18 B. gauge	,,		,,	0 1 03	
1602	6' x 3' x 16, 14 or 12 B. gauge	1,		,,	0 1 01	
1603	6' x 3' x 10 B. gauge Brass Tubing (except Boiler Tubes), solid drawn, any length ordered—" Metal	,,		<b>.</b> .	0 1 01	
1604	Manufactures Ltd."  1" outside diameter x 26, 24, 22, 18 or 16 S.W. gauges, as ordered	N.S.W.	h .	,,	† 0 2 4	
1605	5/16" outside diameter x 24, 20, 18 or 16	,,	Sac nout	,,	† 0 2 4	Coo White & C
1606	S.W. gauges, as ordered as outside diameter x 20, 18, 16, 14, 12 or	. ",	See next page -	,,	† 0 1 114	Geo. White & Co. Pty. Ltd.
1607	10 S.W. gauges, as ordered 7/16" outside diameter x 20, 18, 16 or 14 S.W. gauges, as ordered	,,		,,	† 0 1 11;	

# METALS—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Brass Tubing (except Boiler Tubes), solid drawn, any length ordered—" Metal Manufactures Ltd."—continued—				£ s. d.	
1608	½" outside diameter x 20, 18, 16, 14 or 10 S.W. gauges, as ordered	Ņ.S.W.	·	lb.	† 0 1 10½	)
1609	9/16" outside diameter x 20, 18 or 16 S.W. gauges, as ordered	,,,		<b>"</b> .	† 0 1 10½	
1610	§" outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	,,		,,	$0 \ 1 \ 9\frac{1}{2}$	<b>~</b>
1611	3" outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	,,		,,	† 0 1 8	
1612	13/16" outside diameter x 22, 16 or 10 S.W. gauges, as ordered	,,	1500 lb.	,,	† 0 1 8	Geo. White & Co. Pty. Ltd.
1613	7 outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	,,		,,	† 0 1 9	
1614	1" outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	,,		,,	† 0 1 8	
1615	1½" outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	,, .	:   	,,	† 0 1 8	
1616	11" outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	,,	•	,,	† 0 1 8	
1617	$1\frac{1}{2}''$ outside diameter x 20, 18, 16, 14, 12, or 10 S.W. gauges, as ordered	٠,,	IJ	. ,,	† 0 1 8	J
•	LEAD.				Spot . market	
†1618	Lead, Pig, soft (remelted)	Vict.	20 tons	ton	price plus	The Moreland Metal
†1619	Lead, Pig, soft, produced from new ma-	S.A.	3 ,,	,,	17_0 0	Co. Ltd. Walter Coop
	terial			ļ	Nett Spot	<u>}</u> .
					Pig Lead market	
†1620	Lead, Sheet, any thicknesses ordered, and cut to any sizes ordered	Vict.	8 ,,	,,	price plus	John Danks & Son Pty. Ltd.
	Antimonial Lead Strip, extruded, in rolls, to Specification—"J. McIlwraith & Co. Pty. Ltd.	,				
1621	2" wide x 125" thick	**	28 cwt.	cwt.	1 15 0	,
1622	2" wide x '06" thick	· "	28 ,,	,,	2 0 0	John McIllwraith & Co. Pty. Ltd.
1623	1 9 wide x 06" thick	"	9 ,,	,,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	J
		1			Mean of spot &	
					forward market	
	ZINC		,		price of spelter,	, -
1624	Zinc, Electrolytic, 99.9 per cent. " Electro-	Tas.	75 ,,	ton	† 8 0 0	Briscoe & Co. Ltd.
†1625	lytic Zinc Coy." Zinc, Sheet, Perforated, 84 holes to the	U.K.	50 sq. ft.	sg. ft.	0 0 2	) ·
	square inch, each hole 0.085" diameter, No. 6 Zinc Gauge (0.011"), in sheets 7' 0" x 3' 0" or 8' 0" x 3' 0", as	,			Nett	 
†1626	ordered Zinc, Plain, No. 8 Zinc Gauge (0.015"), 9 Zinc Gauge (0.017"), 10 Zinc Gauge (0.019"), 11 Zinc Gauge (0.021"), 12 Zinc Gauge (0.025"), 13 Zinc Gauge (0.028"),	Belgium	5 cwt.	cwt.	2 6 0	Edward Duckett & Sons
	13 Zinc Gauge (0.028), 14 Zinc Gauge (0.031"); 20 Zinc Gauge (0.070"),	:	,		1	
	as ordered, by any size ordered "Veille Montagne"	;	,			
1627-	1630 Nil	, ,			1	<u> </u>

#### TAPS, DIES AND CHASERS

#### SPECIFICATION FOR TAPS-Items Nos. 1631 to 1707.

9. Particulars.—The Taps shall be of the very best quality material and workmanship, and shall be free from all injurious defects.

The Taps set opposite Items 1631 to 1666 shall be Standard Whitworth Hand Taps.

The Taps set opposite Items 1667 to 1675 shall be Standard Gas Hand Taps and shall be supplied in sets, each set comprising one Taper and one Plug Tap.

The Taps set opposite *Items* 1676 to 1684 shall be Whitworth thread and shall be suitable for use with a National Nut Tapping Machine, and shall be in accordance with the particulars shown on V.R. Drawing No. 8920.1.

The Taps set opposite Items 1685 to 1690 shall be suitable for use with a National Nut Tapping Machine, and shall be in accordance with the particulars shown on V.R. Drawing No. 8920.2.

The Taps set opposite Items 1691 to 1703 shall be Standard Whitworth Taps, suitable for use with Horizontal Tapping Machines. Items 1691 to 1693 and 1699 to 1701 shall be in accordance with V.R. Drawing No. 8920 1 Items 1694 to 1698 and 1702 to 1703 shall be in accordance with V.R. Drawing No. 8920 3.

The Taps set opposite Items 1704 to 1707 shall be similar to the "B.A." long pattern.

All taps shall be right hand, unless stated otherwise.

Limits of Tolerance.—The Taps shall be true to the specified dimensions within the following limits of tolerance:—

Items 1631 to 1675 and 1704 to 1707-Minus, Nil. Plus, 0.003 in. of the diam.

Items 1676 to 1684, 1691 to 1693 and 1699 to 1701, as shown on V.R. Drawing No. 8920 1. Items 1685 to 1690 as shown on V.R. Drawing No. 8920 2.

Items 1694 to 1698 and 1702 to 1703 as shown on V.R. Drawing 8920:3.

Items 1691 to 1706-Minus, Nil. Plus, 0.003 in. of the diam.

Pitch-Items 1631 to 1707. No Tap shall be more than 0.0005 in. out of pitch in any inch of length.

Inspections, Tests and Rejections.—All inspections and tests will be conducted by and at the cost of the Corporation at its premises. Five per cent. of each delivery shall be selected for inspection and tests, and shall be held as representing the lot from which they are selected. In the event of any of the taps selected failing to comply in any particular with this Specification, the lot from which they were selected will be liable to rejection.

#### SPECIFICATION FOR DIES AND CHASERS.

Particulars.—All material and workmanship of the Dies and Chasers shall be of the very best quality for the purpose, and they shall be free from all injurious défects.

The HEXAGON DIE NUTS set oposite Items 1708 to 1713 shall be Whitworth Standard, made from best cast steel hardened and tempered ready for use.

The DIES set opposite Items 1723 to 1728 shall be made from high speed steel, and shall be suitable for efficient use in "Landis" Rotary Dieheads.

The DIES under Items 1729 to 1732 shall be made from high speed steel, and shall be suitable for efficient use in "Herberts" Patent Self-opening Dieheads.

The Machine Chasers set opposite *Item* 1735 shall be made from Carbon Steel, and shall be in accordance with the particulars shown in V.R. Drawing, No. 309N.

Limits of Tolerance.—The Hexagon Nut Dies shall not be over nor more than 0 0015 in. under the specified diameter. No Die or Chaser shall be more than 0 0005 in. out of pitch in any inch of length.

Inspection and Tests.—All inspections and tests shall be conducted by and at the cost of the Corporation at its premises.

Rejection.—Should any Die or Chaser fail to comply in any particular with this Specification, it shall be liable to rejection.

#### Names of Manufacturers

McPherson's Pty. Ltd.-Patience & Nicholson Ltd.

Hardware Co. of Aust. Pty. Ltd.—Patience & Nicholson Ltd.

Green Bros. & Miller Pty. Ltd.-Green Bros. & Miller Pty. Ltd.

The Sutton Tool and Gauge Manufacturing Co. Pty. Ltd.—The Sutton Tool and Gauge Manufacturing Co. Pty. Ltd.

The Eagle & Globe Steel Co. Ltd.—Patience & Nicholson Ltd

TAPS, DIES AND CHASERS-continued.

tem No.	Description			Country of Manuf're	Estimated Requirements	Rate per	Rate	. Name of Contractor
1631	Taps, Whitworth Thread-	-		Vict.	100	each	£ s. d. ‡‡0 0 4½	]
1632	3." ,,	•••		(paruy)	250	71	‡‡0 0 4½	
1633	16 ''' 7 2'' ''' 4''' ''' 6''' ''' 38''' '''	•••		"	5	,,	††0 0 4½	Ltd.
1634	4 ,,,,	••	•••	,,	200 .		$110 0 4\frac{1}{2}$	
1635	5″ 16″,	•••	•••	**	80 100		110 0 7 1 0 0 10	Green Bros. and
1636	. <del>8</del> ,,	•••	•••	,,	100	٠,,	+ 0 0 10	Miller Pty. Ltd
1637	1/2" ,,	•••		,,	50	,,	0 1 3	The Eagle & Glo
1638	12" '' 5" ''	• • •		"	70	,,	$0 \ 1 \ 7\frac{1}{2}$	Steel Co. Ltd.
7.000		•			25		0 2 2	Hardware Co. of
1639	¾" Taper	. ••	•••	"	25	,,	2 2	Aust. Pty. Ltd.
1640	7." 8 "			,,	10	,, .	0 2 103	
1010				"			ļ -	Steel Co. Ltd.
1641	1" ,,		•••	"	15	,,	0 3 4	Hardware Co. of
1040					5	1	0 6 2	Aust. Pty. Ltd. The Eagle & Gle
1642	11," "	•••	***	· " ·		"	. '	Steel Co. Ltd.
1643	1" Intermediate	•••		,,	80	,,	tto 0 4	]
1644				,,	150	,,	110 0 4	
1645	3 7 '' '' '' '' '' '' '' '' '' '' '' '' '	••••	•::	*7	180	,,	110 0 41 110 0 4	
1646	4 »	•••	,	,,	100	,,	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	[ ]· , Liu.
1647	<u>16</u> "	, ,	•••	,,,		,,	**	
1648	3″ 8 ",			,,,	100	,,	‡ 0 0 10	Green Bros. &
	•			,	40	'	0 1 9	Miller Pty. Lt
1649	1" 25" 8" >>	•••;	•••	,,	40 80	27.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	The Eagle & Co. Ltd
1650	<b>₹</b> "	•••	•••	,,		,,	0 1 1	Siedr Co. Bic
1651	<u>3</u> " ,,	•••	•••	,,	20	,,	0 2 2	Hardware Co. of
	_				. 20		0.010	Aust. Pty. Ltd
1652	7/8 ,,	•••	•••	».	30	,,	0 2 10	The Eagle & C Steel Co. Ltd.
1653	1"	•		,,	20	,,	0 3 4	Hardware Co. of
1000	ı ,,			" ,		. "		Aust. Pty. Ltd
1654	1½" ,,	•••	•••	,,	5	>>	0 6 2	The Eagle & Gl
	;			,	120		110 0 4	Steel Co. Ltd.
1655 165 <b>6</b>	½" Plug	•••	•••	,,,	175	""	110 0 4	1
1657	16 " 7 " 32" "	•••	•••	,,	5	,,	·  <del> </del> ††0 0 4	
1658	\$" Plug		•••	,,,	250	,,	110 0 4	
1659	15 ,,	•••	•••	,,	120	,,	tto 0 7	1)
1660	3" "		•••	1	170	,,	t 0 0 10	Green Bros. &
1000	* '"	•••	• • • • • • • • • • • • • • • • • • • •	**		"	T	Miller Pty. Lt
1661	1/2" ,,	•••		,,	40	,,	0 1 3	
					60		0 i 7	The Eagle & C
1662	<u>₹</u> ″ ,,	•••	•••	"		".	" ' '	2 5,000, 00. 10
1663	3" "			,,	30	,,	0 2 2	
							0.010	Aust. Pty. Lte
1664	78" ,,	•••	•••	"	10	,,	0 2 10	The Eagle & Gl Steel Co. Ltd
1 005	1" ,,		,		20	,,	0 3 4	
1665	1 ,,	•••	•••	"		"		Pty. Ltd.
1666	11," ,,	•••		,,	5	,,	. 0 6 2	
	ì	o Thrond			,			The Eagle and
1667	Taps, Hand-working, Ga	s inread		,,	10 sets	set	0 2 6	
1001	8 240 25 502			"				
1668	1" ,, ,,	•••	·	,,	10 ,,	,,	0 3 0	ال
1.000				1.	10 ,,		to 4 0	h .
1669	3" ,, ,,	•••	***.	"		''	1	Green Bros. &
1670	1," ,, ,,	•••	•••	,,	2 ,,	, ,,	, 10 5 3	Miller Pty. 1
					2 ,		0 7' 2	The Eagle & Gl
1671	3" ,, ,,			"	۷,,	>>		

TAPS, DIES AND CHASERS-continued.

Item No.	Description	Country of Manuf're	Estimated . Requirements	Rate per	Rate	Name of Contractor
	Taps, Hand-working, Gas Thread—con	-			£, s. d.	
1672	tinued—  1" two to set	***	2 sets	set	10 10 0	) <sub>1</sub>
1673	14" "	(partly)	2 ,,	,,	10 16 0	Green Bros. & Miller Pty. Ltd
1674 1675	$1\frac{1}{2}$ ,,,,,	. ,,	l ,, l ,,	,,	1 4 6	Hardware Co. of Au
۶.	Taps for "National" Nut-tapping Machines, to Drawing No. 8920 1, Whit	-		,,		Pty. Ltd.
1676	worth Thread—  1/2"	. ,,	5	each	‡0 5 0	Green Bros. &
1677	5"	. ,,	5	,,	0 5 11	Miller Pty. Ltd. The Eagle & Glo
1678	<del>3</del> "	. ,,	40	,,	0 5 5	Steel Co. Ltd.
1679	<del>7</del> ″	,,	70	,,	10 8 6	)
1680	1"	,,	220	,,	‡0 10 3	`
1681	l ½"	.,,	5	,,	‡0 13 3	Green Bros. & Miller Pty. Ltd
1682	11/2"	. ,,	10	,,	‡0 16 6	
1683	1§″	. ,,	2	"	‡0 19 3	}
1684	1½"	. ,,	2	,,	1 1 6	The Eagle & Glob
	Taps for "National" Nut-tapping Machines, to V.R. Drawing No. 8920 2-	-				Steel Co. Ltd
1685	1", 11 Threads per Inch .	,,	. 2	,,	‡0 10 6	Green Bros. &
1686	. 11,7, 11 ,, ,, ,.	,,	15	. "	10 13 3	Miller Pty. Lto
1687	1,3", 11 ,, ,,	,,	2	,,	0 13 3	The Eagle & Glob Steel Co. Ltd.
1688	11,", 11 , ,, ,,	,,	25	**	10 16 6	Green Bros. & Miller Pty. Ltd.
1689	$1\frac{3}{8}''$ , 11 ,, ,	,,	2	,,	0 16 3	Twiner Tty: Eta.
1690	1½", 11 ,, ,, ,,	,.	10	,,	0 19 0	
1691	Taps, 'Horizontal Tapping Machine Right-hand, Whitworth Thread— 11/2" to V.R. Drawing No. 8920		. 2		0 10 3	The Eagle & Glo
1692	11"		2	,,	0 13 0	Steel Co. Ltd.
1693	11"	,,	2	,,	0 19 0	
1694	$1\frac{3}{4}$ , , , 8920		5	,,	1 5 8	
x 1695	2" ,, ,, ,,	,,	2	,,	‡1 18 0	h .
1696	$2\frac{1}{4}$ ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,	. 2	,,	12 4 0	
1697	$2\frac{3}{8}$ ,,,,,,,	,,	2	,,	12 13 0	Green Bros. & Miller Pty. Ltd
1698	$2\frac{1}{2}$ ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,	2 .	,,,	13 2 0	
1699 1700 1701	Taps, Horizontal Tapping Machine Left-hand, Whitworth Thread—  1 to V.R. Drawing No. 8920  1 to V.R. Drawing No. 8920	s, 1 ,, -	1 1 1 1	" "	0 12 6 0 16 6 1 5 6 1 13 6	The Eagle & Go
$1702 \\ 1703$	$\begin{bmatrix} 1\frac{\pi}{2}'' & , & , & 8920 \\ 2'' & , & , & , & , \end{bmatrix}$	<sup>3</sup>   ",	1	"	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

TAPS, DIES AND CHASERS—continued.

Item No.	Description			Country of Manuf're	Estimate Requiremen		Rate per	] 1	Rate		Name of Contractor
	_							£	s.	d.	
1704	Taps, 2 B.A.	·;··		Vict.	2		each	110	0	6	1
1705	Taps, 4 B.A.		•••	(partly)	2		,,	110	0	6	McPherson's Pty.
1706	Taps, 8 B.A.			,,	10		,,	110	0	7	Ltd.
1707	Dies, 6 B.A.		•••	,,	1		,,	0	0	8	The Sutton Tool &
	Dies, Nut, Hexagon, Whit	worth Thi	read								Gauge Manufg. C Pty. Ltd.
1708	3,7			,,	6		,,	0	2	1	h
1709	1,*		•••	,,	6		,,,	0	2	3	
1710	§″			,,	6		,,	0	3	1	
1711	. 3"			,,	6		,,	0	3	4	The Eagle & Glol Steel Co. Ltd.
1712	<b>₹</b> 7 ″	•••	•••	,,	6		,,	0	3	11	
1713	1″		•••	,,	6		**	0	4	4	jJ
	Dies, Adjustable, 23 d	iameter,	Whit-								
1714	worth Thread (Excluding	g Guides)-	- 	,,	2		,,	10	5	9	h
1715	<u>‡</u> ″	•••		,,	5		,,,	to	5	9	
1716	5." 18	•••	•••	,,	2		,,	10	5	9	
1717	3 <i>"</i> 8			,,	6		.,	ţö	5	9	Green Bros. and Miller Pty. Ltd.
1718	. 1 "			,,	15		,,	to	6	3	
1719	<u>5</u> ″		•••	,,	15		,,	10	7	6	J
1720	<b>3</b> .″			,,	10		,,	0	7	11	h
1721	7.″ 8″			,,	10		,,	0	9	4	The Eagle & Glo Steel Co. Ltd.
1722	1″	•••		,,	10		,,	0	10	9	Steel Co. Ltd.
	Dies, "Landis," Style " Thread, in sets of four-	F," Whit	tworth .			į					
1723	$\frac{1}{2}$ " to $\frac{1}{8}$ ", as ordered	•••	•••	,,	15 se	ts	set	2	0	0	1)
1724	⅓" to 1½", as ordered			,,	80	,,	,,	2	0	0	
	Dies "Landis," Style " head Whitworth Thread,	F," for 3 in sets of i	" Die- four—								Green Bros. & Miller Pty. Ltd.
1725	137			,,	5	,, .	,,	3	2	6	
1726	2 <del>1</del> ″	•••		,,	2	,,	,,	3	2	6	J . `
1727	Dies, "Landis," Pipe, 1	4 thread,	Whit-	,,	2	**	,,	2	1	6	h
1728	worth for 1½" Diehead, in Dies, "Landis," Pipe, 11 worth for 1" to 2" Pipes,	l threads,	Whit-	,,	2	,,	,,	2	1	6	
•	Dies, "Herbert," to sui Heads, in sets of four—	it Herbert	's Die						•		The Eagle & Classical Steel Co. Ltd.
1729	1", style ",C," sizes 3	" to 1"	for 1"	,,	40	,,	,,	1	. 4	6	
1730	Diehead, as ordered, William, style "C," sizes 7 ordered, Whitworth T	hitworth T 7/16″ to T	l'hread	"".	30	,,	,,	1	11	0	

6.71, ;

#### TAPS, DIES AND CHASERS-continued.

Item No.		Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Dies, "Herbert," to suit Herbert's Die		r, (		£ s.,d.	i.
1731	Heads, in sets of four—continued— 1\frac{1}{4}", Style "C," sizes 1\frac{1}{8}", 1\frac{1}{4}", 1\frac{3}{8}" and 1\frac{1}{2}", as ordered, 11 threads per inch	Vict. (partly)	3 sets	set	1 16 0%	
1732	2", style "C," sizes $1\frac{1}{8}$ ", $1\frac{1}{4}$ ", $1\frac{3}{8}$ ", $1\frac{1}{2}$ " and $1\frac{5}{8}$ ", asor dered, 11 threads per inch	,,	10 ,,	,,	2 11 6	The Eagle & Globe Steel Co. Ltd.
1733	Dies, Tangential, to V.R. Drawing No. N.Z. 7, amended 12/4/34 for "Kendall and Gent" Machine (screw couplings), in	,,	12 ,,	,,	3 10 0	Green Bros. & Miller Pty. Ltd.
1734 ·	sets of four Dies, Tangential, for 1½" "Landmatic" Die Head in sets of 4, sets to be interchange- able with each other, to Blue Print N.X.9	, ,	15 "	,,	2 5 0	)
; 1	Chasers, Machine, Outside, to Drawing No. 309n—			,	'	2364
1735	10 to 14 threads per inch, as ordered	,, .	.50	, each	0 3 2	The Eagle & Globe Steel Co. Ltd.
	Dies, Hand, Brass, 26 threads per inch (Whitworth)			1 117	i -	.':
1736 1737 1738 1739	$\frac{1}{6}'' \times 1_{6}^{5}''$ outside diam	,,	$\begin{bmatrix} 2\\2\\2\\2 \end{bmatrix}$	. "	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
1740	$\frac{16}{2}$ " x $1\frac{56}{16}$ " outside diam  Reamers, Spiral, with chip breaker, to	,,	2	,,	0 3 9	The Sutton Tool & Gauge Manufg. Co. Pty. Ltd.
1741	Drawing No. NX-I		50	j. :	0 16 3	
$1742 \\ 1743$	diameter   diameter	"	120 40	,,,	1 0 9 1 2 3	

#### ELECTRODES AND WELDING WIRE

7. The Ordinary Grade Electrodes (Items 1749 to 1753 inclusive) and Structural Grade Electrodes (Items 1758 to 1763 inclusive), shall be in accordance with Australian Standard Specification No. A-18-1933. Items 1758 to 1763 inclusive shall, in addition to the above, be capable of being hot forged. The High tensile steel wire for oxy-acetylene welding (Items 1776-1778 inclusive) shall be in accordance with Australian Standard Specification No. B 29/1931.

All other Electrodes and Welding Wire shown opposite the various items in the Schedule, shall be capable of depositing the material specified in connection with welding. The material shall be made by an approved process, and shall be of uniform homogeneous structure, free from segregations, oxides, pipes, seams, etc., and shall comply with such tests as the Department may deem necessary to determine suitability.

The Electrodes shall be 18 inches long. The covering shall not easily chip or break off, and shall not be affected by atmospheric conditions.

The Welding Wire shall be free from rust, oil and grease.

Iron and Steel welding wires shall be dipped or otherwise coloured as may be decided by the Corporation for identification purposes.

As regards Items Nos. 1772 and 1773, the rates are subject to variation to the extent of any rise or fall in "Ryland's" current prices for Wire, and shall apply to the undelivered portion of orders, the Contractor to be under obligation to advise the Comptroller of Stores of any such alteration.

† As regards Items Nos. 1783 to 1785, the rates are based on E.C. Wire bars between £35 and £40 per ton and will be subject to an increase of £d. per lb. for any increase above £39 19 11 per ton for wire bars for every £5 per ton or part thereof. A similar reduction in Contract rate will apply if price of E.C. Wire bars falls below £35 per ton.

As regards Items Nos. 1754 to 1755A, and 1767 to 1769A the tender of the Austn. Oxygen & Indust. Gases Pty. Ltd. has also been accepted for "E.M.F." Electrodes at lower rates than "Quasi Arc"

No orders are to be issued for "Quasi Arc" Electrodes, Items Nos. 1754 & 1755, unless personally authorised by the Chief Electrical Engineer.

As regards Items 1767-1769, "E.M.F." Electrodes have been accepted for experimental purposes only. Orders may be issued for "Quasi Arc" Electrodes under these items pending satisfactory results from "E.M.F." Electrodes.

# ELECTRODES AND WELDING WIRE—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	. Rate	Name of Contractor
	Electrodes, Ordinary Grade "EMF. Weld Rod"—			• •	£ s. d.	
(1749)	No. 6 S.W.G Weld Rod -	Vict.	· 250 ft,	100 ft.	0 8 0	ነ -
1750	No. 8 ,,	,,	1,200,000 ,,	, ,,	0 6 0	
†   1751	No. 10 ,,	,,	140,000 ,,	;	0 4 6	Aust. Oxygen &
1752	No. 12: "	,,	6000 ,,	, ,,	0 4 3	Indust. Gases Pty. Ltd.
1753	No. 14 ,,	,,	500 ,,	,,,	0 4 0	
†1754	Electrodes, Mild Steel, Special— No. 8 S W G "Quasi Arc"	Vict.	)	, ,		Robert Bryce & Co.
†1754	"Uranium" No. 8 , "EMF Weld Rod"	(partly) Vict.	120,000 ,,	,,	1 t 0 · 6 0	Pty. Ltd. Aust: Oxygen & Indust.
<b>†17</b> 55	No. 10 " "Quasi Arc"	Vict.	ή · ,	,,	0 6 3	Gases Pty. Ltd. Robert Bryce & Co.
†1775 <i>i</i>	"Uranium" No. 10 ,, "EMF Weld Rod"	(partly) Vict.	50,000 ,,	,,	0 4 6	Pty. Ltd. Aust: Oxygen & Indust.
	Electrodes, Mild Steel, suitable for over-				,	Gases Pty. Ltd.
(1756	head work—"Quasi Arc" No. 8 S.W.G	Vict.	· 5000 ,,	,,	0 8 0	Robert Bryce & Co.
† {   1757_	No. 10 ',	(partly)	5000 ,,	,,	0 6 3	Pty. Ltd.
			, "		1.1	. ** * ,
	work required to be forged hot—"E.M.F. New Era" or "Extra fluxed," as ordered					
1758	No. 4 S.W.G	Vict.	30,000 ,,	٠,,	0 12 0	The state of
1759	No. 6 ,,	,,	300,000 ,,	,,	0 9 6	
1760	No. 8 ,	· ',, ·	450,000 ,,	1,,	0 7 6	
1761	No. 10 ,,	, ,,	80,000 ,,	••	0 6 6	,
1762	No. 12 ,,		5000 ,,	,,	0 5 9	Aust. Oxygen &
[1763	No. 14 ,,	. "	2000 ,,	•,	0 5 6	Indust. Gases Pty. Ltd.
	Electrodes, Mild Steel, Light Coated, suitable for use on 25 cycle A.C. supply— "EMF" Arctype Rod—		. ,			
1764	No. 6 S.W.G	"	5000 ,,	,,,	0 5 9	
† 1765	No. 8 "	,,	50,000 ,,	,,	0 4 6	
1766	No. 10 ,,	,,	20,000 ,,	. , .,,	0 3 9	J
	Electrodes, Steel, to deposit 0.5 per cent. carbon steel—			. 50.	The second	,,··· , )
†1767	No. 6 S.W.G. "Quasi Arc".	. Vict! (partly)	6000 ,	. ,,	0 14 9	Robert Bryce & Co.
†1767.		Vict	} ""	,, .		Aust. Oxygen & Indust.
†1768	No. 8 ,, "Quasi Arc"	Vict., (partly),	40,000 ,,	. **	0 12 11,	Gases Pty. Ltd. Robert Bryce & Co:
†1768	No. 8 " "EMF" High Carbon	Vict.	ا، <del>غ</del> ٥,٥٥٥ ,,	, ,,	0 11 6	Pty. Ltd. Aust. Oxygen & Indust.
<b>†</b> 1769	No. 10 , "Quasi Arc"	Vict.	10,000 ,,	,,	0 9 9	Gases Pty. Ltd. Robert Bryce & Co.
†1769 <i>a</i>		[Vict.	5	,,	0 9 9	Pty. Ltd.
£1770	Electrodes, Cast Iron, suitable for work on cast iron that is heated—"EMF"  No. 8 S.W.G	Vict.	250 ,,	د ا بن و و	0 14 6	Aust. Oxygen & Indust. Gases Pty. Ltd.
†{ 1771	No. 10 ,,	,,	600 ,,		0 12 0	1

# ELECTRODES AND WELDING WIRE-continued.

Item No.	Description	٠, ,	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Wire, Mild Steel, Electric coils—"Ryland Bros."	Welding, in				£ s. d.	
. [1772	3" diameter		. N.S.W.	70 cwt.	ton	24 19 9	
1773	17"		., ,,	5 ,,	,,	26 2 6	Briscoe & Co. Ltd.
<b>*</b>	Wire, Steel, Electric Weld carbon steel deposit of a cent. carbon, "Rylax"—						
. [1774	diameter in lengths of	of approx. 18"	,,	15 ,,	cwt.	2 10 0	Australian Oxygen &
1775	" &" diameter in lengths of	approx. 18"	. "	'2 ,,	,,	2 10 0	, Industrial Gases Pty. Ltd.
(1776	Wire, High Tensile Steel, i	n coils, Oxy- ix "—		5 ,,	,	1 17 .6	1
	½" diameter	•••	• ,, ′	,	"	•	Oxygen Service &
{	3″ ,,	••	. ,,	5 ,,	,,	1 17 6	Manufacturing Co. Pty. Ltd.
[1778	<del>1</del> " ,,	•••	. ,,	2 ,,	,,	2 2 6	μ :
	Wire, Iron, in coils, Oxy-Ace ing, "Rylax"—	tylene Weld-					
<b>(</b> 1779	10 S.W.G.		. ,,	30 ,,	,,	1 6 0	)
1780	16" diameter		. "	5 ,,	,,	1 10 0	
1781	3." 16" »,		. ,,	50 ,,	,,	1 5.0	Australian Oxygen & Industrial Gases
1782	1" »,		. ,,	50 ,,	,,	1 5 0	Pty. Ltd.
	Welding, in lengths of	Oxy-Acetylen 3', "Austra	1 .	,		· '	
1783	Bronze " ‡" diameter		. "	20 "	,,	†11 6 6	)
1784	3 " ,,		. ,,	35 ,,	"	†9 13 0	Allen-Liversidge
1785	1,"		. ,	175 ,,	,,	†9 13 0	(Aust.) Ltd.
†1786	Wire, Brass, in coils, Oxy-Ad, ing "Austral"—  1" diameter	cetylene Weld	- ,,	1 "		6 19 4	Australian Oxygen &
181-179	4 1 2 2 2 2		,	,	"	·	Industrial Gases Pty. Ltd.
					•		
		CORK	S AND B	UNGS			,
ì	Corks—		1			'	
*1791	Axle-box, large quart and e	xtra tapers	. Vict. (partly)	2000 gross	gross	0 1 .9	·]·
*1792	Axle-box, small			40 ,,	. ,,	0 1 2	
1793	Bungs, 13" for 5-gal. drums		. ,,	10 ,,	,,	0 5 6	
*1794	Bungs, $1\frac{1}{2}$ " tapered to $1\frac{3}{8}$ " x	11" long	. ,,	50 ,,	,,	0 3 9	Valati Dane
*1795	Bungs, $1\frac{5}{16}$ tapered to $1\frac{3}{16}$	1 1 long	. "	50 ,,	,,	0 3 6	Vogt Bros.
*1796	Bungs, 1" tapered to $\frac{7}{6}$ " x $1\frac{1}{4}$ "	long	. ,,	6 ,,	. ,,	0 2 3	
*1797	Phial		. ,,.	20 ,,	. ,,	0 "1 1	
*1798	Roof Lamp, 11" tapered to 1	1 x 11 long	,,	2 ,,	_ "	0 3 3	
*1799	Shrive, 11/2 tapered to 11/2 x	,	,,	3 ,,	, ,,	0 1 4	
			1	1		1	1 1.00 m

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#### WOOL YARN PADS AND SKEINS .

#### (Period 1/10/34 to 30/9/35).

the latter of the Wool Yarn Pads and Skeins are for use for lubricating railway rolling stock axle

The Wool Yarn Pads shown opposite Item 1801 shall be supplied in continuous thread skeins of approximately 2 ozs. in weight each for 5 in. x 2 in. dia. pads, ranging to approximately 16 ozs. for 9 in. x 4 in. dia. pads, made up into Pads by lapping them, and tied (with binding twine of the best quality) in that form, in any length from 5 inches to 9 inches inclusive, by any diameter from 2 inches to 4 inches inclusive, as may be ordered.

The skeins shown opposite Item 1802 shall be continuous thread skeins, 24 inches in length, and approximately 8 ounces in weight each.

The necessary tests to ascertain whether the Wool Yarn delivered complies in every respect with this Specification will be conducted, and should more than 10% of any delivery fail to comply with the Specification, the whole of such delivery will be liable to rejection of the specification of the specif

The Wool Yarn Pads shown opposite Item 1801, shall be provisionally delivered in the quantity and in the lengths and diameters as may be ordered, packed in cases or bales with the nett weight plainly marked on each case or bale, and deposited where and as directed at the Workshops, North Melbourne, and the Wool Yarn Skeins shown opposite Item 1802, to be similarly trucked and delivered at the Workshops, Jolimont.

The rates are subject to decrease as may be determined by the Comptroller of Stores in the event of reduction in wages and/or increased working hours of employees concerned.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate	Rate	Name of	Contractor
†1801	Wool Yarn Pads, 5 inches long by 2 inches diameter to 9 inches long by 4 inches	Vict.	18 tons	lb.	£ s. d. 0 0 11½	)	71)
· ·	11 (1/10/31-30/9/33)					1	Gibson; P
†1802	Wool Yarn, in Skeins, 24 inches long (1/10/34-30/9/35)	,,	5 5 3 3 4 4 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	, ,,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	J 	/
1603	Nil.	,	1 1 1/4 1/1 4	300	category	4 - 11 / 11 - 3 May -	
	the second secon				7.11	t	6 (I)

#### WATER TROUGHS.

- 7. Item 1804.—The Cattle Trough must be 12 feet long, with a cross-section of approximately 24 in. x 15 in. (internal), shall be of concrete, well reinforced, and with surfaces smoothly rendered, and provided with supports so that the top of the Trough will stand 18 inches above the ground level. Provision shall be made at one end of the trough for a ½ in. connection for a ball cock. A suitable steel hood and padlock shall be provided to protect the ball cock. No crating required.
- 8. Item 1805.—The Pig Trough shall be 8 feet long, with a cross section of approximately 15 in. x 8 in. (internal), shall be of concrete, well reinforced, and with surfaces smoothly rendered, and provided with a suitable base so that the bottom of the Trough will rest flat on the ground. Provision shall be made at one end of the Trough for a 1-inch connection for a ball cock. A suitable steel hood and padlock shall be provided to protect the ball cock. The rate includes crating suitable for transport by rail.
- 9. Item 1806.—The Wash Trough shall be in two divisions, shall be of reinforced cement 1 inch thick, shall be 4 ft. 3 in. long, 14 in. deep, 1 ft. 2 in. wide at bottom, and 1 ft. 9 in. wide at top, and shall be fitted with brass plugs and washers (M.M.B.W.) complete to each division, with wastes combined to form a single outlet as approved by the Melbourne and Metropolitan Board of Works. The rate includes 3 in. x 1 in. hardwood crates, which shall remain the property of the Corporation.

	Troughs, reinforced concrete, delivered f.o.r. Spring Vale Siding—					7 . Sept. 1971
	f.o.r. Spring Vale Siding— ,, 11	r.	১৭% [1	. 1	or here.	170 Feb. 2017!
1804	12' long, for Cattle (as specified), Type "A"	Vict.	. 6 10	'each	~ 6° ′51 .0°.	7
1805	8' long, for Pigs, (as specified), without crossbars, Type "C"	2214				Rocla. Ltd.
1806	Troughs, Wash, reinforced cement (as specified)	** ***	Nil.	ردان. 11 ° ،	q 1 4 0 1 4 0 ut Lorry t	Workshops Manage Spotswood '71
1807	Nil.					**** -665*

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#### PNEUMATIC 'AND! SOLID! TYRES.

As regards Items Nos. 1808 to 1808B, the following Guarantee has been submitted by the three Contractors:make I

No specific warranty is given or implied with the Tyres tendered, but should any faults in material or manufacture develop within 180 days, which in Contractor's judgment preclude reasonable service being obtained by the user, then they will be-

- (a), Repaired free of charge, or
- (b) A proportionate allowance will be made on a new Tyre off the then current list; taking into consideration the service rendered by the defective Tyre on a basis of 5,000 miles. No cash refund will be made.
  - (c) Any Cover on which an allowance has been made under this Guarantee shall become the property of the Contractor.

..... The Contractors expressly disclaim any responsibility for-

- (a) Covers that wear out before 180 days, if, in the Contractor's opinion, the Covers were free from faulty workmanship.
- (b) Covers (whether of faulty workmanship or not) that have been destroyed or injured by accident, improper inflations, used on wheels out of alignment, used on rims that are rusty, damaged, or not of standard size for the Cover; or used in conjunction with any substitute for air, or any improper usage.
  - (c) Covers used on Motor Cycles, Side Cars, or Motor Tricycles.
  - (d) Covers used to carry loads that, taking the horse-power of the vehicles and road conditions into consideration, are considered by the Contractors to be excessive.
  - (e) Covers bought second-hand, blemished Covers, or Covers marked B or JOB.
  - (f) Accidents or damage to persons or property arising from any defect to Covers or Tubes, or to defective fitting by Contractor's servants or others.
  - '(g) Covers fitted to any vehicle used for towage.'
- 7. All Tyres and Tubes must be of the standard first grade production.

#### 8. SPECIFICATION I.R. TYRES.—Items Nos. 1809 to 1817.

As regards Items Nos. 1809 to 1817, the Tyres shall be of the very best quality, solid grey indiarubber, and shall be securely vulcanized to the rims of the Corporation's vehicles. The moulds and rims may be inspected at the workshops of the Corporation at Newport. The moulds and rims will be delivered to the Contractor at the Metropolitan Receiving Depot, and shall be returned with the tyres and rims on the completion of an order or on demand in good order and condition to the Metropolitan Receiving, Depot, Spencer-street.

As regards Items Nos. 1808 to 1808c, the estimated requirements are based on the full list price.

As regards Items Nos. 1808-1808B, it is agreed that the nett prices, which are based on list prices and trade discounts current at date of delivery, shall be regarded as the contract rates.

The contract rates may be increased in the tevent of production costs being increased as, a result of increased costs of material or manufacture, or because of Federal or State Government obligations, beyond those obtaining at time of tendering—the Corporation having the right within seven days of ) notification of such increased contract rates to confirm same, or cancel the contract of order to be some or the contract of order to be some or the contract of order to be some or to be some order to be some or

In the event of contract rates being amended, the Corporation shall not be placed at any disadvantage in comparison with other Government Departments.

Any variation in contract rates shall apply to all outstanding orders at the date of such variation.

Orders for Tyres and Tubes, Items Nos. 1808-1808c, are to be issued in the following, poportions:

Dunlop ....56%
Barnet Glass 28%
Goodyear 16%
Overhead Maintenance Storehouse to arrange. proportions:

A trial order is to be placed with the Olympic Tyre Company for a set of Tyres. 29 x 4.40, 30 x 5.25, and 31 x 5.25, when tyres of these sizes are required; for renewals. Storekeeper Overhead Maintenance Depot to arrange.

As regards Items Nos. 1808-1808B, the discount of  $2\frac{1}{2}\%$  mentioned in rate column is subject to payment by 25th of month following delivery.

As regards Item No. 1808c, the discount mentioned in rate column is subject to payment.

within 30 days.

#### PNEUMATIC AND SOLID. TYRES -continued.

,	人名伊里 化二二十二十十二二二二二二二十二十二十二十二十二十二十二十二十二十二十二十二十	Country	• •:		10.00	
Item No.	Description	of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	,	. , -	1 4 1/2 2 2 pt	, î., .	£ s. d. Percentage off, price list dated	7.0
1808	Tyres and Tubes, Pneumatic, for motor cars, trucks and buses, as may be ordered, "Dunlop"	Vict. & N.S.W.	1	each	20% 5% & 2½%	Dunlop Perdriau Rubber Co. L.t.d
1808A	Tyres and Tubes, Pneumatic, for motor cars, trucks and buses, as may be ordered "Barnet Glass"	Vict. (partly)	£1500	,, .	22762	Barnet Glass Rulling Co. Ltd.
1808в	Tyres and Tubes, Pneumatic, for motor cars, trucks and buses, as may be ordered, "Goodyear"	N.S.W.	, , , , , , , , , , , , , , , , , , ,	,,		Goodyear Tyre S Rubber Co. o of A'sia Pty, Ltd
1808c	Tyres and Tubes, Pneumatic, for motor cars, trucks and buses, as may be ordered, "Olympic"	Vict. (partly)		.,	See note on previous page re 21% discount	Olpmyic Tyre & Rubber Co. Pty. Ltd.
	Tyres, solid rubber, to be moulded on rims, for industrial trucks—	, ·	, ,			
1809	"' '6¼ dia.'x 6¼"	,,	2	each	‡2 10 3	1
1810	6½" dia. x 5"	, "	2	٠,,	‡1 13 9	
1811	11¼" dia. x 4¼"	, <u>, , , , , , , , , , , , , , , , , , </u>	8	,,	‡2 5 0	
1812	14\frac{3}{8}\dia. x 3"	. ,,	2	,	12 10 0	
1813	14 g dia. x 4"	,,,	2	,	12 12 6	Dunlop Perdriau Rubber Co. Lto
1814	16" dia. x 4"	,	30	, ,	13 2 0	
1815	173" dia. x 3½"	,, .	6	. ,,	‡3 6 0·	
1816	17¾", dia x 5", ,	ر. د د نورون د	to	2 1 1 jg	13 10 0	11.2
1817	20" dia x 3½"	200 16 22	6.	jr ,	‡ <b>4</b> 2 0	
1818-	.—1819 Nil					·

Less 2½% discount for payment by 25th of month following-delivery:

# AMBULANCE MATERIAL.

7. As regards Items 1822, 1826–1832, 1834, 1841, 1843, 1846, 1847, 1848, 1852, 1854, 1857–1859, 1864, 1870, 1871, 1873, 1876, 1879, 1886, 1887, the rates include Telegraphic Transfer Exchange between Australia and London at  $25\frac{1}{2}\%$ , and if this rate of Exchange be varied during the contract, the difference calculated on 50% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date-the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

As regards Items 1834, 1841, 1847 and 1873, the rates shall be firm as regards conversion, but shall be subject to adjustment as above for T.T. exchange.

8. Containers.—As regards Item 1853, the rate does not include the cost of containers, which are returnable and the amount to be paid by the Corporation for any such containers not returned to the Contractor at the Metropolitan Receiving Depot within thirty days from date of delivery of the material, is £1 each. This amount will be debited, and allowed by Contractor on return of Jars.

As regards the contract with Henry Francis Pty. Ltd., three months from the date of the letter of acceptance will be allowed to enable stocks to be obtained of the items to be imported to meet initial orders.

‡ As regards Items 1881-1885, the rates are subject to 2½% discount for payment within 30 days.

The I.R. Stoppers to be supplied under Items 1881-1885 shall be capable of resisting liquid ammonia.

# AMBULANCE MATERIAL—continued.

Item No.	Description	Country of . Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
1820	Acid, Boracic	:	30 lb.	•••	£ s. d.	} <sub>Nii</sub>
1821	Acid, Picric	•••	2 ,,	•••	****	Jakon Kasi
1822	Ammonia, Vaporole (12 in tin)	U.K.	24 tins	tin	.024 <u>1</u>	) · · · ·
1823	"Plastine" (Hospital size 5-lb. tins)	Vict.	200 tins	,,	0 4 0	₹
1824	Arnica Tincture of, Bulk	`,,	6 lb.	16 fluid ozs.	0 4 3	· · · · · ·
1825	Aspirin (5 gr.) Tabs., 500 in bottle	,,	5 btls.	bottle	0 2 0	1
1826	Bandages, Calico Roller, 3" x 6 yards	U.K.	. 1750 doz.	dozen	0 3.0	Felton, Grimwade & Duerdins Ltd.
1827	Bandages, Calico Roller, 2" x 6 yards	,,	850 ,,	"	0.110	Ductums Liu.
1828	Bandages, Calico Roller, 1" x 6 yards	**	400 .,,	,, ·	0 0 11	
1829	Bandages Open Wove, Rlr., 3" x 6 yards	,,	. 800 ,,	,,	0 1 8	
1830	Bandages, Open Wove, Rlr., 2" x 6 yards	,,	800 ,,	,,	$0 \ 1 \ 2\frac{1}{2}$	1
1831	Bandages, Open Wove, Rlr., 1" x 6 yards	,,,	800 ,,	· "	0 0 81	J . ,
1832	Bandages; Calico (Triangular), in pkts. of 12	,,	350 pkts.	packet	0 3 0	Henry Francis
1833	Baths, Eye, Glass		2 doz.			(Wholesale) Pty. Ld Nil
1834	Bottles, 2 dram	Japan	40 ,,	dozen	.010 5	<b>ή</b> :
1835	Bottles, 1 o, Angular (Poison)	Vict.	175 ,,	. ,,,,	0 0 10	
1836	Bottles, 2 oz., Angular (Poison)	,, ,	20 -,,	, ,,	0 : 1 : 1	
1837	Bottles, 1 oz., Square (clear glass)	,,	20 ,,	,,	0 0 18	Felton, Grimwade &
1838	Bottles, 2 oz., Square (clear glass)	,,	20 ,,	,,	0 1 4	Duerdins Litd.
1839	Bottles, 4 oz. Flat	,,	40 ,,	,,	0 1 10	
1840	Bottles, 8oz. Flat	,,	20 ,,	,,	0 2 2	
1841	Brushes, Camel Hair (Goose)	Japan	80 ,,	,,	0 0 8	IJ
1842	Collodion, Bulk		8 lb.	ļ . <b></b>		Nil
1843	Chloride of Lime	U.K.	3 ,,	lb.	0 1 0	Felton, Grimwade & Duerdins Ltd.
1844	Diarrhoea Mixture (1 lb. bottle)	Vict.	4 btls.	,,,	0 2 6	Henry Francis
1845	Droppers, Eye	(partly)	3 doz.	dozen	0 2 0	(Wholesale) Pty. Ld
1846	Embrocation, Elliman's, 33 fluid ounces	U.K.	4 btls.	bottle	0 1 10	Felton, Grimwade &
1847 1848	Forceps, Splinter Gauze, Plain, Butter Cloth in 100 yd. roll	Germany U.K.	80 pairs 8500 yards			& Duerdins Ltd.
1849	Gauze, Absorbent, Compressed, Pleated		240			Nil
1850 1851	(in 1 yd. pkts.) Glasses, Medicine, 2 tablespoons Ginger, Tinc. of, Bulk (B.P.)	Vict.	80 15 lb	each 16 fluid , ozs.	0 6 9	Felton, Grimwade & Duerdins Ltd.
1852	Horsehair, for Sutures, in hanks of 100	U.K.	10 hanks	hank	0 0 6	Henry Francis (Wholesale) Pty. Ltd.
1853			40 gals.	gal.	3 2 6	( w noiesale) Fty. Ltd.
1854 1855 1856	Jars, Screw Top, 1 lb., square	. Vict.	15 yds. 24 doz. 24 "	yard dozen	$\begin{array}{c cccc} 0 & 2 & 0 \\ 0 & 2 & 7 \\ 0 & 2 & 2 \end{array}$	Duerdins Ltd.

# AMBULANCE'MATERIAL—continued.

Item , No.	Description	Country of . Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
1857	Lint, 1 oz. pkt., Plain	U.K.	24 doz.	doz.	£ s. d. 0 2 3	Greenhalgh's Ltd.
1858	Lint, 1 lb. pkt., Plain	,,	20 ,,	,,	1 7 0	· ·
1859	Lint, 1 lb. pkt., Borated	,,	6 ,,	,;	'`0-19-6	Felton, Grimwade &
1860	Lotion, Calamine 0	Vict.	. 20 lb,i	16fluid	0 1 4	Duerdins Ltd!
1861	Lysol, 1lb. bottles ,	(partly) Vict.	30 ,,	ozs. lb.	0 1 2	], "5
1862	Magnesia Sulphate		. 20 ,,		,	Nil ·
1863	Methylated Spirits (Pure)	Victi	35 gals.	gal.	0 / 4 9	Felton, Grimwade &
*1864	Needles, Surgeon's, assorted pkts. 6 in pkt.	U.K.	200 pkts.	packet	0 0 111	Duerdins Ltd. Henry Francis
1865	half curved Oil, Olive, in 1 gall. tins,		15 lb.		√r :	(Wholesale) Pty. Ld
ı 866	Oil, Castor, Pure (Bulk)		10 %,	u"!'		
1867	Ointment, Boric (1 lb. pots)		15,			Nil
1868	Ointment, Zinc (in 1 lb. pots)	,,,,,	5 ,,'	,		
1869	Peroxide of Hydrogen, in 1 lb. bottles	Vict.	150 .,	·lb!	0 0 10	Felton, Grimwade &
†1870	Plaster, "Z.O.", 1" x 1 yard	U.K.	· 200 doz.	dozen	0 2 11	Duerdons Ltd.
†1871	,, ,, 1" x 10 yards	, <u>,</u> , l	30 ,,	,,	0 13 6	Greenhalgh's Ltd.
1872	,, ' ,, ' 2" x 10 yards	Vict./	. 15 "	7,7	1: 3 9	Dunlop, Perdriau
1873	Potash, Permanganate of, (Bulk)	(partly) France	3 lb.	-1623	01 3	Rubber Co. Ltd. Felton, Grimwade &
. 1874	Pins, Safety (120on card)		200 doz.	dozen	··! :	Duerdins Ltd. Nil
1875	Sal Volatile (Bulk)	Vict. (partly)	cards · 250 lb.	cards 16 fluid	0 5 3	Felton, Grimwade & Duerdins Ltd.
*1876	Scissors, Surgeons', 5", Chrome plated	U.K.	50 doz.	ounces doz.	1 9 0	Denyers Pty. Ltd.
1877	Silk, Oil, 36" wide		5 yards			Nil
1878	Soap, Carbolic, Bars, ½'s	S.A.	20 lb.	1ь.	0 1 0	Felton, Grimwade &
1879	Snakebite Antidote, "Lauder Brunton"	U.K.	50 tubes	tube	0 0 61	> Duerdins Ltd.
1880	Wooden Tubes ; :: Stalls, Finger		3 doz.		·	Nil
+1881	Stoppers, (Grey Rubber), soft, No. 1	N.S:W.	10 gross	gross	1069	) ·
†1882	, , , , , , , , , , , , , , , , , , ,	(partly)	20 ,,	, ,,	† 0 7 0	• *
†1883	Carlo Community of the Carlo C	,,,	20 ,,	; ".: ,,	† 0 7 3	Hardie Rubber Co.
1884		,. ~ . ,,	. 10 "	. "	‡ 0 · 7 · 6	Ltd.
†1885	,, ,, ,, 5	,,	10 ,,	"	† 0 · 7 · 9	
.†1886	Wool, Surgeons', Plain, Loz. Cartons	U.K.	20 doz.	dozen	0 1 4	) , , , , , , , , , , , , , , , , , , ,
1887	, , , 4 oz. ,	,,	10 ,,	.'	0 4 3	Hicks, Atkinson & Sons Pty. Ltd.
1888 1889	, , , , , , , , , 11b	Vict.	1500 lb	lb".	0 1 21	Orders are to be placed with Hospitals Board of Supplies for
40.1	Ung. Hydrarg. B.P	4 /	. 15 "	٠٠. ،	1 1.c. ) .dl	grade "H1" at 1/21d. per lb. 'Nil ''
		% discour	nt—30 days.	i er l	17:17: <b>3</b> 6 - 14 - 1	•

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#### TELEGRAPH AND TELEPHONE MATERIAL

#### (Period 1/10/34 to 30/9/35).

- SPECIFICATION FOR DRY CELLS.—Item No. 1896.
  - (a) General.—The Cells are required for light intermittent service such as telephone operation, bell ringing and similar work. Except where otherwise specified in this specification cells shall comply with British Standard Specification No. 397, of 1933, and are therein designated as type D.R. 3.

(b) Terminals.—Two knurled brass terminals shall be provided, fixed in an approved manner to the electrodes.

(c) Samples.—The tenderer shall submit with his tender two sample Cells.

(d) Tests.—All of the Cells delivered will be subjected to the following test in addition to the appropriate tests specified in B.S.S. 397 of 1933—

The current reading at the expiration of one minute will be measured through a

resistance of 3 ohms., including the resistance of the ammeter. It shall not be less

than 480 milliamperes in the case of a new cell.

(e) Branding.—Cells shall be branded "VICTORIAN RAILWAYS," and the method of branding to be adopted shall be stated by the tenderer in the tender: 'Cells shall also be branded with the words TESTED BY and DATE, a sufficient space being left at the side of these words to accommodate the signature and date affixed by the Railways Testing Officer.

(f) Packing.—The Cells shall be delivered securely packed in strong cases containing 50 cells in each case. There shall be a moisture proof covering between cells and

- (g) Efficiency.—The tenderer shall state the guaranteed capacity in watt. hours of each Cell offered by him, but in no case shall the minimum output be less than 35 watt. hours. The electrical efficiency of a cell offered under this specification shall be the watt. hour output as determined by tests conducted by the Department on sample cells extracted from each delivery. Where the Cells are manufactured in the Commonwealth, 12 cells chosen at random from each delivery shall be taken. Of these, 6 shall be submitted to watt. hour capacity tests as described hereunder. The remaining 6 shall be held for further joint or independent tests in event of the Contractor wishing to dispute the results of the Department's tests. In this event the value of these remaining 6 cells shall be deducted from payments to be made to the Contractor. The watt. hour capacity tests shall be conducted as specified in B.S.S. 397/1933. These tests will be conducted in the Laboratory of the Department. The watt. hour capacity of the Cells supplied will be taken as being the average of the cells so tested and will be the basis upon which the deductions referred to hereunder in regard to deficiencies in watt. hours will be enforced.
- (h) Deficiency in Watt. Hours.—Should the watt. hour capacity as determined by the tests set out in the preceding paragraph indicate that the cells are furnishing a watt: hour output of less than 35 watt. hours per cell, the Contractor shall forfeit from the amount withheld, an amount per cell bearing the same proportion to the contract price as the reduction in watt. hour capacity bears to the minimum watt. hour output

required, i.e., 35 watt. hours.

Should the 5% withheld in accordance with paragraph (i.) be insufficient to cover the claim of the Department, the Contractor must agree to accept a corresponding reduction in price from payments due for cells delivered. Nothing in this specification or in the conditions of contract shall prejudice the right of the Department to recover from the Contractor any amount exceeding the 5% retained should this amount be insufficient to cover the claim.

(i.) Acceptance.—A payment of 95% of the Contract price will be made for Cells accepted as having passed the tests as laid down in this specification and as having been correctly delivered in other respects. The balance of 5% will be withheld until the tests referred to in paragraph (g) have been completed.

9. SPECIFICATION FOR No. 2 POROUS POTS.—Items Nos. 1910 and 1911. 

Pots shall comply with B.S.S. 397/1933 in so far as it applies.

Carbon plate shall be of the best carbon and shall reach the bottom of pot.

Brass terminals shall be fixed to top of carbon in approved manner so as not to become loose or detached in service.

Contents of cell shall be not less than 350 grams and to consist of equal parts of manganese · ,11, 1 - \*\* dioxide and crushed carbon.

Particles shall be of a uniform size and intimately mixed." . .

The tops of the porous pots shall be sealed up in the usual manner with best pitch to a thickness of  $\frac{3}{16}$  inch and perforated by a tube to allow the escape of gases generated in the cell.

The tops of the cells complete (excepting only the terminals) shall be dipped into a mixture of paraffix Wax and ozokerite to within half an inch below the top of the porous pot.

Tenderers shall submit with their tender two (2) sample Pots for testing purposes.

Pots shall be sufficiently porous to pass the following tests:-" Pots shall be filled with water to a depth of  $4\frac{1}{2}$  inches, and water maintained at this level for 24 hours with suitable precautions against evaporation. At the end of this period not less than 100 cubic centimeters of water shall have passed through the pot.

If required, 12 weeks to be allowed for the initial order.

#### TELEGRAPH AND TELEPHONE MATERIAL—continued.

Each of the Carbons shall be furnished with tightly fitting bands to prevent them touching the Zinc Rod as used by the Corporation, and shall otherwise be in accordance with the sample exhibited by the Corporation for the guidance of tenderers.

As 'regards Items 1894, 1895, 1898, 1902, 1909, 1910, the rates include Telegraphic Transfer Exchange between Australia and London at  $25\frac{1}{2}\%$ , and if this rate of Exchange be varied during the Contract period, the difference calculated on 40% of the Contract rate shall be to the 'Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

As regards Item 1913 adjustment for exchange shall be as above except that it will be calculated on an amount of £2 each and as at the date of delivery.

As regards Items 1894, 1895, 1898, 1902 and 1909 the rates are firm as regards conversion.

As regards Item 1911, T.T. exchange between Australia and London is to Corporation's account, and will be charged at the rate current at the date of delivery on an amount of 1/- per carbon. Conversion has been calculated in the contract rate at 124.21 francs to £1 sterling, and any variation on the date of delivery will be charged on 1/- per carbon. Exchange between Australia and London at the published rate on the date of delivery will be charged on the amount represented by the sum which has to be remitted by the Contractor to cover the depreciation of the £1 sterling

Item 1913.—Delivery ex stock for ordinary requirements. Special quantities 10/12 weeks for delivery.

	·	<u> </u>	· · · · · · · · · · · · · · · · · · ·			
Item No.	Description.	Country of Manuf're.	Estimated Requirements	Rate.	Rate.	Name of Contractor.
		<del></del>		[ <del></del> -		
				ļ	£. s. d	
	Bells, Extension, Magneto type, mounted, "RA-30"—	74 .				
†1894	2500 ohms	Sweden	35	each	1 0 0	Ericsson Telephone
+1895	1000 ohms	Sweath	25		0 19 0	Manufacturing Co.
†1896 ·	Cells, Dry, to Specification, to be branded	Vict.	12,000	٠,,	0.1 3	Widdis Diamond Dry
	"The property of The Victorian Railways		,,,,,	".	,	Cells Pty. Ltd.
	Commissioners "	-			1	,
†1897	Condensers, 2 M.F., approx. 4½" x 2" x ½"	•••	150			Nil
11000	Receiver for Auto., Coy,'s Table Tele-		٠ ـ ـ ـ ا			
†1898	Receiver for Auto., Coy.'s, Table Tele-	Sweden	75	· · ·	0, 1 2	Ericsson Telephone
	phones 2' 9" long, 2 Conductor Cord	g acu		٠٠,		Manufacturing Co.
†1899	Switchboard, 5' long, 3 conductor, to	l' · ·	, , , , ,		1	h
1 4000	fit Kellog plugs	;· •••··	.1			\ ·
†1900	Switchboard, 4' 6" long, 2 conductor,	•••			l	Nil
•	red	•	1 ,,,	•	i: .	11
†1901	Switchboard, 4' 6" long, 2 conductor,	. , ,••••			· ···	IJ
1.1000	white	a.,		٠.		
†1902	Cord, Telephone, braided, silk insulated,	Sweden	1000 yds.	yard	0 1 0	Ericsson Telephone
*1903	four-way Mouthpieces, for W.E. Telephones	Vict.	300	each	0 0 3	Manufacturing Co.
1000	, indutipleces, for w.r. retephones	(partly).	, 300.	each	0,0 9	McKenzie & Holland (Australia) Pty. Ltd.
	Pins, Queensland, Galvanized, to Drawing,	(partiy).	' ' ' '	•		(Australia) I ty. Ltu.
	No. F. 1465—				1	
1904	Large, No. 3	Vict.	2000	**	0 0 6.4	\ McPhersons Pty.
1905	Small, No. 4	** >>	90.	٠,	0. 0 5.45	∫ Ltd.
1906	Pins, Telegraph, Blue Gum, Jarrah, Iron-	2 (CH)	6000	:1000,	5,84	Chief Mechanical En-
	bark, Blackwood, Stringy-bark, or other approved Timber, to Drawing IF. 2459,		,	4 1		gineer
	amended		۱, ,			,
*1907	Pins, Insulator, Galvanized, with Pat. B,	,,	250	each	0 0 3:	McPhersons Pty. Lta.
2007	Lead Head; Goose Neck, 1	<b>"</b>				Mer hersons I ty. Ist.
†1908	Plugs-2-Conductor "Kellog"	·				, Nil
†1909	" 2-Conductor, "W.E."	Sweden	. 100.	each	0 2 8	Ericsson Telephone
		1			l	Manufacturing Co.
†1910	Pots, Porous, Leclanche, to Specification,	U.K.	[Υ΄	, + 22	$\begin{bmatrix} 0 & 1 & 5\frac{3}{4} \end{bmatrix}$	The Lawrence & Han-
	"Atlas"	,	2300		,	son Electrical Co.
±1011	'	France &			0 1 0	Ltd.
<del>†</del> 1911	Carbons, A.D.: No. 245	Vict.	ן'	,, .	0 1 9	McKenzie & Holland
<b>†1912</b>	Receivers, Polarized Bell Type	VICE	' ', '			(Australia) Pty. Ltd. Nil
1913	Receivers, Polarized Bell Type Telephones—Table Type, Automatic, "As-	U.K.	50	* **	3 5 0	Siemens (Australia)
1	I tic A Type Neophone		50	<b>"</b> '.		Pty. Ltd.
†1914	Zincs, No. 218, for A.D. Caustic Soda	'Vict.'	1000	,,,	$0 2 10\frac{1}{2}$	McKenzie & Holland
101- **	Cells	 	·	´ . ´ ``		(Australia) Pty. Ltd.
1915-19	119 Nil.	i - , 'n	17 1 10 1 10 1	'	• • • • • • • • • • • • • • • • • • • •	1



#### ·ACETYLENE, .CARBONIC ACID GAS AND OXYGEN.

#### ACETYLENE.

7. The service comprises the supply and delivery as ordered in the manner herein specified in steel cylinders, where directed at Flinders-street Station or elsewhere, of purified compressed Acetylene dissolved in acetone.

The Acetylene must be pure and dry.

The Acetylene shall contain not more than 05 per cent. Phosphine.

Acetone must be genuine, free from all impurities, and when fully charged the quantity of acetone must be such that it does not completely fill the voids of the porous substance in the cylinder at a temperature of 150 deg. Fahrenheit.

The Acetylene will be submitted to the following test. Cylinders for testing may be selected from each delivery:—

When the Acetylene is played for 40 seconds on a piece of Blotting paper saturated with a 5 per cent. solution of silver nitrate in water, the Blotting paper shall not discolor.

The Acetylene and Cylinders supplied shall comply with the standard set by the British Acetylene Association and shall be manufactured and charged in strict accordance with the Home Office Regulations contained in the order of Secretary for State (No. 9), dated June 23rd, 1919.

The rate for Acetylene supplied in the Departmental cylinders shall include the maintenance of the cylinder valves, also re-acetoning of cylinders as required. The bulk of the Acetylene under Items Nos. 1920 and 1921 shall be supplied in cylinders containing six (6) kilogrammes of Acetylene, but a small proportion of small cylinders may be used.

The weight of the cylinder, valve, and acetone must be shown separately on each cylinder:

The empty cylinders will be returned to Contractor at Spencer-street or Flinders-street
Station.

#### CARBONIC ACID GAS.

8. The empty Carbonic Acid Gas cylinders will be returned to the Contractor at the Ice Works, Spencer-street Station Yard, or Metropolitan Receiving Depot.

#### OXYGEN.

The Oxygen shall consist of gas compressed in cylinders to a pressure of not less than 120 atmospheres.

The compressed Oxygen Gas shall be supplied in cylinders containing six (6), twenty (20), forty (40), one hundred (100), or two hundred (200) cubic feet as ordered.

Oxygen taken from such cylinders comprised in each and every delivery, as the Comptroller of Stores may select, shall, when tested, fulfil the foregoing requirements.

Samples of Oxygen taken from such cylinders comprised in each and every delivery, as the Comptroller of Stores may select, shall, when subjected to analysis, contain not less than 98 per centum of oxygen.

7.1

The Australian Oxygen Co. and Oxygen Service Co. shall have the right to test, before refilling, any Departmental cylinders which have not been previously tested for a period of two years, and the cost of such test, at 3s. 6d. per cylinder, will be borne by the Corporation.

As regards cylinders of Australian Oxygen Co. and Oxygen Service Co., if any cylinders be not returned within six months, and if claim be made, adeposit will be lodged by the Corporation as shown below, which shall be refunded by the Contractor on the return of such cylinders to the Contractor in good order and condition, and that in the event of any cylinders or valves being damaged whilst in the possession of the Corporation, the Corporation will bear the cost of any repairs or replacements of such damage provided the charge is reasonable.

#### VALUE OF CYLINDERS.

Rates do not include Sales Tax: if exemption clause be not included on order, Sales Tax payable. This refers to Refreshment Services Branch.

As regards Items 1920-1923, Allen-Liversidge shall furnish a quarterly statement of residual gas obtained from cylinders returned and credit the Dept. with the value of same.

As regards Items 1924 to 1925, delivery will be made free of charge direct to, and empty cylinders collected from, any point in Melbourne or Suburbs, as directed by Comp. of Stores.

As regards Item 1925 and 1925A, orders shall be allotted as under-

65% of requirements to Aust. Oxygen and Ind. Gases Pty. Ltd. 35% , Oxygen Service & Mftg. Co. Pty. Ltd.

(To be arranged and kept under review by S. House Manager.)

## ACETYLENE, CARBONIC ACID GAS AND OXYGEN-continued

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Acetylene, compressed, purified	· ( ) ( )	tia	o, like		Sp. (
1920	În Departmental Cylinders :	Vict.	50°1b.	Ιь.,	0 1 11	777
1921	In Cylinders supplied by the Contractor	<b>"</b> ;	80,000 ,,		train a	
1922	Acetylene, in Cylinders of 100 c. ft. capacity, suitable for Departmental flares in use at Overhead Depots of the state of the suitable for the suitable flares in the suitable for the suitable for the suitable flares in the suitable for the suitable flares in the suitable fl		1750 ,,	,, ,,	0 2 0	Allen-Liversidge Aust. Ltd.
1923	Acetylene, in Cylinders of 50 c. ft. capacity, suitable for Departmental flares in use at Overhead Depots	f.	1750 ,,		0 . 20	
1924	Gas, Carbonic Acid, in steel cylinders, supplied by Contractor, containing 50 lb. of gas each	r Cir.	}	1 22 2 1	0 0 4	Australian Oxygen
1924 A	Gas, Carbonic Acid, in Departmental steel cylinders, containing 50 lbs of gas each	.,,		,, :	{0 '0 4 less 10%	& Industrial Gase Pty. Ltd.
1925	Oxygen, not less than 99 per cent		. 3,900,000 с.	100	0 4 3	J ,
1925a	od star at control of the action of		feet 2,100,000 ,,	c. ft.	6" 4 3	Oxygen Service &
1926	Hydrogen, in cylinders of 100 cubic feet		, 8000 c. ft.	,,	0 12 6	Mftg. Co. Pty.Ltd. Australian Oxygen & Industrial Gases
1927_	1928—Nil	.,				Pty. Ltd.

COKE AND COAL TAR.

7. Quality.—The Coke and Coal Tar shall be the very best quality of their respective kinds.

8. Gas Coke.—The Gas Coke shall conform to the following specification:

Moisture
Sulphur
Less than 3 per cent.

Less than 1 per cent.

Nolatile Matter
Less than 2 per cent.

Less than 10 per cent.

9. Tests of Coke.—All tests to ascertain if the Coke complies with this specification will be carried out by the Corporation on samples which will be taken from deliveries of Coke in trucks after arrival at the Workshops of the Corporation, or on samples which will be taken from any Coke after it is delivered direct by the Contractor to the place specified on the order for same!

- 10. Empty Bags for Coke.—In the event of Coke being ordered for delivery in bags, the necessary empty bags will be delivered by the Corporation, free of all charges incidental thereto, at the works of the Contractor, and the fact that the necessary bags have been so delivered will be indicated on all orders affected by this provision before they are issued to Contractor, excepting that for Item 1940 the Coke shall be delivered in Contractor's bags which will be returnable.
- 11. Weights of Coke.—All weights shall be net and shall be ascertained by weighing the Coke on the weighbridge scales or other weighing machines of the Corporation, excepting where it is not practicable to obtain weights as aforementioned, a weighbridge weight docket shall be furnished by the Contractor with each delivery of Coke.
  - 12. Coal (Crude) Tar.—The Coal Tar shall conform to the following specification:—

Source.—The Tar shall be solely the natural residual resulting from the destructive distillation of bituminous coal, during the process of gas manufacture.

The Tar shall not contain more than 5% by volume of water (ammoniacal liquor); an allowance shall be made for any water in excess of 5%.

Specification of the form of the for

13. Tests of Coal Tar.—All tests to ascertain if the Coal Tar complies with this specification will be carried out by the Corporation on samples which shall be taken; at the discretion of the Comptroller of Stores from any delivery.

#### . COKE AND COAL TAR-continued.

- 14. Empty Containers for Tar.—In every case where Coal Tar is ordered, the necessary containers will be delivered by the Corporation, free of all charges incidental thereto, at the works of the Contractor (and the fact that the necessary containers have been so delivered will be indicated on all orders for Coal Tar before they are issued).
- 15. Gallonage of Tar.—The gallonage of Coal Tar as ascertained at the Contractor's works shall be accepted for the purpose of this Contract.
- 16. Delivery.—The Coke and Coal Tar shall be delivered by the Contractor at the place or places stipulated in the Schedule.
- 17. Each Truck to be Loaded to its Prescribed Tonnage Capacity.—Provided there is on order with the Contractor a quantity sufficient for the purpose, the Contractor shall load to its prescribed tonnage capacity each truck in which Coke or Coal Tar is delivered, and in the event of failure on the part of the Contractor to so load any truck, the Corporation reserves the right to debit the Contractor with such amount as may be determined by the Comptroller of Stores, after taking into consideration the shortage in weight, the distance of the haul, and any other circumstances.

As regards Items 1929/32A as the coke supplied by The Metropolitan Gas Co. and the Colonial Gas Co. is of about equal quality, the business should as far as possible be equally divided between these two Contractors.

As regards items for Coal Tar orders are to be placed with Coates & Co. for Tar required in Country districts and for use in special work in the Metropolitan district.

The Contract with the Metropolitan Gas Co., provides for time of delivery to be extended in the event of strikes or labor troubles of any kind preventing delivery by the due dates.

The Contracts with the Metropolitan Cas Co. and The Colonial Cas Co. also provide for the rates being amended should there be any variations in the price of Coke at Contractor's Works during the Contract period, such increase or decrease in the rates shall apply to any Coke undelivered at the date of such variation in price of Coke.

Delivery of Coke by the Colonial Gas Association shall be given at Footscray, Box Hill or Oakleigh, at Corporation's option.

Item No.	. Description	Country of Manuf're	Estimated Requirements	Rate per	Rato	Name of Contractor
	9 .		,		£us. d.	Maria Caliza Tanan Maria Maria Maria Maria
1929	Coke, Ordinary, Loose, delivered into Departmental Drays at Contractor's	Vict.		ton	1 12 0	Colonial Gas Association Ltd.
1929a	Works, Footscray  Coke, Ordinary, Loose, delivered into Departmental Drays at Contractor's	, , .	20 tons	,,	1 12 0	The Metropolitan Gas Co.
1930	works at West Melbourne Coke, Ordinary, Loose, delivered direct by Contractor within a radius of one (1) mile from the Spencer Street Rail- way Station			<b>"</b>	1 14 0	Colonial Gas Association Ltd.
1930a	Coke, Ordinary, Loose, delivered direct by Contractor within a radius of one (1) mile, from the Spencer-street Railway	1	20 ,,	, ,,	1 14 0	The Metropolitan Gas Co.
1931	station Coke, Ordinary, Bagged, delivered direct by Contractor within a radius of one (1) mile from the Spencer-street Railway	, ,,		,,	1 15 0	Colonial Gas Association Ltd.
1931a	station Coke, Ordinary, bagged, delivered direct by Contractor within a radius of one (1) mile from the Spencer Street Rail-	:	40 ,,	, ,,	. 1 15 0	The Metropolitan Gas Co.
.1932 .	way Station Coke, Ordinary, Loose, delivered free on rails at Loop "B" Footscray, Box Hill, or Oakleigh	,,		,,	1 14 0	Colonial Gas Association Ltd.
1932a	Coke, Ordinary, Loose, delivered free or rails at Pigott-street Siding, West Mel-	ı ,,	4000 ",,	,,,	. 1 14 0	The Metropolitan Gas Co.
1933	bourne Coke, Ordinary, Bagged, delivered free on rails at Spencer-street, Melbourne	, ,	20 ,,	,,	1 15,0	Gas Co.

# . COKE, AND, COAL TAR-continued.

Item No.	Description	Country, of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
1934	Coke, Ordinary, Loose, delivered by Con-	Vict.	900		£ s. d. 2 1 0	,
1001	tractor direct into Bins at Ballarat North Workshops	viet.	200 tons	ton	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	The Ballaarat Gas
1935	Coke, Ordinary, Bagged, delivered direct by Contractor to the Railway Refresh- ment Rooms at Ballarat	,,	120 "	,,	2 1 0	Co.
1936	Coke, Ordinary, Loose, delivered by Contractor direct into Bins at Bendigo North Workshops		200 ,,	,,		To be obtained under item 1932
1937	Coke, Ordinary, Bagged, delivered direct?  by Contractor to the Railway Refreshment Rooms at Bendigo	Vict.	120	, .	2 5 0	Bendigo Gas Co.
1938	Coke, Ordinary, Bagged, delivered direct by Contractor to the Railway Refresh- ment Rooms at Ararat, or into trucks at Ararat Railway Station for the Loco. Depot, Ararat	, ,, ,,	60 ,,	**. **:	2 5 0	The Gas Supply Co.
1939	Coke, Ordinary, Bagged, delivered direct by Contractor to the Railway Refreshment Rooms at Geelong		60 ,,		•••	Nil.
1940	Coke, Ordinary, Bagged, delivered by Contractor direct into Bins at Electrical Depot Storehouse, Spencer Street, Mel- bourne in Contractor's bags, which will be returnable	Vict.	600 "	ton	1 15 0	The Metropolitan Gas Co.
1941	Coal Tar (to Specification)— Tar, Coal, delivered at Contractor's	',,,	γ	gal.	0 0 4	
19 <b>41</b> a	Works, West Melbourne Tar, Coal, delivered at Contractor's Works at Mentone	<b>,,</b> .		",	0 0 57	<u>)</u>
1941в	Tar, Coal, delivered at Contractor's Works at Ballarat or Bacchus Marsh	,,		,,	0 0 58	
1941c	Tar; Coal, delivered at Contractor's Works at Ararat	. "	8,000 gallons	"	0 0 63	Coates & Co. Pty. Ltd.
1941p	Tar, Coal, delivered at Contractor's Works at Stawell	"		,, "	$0  0  6\frac{1}{2}$	
1941E	Tar, Coal, delivered at Contractor's Works at Warracknabeal, Sale or Albury	,,	]	,,	0 0 78	
1942	Tar, Coal, delivered free on rails at Spencer-street	,,	]	,,	0 0 41	The Metropolitan Gas Co.
1942a	Tar, Coal, delivered free on rails at, Mentone	,,		,,	0 0 6	) ·
1942в	Tar, Coal, delivered free on rails at Ballarat	, ,,,		· , ; ; ; ;	$0  0  5\frac{1}{2}$	,
1942c	Tar, Coal, delivered free on rails at Bacchus Marsh	,,	12,000 gals.	" 1 "	0 0 53	Coates & Co. Pty.
1942D	Tar, Coal, delivered free on rails at	,,	, .	,,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Ltd.
1942E	Ararat Tar, Coal, delivered free on rails at Stawell	,,		,,	0 0 6	
1942F	Tar, Coal, delivered free on rails at Warracknabeal, Sale or Albury	,,	1	,,	0 0 71	

# PORTLAND CEMENT. SPECIFICATION.

- 8. Quality.—The Portland Cement shall comply, in every particular, with the Specincation of the Australian Commonwealth Engineering Standards Association No. A2—1926.
- 9. Weights.—In each and every lot of twenty-four (24) multi-wall paper bags delivered there shall be contained one (1) ton (2240 lb.) nett weight of Cement.

Selective check weighings of any lots of twenty-four bags will be made by the Corporation from time to time, and at any time, to ascertain if the foregoing provision is being complied with.

All weights shall be nett and will be ascertained by weighing the Portland Cement on the weighbridge scales or other weighing machines of the Corporation, and all such weights so ascertained by the Receiving Officer shall for all purposes be accepted by the parties to this Contract as correct and final and binding.

10. Branding.—Each Bag shall be branded V. ∧ R.

Each mark shall be three inches high, suitably spaced, and shall be printed or stencilled at the Contractor's option.

11. Delivery.—The Portland Cement shall be provisionally delivered by and at the cost of the Contractor, free on rails at Fyansford, subject to inspection and tests carried out by the Corporation and to the operation of the "Rejection" clause of the Conditions of Contract.

In the event of any general reduction in the selling price of cement to Government Departments, during the currency of the Contract, the Contract Rate shall be amended accordingly. Should a special rate be made in connection with a sale to another Government Department to which special consideration may apply, no amendment in the Contract Rate will be made, provided the Corporation is accorded the benefit of any special rate in cases when the determining special considerations are complied with.

To be ordered in minimum truck loads of 11 tons.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
1945	Cement, Portland, as specified, in approved Multi-wall Paper Bags, "Arc," delivered f.o.r. Fyansford	Vict.	bags 15,000	ton	£ s. d. 4 2 0	Australian Cement Ltd.

#### GAS MANTLES

#### SPECIFICATION.

- 7. Quality of Material.—The Gas mantles shall be constructed of the best materials saturated with proper proportion of Oxides of Thorium and Cerium. (The weights of Oxides of Thorium and Cerium present in proportion to the total weight of the mantle shall be taken as an indication of the quality of the mantle.)
- 8. Particulars.—The mantles shall be in accordance with the particulars shown opposite the various items in the Schedule, and shall have a high photometric value and shall be in accordance with samples submitted with the tender. The mantles under Items Nos. 1946 to 1949 shall be complete with base.
- 9. Tests.—The sample mantles shall be tested in a Woodall Moon or other gas mantle testing machines by and at the cost of the Corporation as follows:—
  - (a) The sample mantles shall be adjusted to a gas burner and burned off for 5 minutes.
    (b) The sample mantles shall be adjusted to a gas burner and burned continuously for

a period of 24 hours.

The mantles after being burned for the periods specified in (a) and (b) shall be subjected to shock tests and their ability to withstand such shall be taken as the measure of durability.

Any number of mantles as may be decided by the Comptroller of Stores may be taken from each lot in each delivery of mantles under this Contract, and may be tested as above to determine if they comply with the Contract sample. Should the mantles so tested fail to comply in any particular with the Contract sample the whole of the lot from which they were selected will be liable to rejection.

10. Containers.—The mantles under Items Nos. 1946 to 1949 shall be supplied, each in separate cardboard containers, so constructed to protect the mantle from damage, and so that the mantle can only be removed by sliding it out of the container.

The mantles shown under Items Nos. 1950 and 1951 shall be suitably packed in containers to protect them from damage.

· 11. Ten weeks will be allowed from date of acceptance for importation, subsequent deliveries ex stock.

#### GASI MANTLES-continuea.

12. McMicking & Co.'s rates are based on the rates of Customs Duty and Primage Duty ruling on 27/6/34, and T.T. exchange at  $25\frac{1}{2}\%$ , and in the event of there being any alteration in such dutues or should the rate of exchange vary, same shall be to the Corporation's account in sc such duties of should the rate of exchange vary, same shall be to the Corporation's account in so far as the shipment or shipments affected are concerned, and shall be calculated on the f.o.b. selling values as disclosed by declared customs documents. The Corporation will not be liable for any increase in the event of the Contractor's failing to deliver within the time stated in the order, or if duties be not paid on the most satisfactory basis for British material.

13. Falk, Stadelmann & Co. Ltd's. rate includes Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the Contract period, the difference calculated on 3/1 per gross shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the

any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

A minimum quantity of 12 No. is to be ordered under Item 1951.

Rates include wharfage—and in the event of Mantles requiring to be imported after receipt of an order, and if the quantity involved is sufficient to warrant action being taken, it is, desired that the same be consigned to the Comptroller of Stores of the Victorian Railways Department in order that the benefit of free wharfage may be obtained. Wharfage will be cleared by the Corporation and the Delivery Order returned to the Contractor to complete delivery. The amount involved will be deducted from the Contractor's invoice.

	The transfer of the state of th	<u> </u>	• ,			
Item No.	Description	Country, of 'Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
†1946	Mantles, Pintsch Gas, 25 C.P., Incandescent, Inverted, complete with bases and	U.K.	300 doz.	dozen	£ s, d.	
†1 <del>94</del> 7	Mantles, Pintsch Gas, 50 C.P., Incandescent, Inverted, complete with bases, and	,,	2000 ,,	,,	0 4 8	
†1948 •	as specified, "Lighting Trades Ltd."  Mantles, Bland, Large, Incandescent, Hard, Inverted, complete with bases, and as specified "Lighting Trades Ltd."	,,	40 ,,	, i ,	0, 5 3,	McMicking & Coy.
†1949	Mantles, Bland, Small, Incandescent, Hard, Inverted, complete with bases and as specified "Lighting Trades Ltd."		75 ,,	,,,	0 5 3	
†1950	Mantles, Incandescent, Lux, 700 C.P., as specified "Lighting Trades Ltd."	,,	220 ,,		0 15 .8	].
†1951	Mantles, Gloria Light, No. 20 Lamp, "Veritas" Special Hill texture	, ,, ,	100 ,,,	.,"	0 4 6	Falk Stadelmann & Co. Ltd.
1952	Nil		ļ	-	ļ	

#### SERGE AND TWILL, ETC.

(See Appendix "G" for specifcation)

#### (Period 1/10/34 to 30/9/35)

	(		-,,	,-,,					,
*†1953	Cloth, Tasmanian Bluey, not less than wide	56"	Vict.	350 1. yds:	l. yd.	, O	6'	ΰ	The Federal Woollen Mills Pty. Ltd.
*†1954	Cloth, 24 oz. per lin. yard, 58" wide, Overcoats, "C.N.2"	for	**	1200 ,,	,,	O	6	0	Codeman Hims & C
*†1955	Serge, 18 oz. per lin. yard, 58" wide	•••	. ",	4500 ,,	٠,,	0	6	0	Godfrey Hirst & Co. Pty. Ltd.
*†1956	Serge, 20 oz. per lin. yard, 58" wide	•••	,,	6000 ,,	,,	0	7	0	IJ
*†1957	Twill, 18 oz. per lin. yard, 58" wide	···.	*** ***	3000 ,,	,, ,, .	0	9	0	The Federal Woollen Mills Pty. Ltd.
1958	Nil			l	į				

#### OVERALLS.

Overalls shall be to sample exhibited by the Corporation for general style and workmanship, and to sample submitted of "Tobralco" which will be used in the manufacture of the Overalls.

- 10. Cards on Overalls.—The Contractor shall attach a card to each Overall on which he shall insert the Order Number, Grade and Location of the Employe for whom the article was ordered, and the measurements furnished by the Corporation, to which the garment has been made.
- 11. Delivery Docket and Lists.—The Contractor shall, with each delivery of the Overalls, furnish to the Receiving Officer:—

(a) A delivery Docket (in triplicate) on forms provided by the Corporation for that

purpose;
(b) A list (prepared in triplicate) showing the Order Number, and Names, Grades and Locations of the Employes for whom the Overalls were ordered.

12. Inspection 'and Rejection at Contractor's Factory.—The Comptroller of Stores or the Receiving Officer shall have free access to all parts of the factory of the Contractor at all reasonable times. He shall be at liberty to inspect the material during the manufacture of the Overalls and to reject any material or Overall that does not conform to the Contract, and notwithstanding that any Overall may have been inspected and passed at the factory of the Contractor, it shall be liable to rejection as provided in Clause 13 of the annexed Conditions of Contract.

Any Overall rejected by the Comptroller of Stores or the Receiving Officer at the factory of the Contractor shall not be re-submitted for delivery without the approval of the Comptroller of Stores or the Receiving Officer.

#### SPECIFICATION.

#### QUALITY, WORKMANSHIP, ETC.

13. The Overalls supplied shall be in strict accordance with the Contract sample as regards style and workmanship, and shall be manufactured from the material submitted by the Tenderer and accepted by the Corporation. They shall be subject to such examination and tests as the Comptroller of Stores may direct.

#### MEASUREMENTS.

14. The Overalls shall be supplied in strict accordance with the measurements furnished with the order.

#### INSPECTION.

15. Final inspection of the Overalls will be made at the Uniform Room, No. 28, 1st Floor, Railway Buildings, Flinders-street, Melbourne.

#### DELIVERY.

16. The Overalls shall be provisionally delivered at the Uniform Room, No. 28, 1st Floor, Railway Buildings, Flinders Street, Melbourne.

Item No.	. Description.	Country of Manuf're.	Estimated Requirements	Rate. per		Rate		Name of Contractor.
†*1959	Overalls—"Tobralco" with 2 detachable white collars, to sample exhibited, and to measurements supplied by the Corporation	Vict. (partly)	250	each	£	s. 12	d. 0	Uniforms Specialists Pty. Ltd.

#### - ACCUMULATOR CELLS AND SPARE PARTS.

(See Appendix "H" for Specification)

Delivery.—The Accumulator Cells and Spare Parts shall be provisionally delivered deposited where and as directed at the Corporations' Car Shed Store, Dudley-street, Melbourne, in the manner described in the "Delivery" clauses of the conditions of contract, to the entire satisfaction of the Comptroller of Stores.

Name of Manufacturer, Items No. 1960-1974p and 1976-8, The Associated Battery Makers of Australia Ltd.

	Makers of Australia Ltd.							
1960	Accumulator Cells, complete—as specified—13 plate, Demi-plante	N.S.W.	200	each	5	14	9	)
1961	9 plate, Demi-plante	,,	280	,,	4	14	0	
1000	Accumulator Cell Boxes, complete with lids—as specified—		25		9	5	ß	Coates & Co. Pty.
1962	For 21 plate Standard Tonum Cells	,,	2.)	"	-	J	U	Eta.
1963	For 15 plate Standard Tonum Cells	,,	70	,,	. 2	0	0	
1964 1965	For 13 plate Demi-plante Cells For 11 plate Standard Tonum Cells or 9 plate Demi-plante Cells	"	80 900	21		18 14	9	-

#### ACCUMULATOR CELLS AND SPARE PARTS-continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
1066	Accumulator Cell Lids, complete, as specified—	NCW	60		£ s. d.	
1966	For 21 plate Standard Tonum Cells	N.S.W.	60	each	0 7 6	
1967	For 15 plate Standard Tonum Cells	,,	130	,,	0 6 5	
1968	For 13 plate Demi-plante Cells	,,	130	,,	0 6 5	<b>4</b>
1969	For 11 plate Standard Tonum Cells or 9 plate Demi-plante Cells	,,,	1400	,,	0 6 0	•
1970	Bottom Blocks, complete, as specified— For 15 plate Standard Tonum Cells	,,,	140	,,	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
1971	For J1 plate Standard Tonum Cells, or 9 plate Demi-plante Cells	,,	900	,,	0 2 9	Coates & Co. Pty.
1972	Positive Plates, complete, as specified	,,	250	,,	0 4 4	
1973	Negative Plates, complete, as specified	,,,	600	,,	0 2 7	
	Positive Sections, complete, as specified-					[ ]
1974	For 21 plate Standard Tonum Cells	,,	40	,,	2 9 6	
1974a	For 15 plate Standard Tonum Cells	,,	90	,,	1 15 6	
1974в	For 13 plate Demi-plante Cells	,,	140	,,	1 10 9	
1974c	For 11 plate Standard Tonum Cells	,,	1600	,,	1 6 0	
1974D	For 9 plate Demi-plante Cells	,,	450	,,	1 1 0	J
*1975	Ebonite Accumulator Accessories— Ebonite Fork Separators	Vict.	200 doz.	doz.	0 3 3	Barnet Glass Rubber
*1976	Ebonite Fork Separators Demi-plante	(partly) N.S.W.	20 ,,	,,	0 4 9	Co. Ltd.
*1977	Ebonite Cell-testing Tubes	23	80 "	,,	$0 \ 2 \ 6\frac{1}{2}$	Coates & Co. Pty.
*1978	Accumulator Floats	11	400 ,,	,,	0 7 0	]
*1979	Ebonite Side Sheets— 11-pt., 11 <sup>0</sup> / <sub>16</sub> " x 5 <sup>0</sup> / <sub>16</sub> " x 19 B.W.G	Vic.	500 ,,	,,	0 5 6	]
*1980	15-pt., 11½" x 7¾" x 19 B.W.G	(partly)	40 ,,	,,	0 6 9	
*1981	21-pt., 11½" x 11" x 19 B.W.G	,,	10 ,,	,,	0 8 9	
*1982	Ebonite Bottom Sheets— 11-pt., 5\frac{5}{4}" x 5\frac{1}{2}" x 19 B.W.G	,,,	100 ,,	,,	0 3 0	> Dunlop-Perdriau   Rubber Co. Ltd.
*1982a	15-pt., $7\frac{5}{8}$ " x $5\frac{1}{2}$ " x 19 B.W.G	,,	40 "	١,,	0 3 10	

#### ENGRAVING PERIODICAL TICKETS

7. The "Engravings" shall consist of the refilling of the existing name, etc., and engraving such words and figures as may be ordered.

The tickets for engraving will be delivered to the Contractor at the office of the Auditor of Revenue in the Spencer-street Railway Building, and when engraved, they shall be delivered by the Contractor to the Auditor of Revenue. In the event of any tickets being spoilt or damaged whilst in the possession of the Contractor, the value as assessed by the Comptroller of Stores shall be reimbursed to the Corporation by the Contractor.

1983	Engravings (comprising refilling of the existing words and figures on tickets furnished by the Corporation, and en-	 1000	Engrav- ing	0	1	8	Harold A. Jones
	graving thereon, such other words and		-		•		

GUM AND INKS.

Item 1991 does not cover the requirements of the Goods Superintendent.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	•				Ė s. d.	
†1984 🏂	Gum, Liquid, in 10-gallon kegs; empty kegs will be returned to the Contractor at the Metropolitan Receiving Depot	Vict.	120 gals.	Imp. gal.	0 4 3	Spicers & Detmold Ltd.
∱1985	Paste, Office in 10-oz. bottles	N.S.W.	1400 bots.	bottle	0 0 43	Davis Gelatine Pty. Ltd.
	Ink—		•	·		
1986	Blue Black, in sound casks; empty casks will be returned to the Contractor at the Metropolitan Receiving Depot		350 gals.	Imp. gal.	0 1 7½	<b>!</b>
1987	Blue Black, in bottles, Imperial quarts	,,	450 bots.	bottle	0 0 113	
†1988	Blue Black, Copying, Imperial pints	,,	5 ,,	,,	0 1 3	Spicers & Detmold
†1989	Green, 12-oz. bottles	,,	120 ,,	,,	0 0 7	Ltd.
†1990	Red, 6-oz. bottles		50 ,,			Nil
†1991	Violet, 12-oz. bottles	Vict.	40 ,,	bottle	0 0 7	Spicers and Detmo
†1992	Metal Stamp, blue, 1-oz. bottles	,,	40 ,,	,,	0 0 5	C. G. Roeszler
†1993	Metal Stamp, black, I oz. bottles	,,	60 . "	,,	0 0 5	Son
†1994	Telegraph, *2-oz. bottles		30 ,,		•••	Nil
	Ink. Indian, in 1 oz. bottles, with quill filler—					,
†1995	Black	Vict. (partly)	300 ,,	bottle	0 0 9	H. Pudney & Co.
†1996	Any other colors ordered	(partry)	60 ,,	,,	0 0 9	Pty. Ltd.
†1997	I.R. Stamp, purple, in 2 oz. bottles (for Suburban Stations)	, )	1750 ,,	,,	0 0 41	Wiltshire's Pty. L
†1998	,, ,, black, in 2 oz- bottles (for Country Stations)	,, }		,,	0 0 41	J

# BOTTLES, TUMBLERS, ETC.

<b>*2</b> 001	Bottles, Glass, 7 oz., for Gum (J204)	Vict.	40 doz.	doz.	$0  1  6\frac{1}{2}$	Australian Glass Manufacturers Co.
2002	Bottles, Glass, 6 oz., for Ink (L424)	. ,,	150 ,,	,,	0 1 61	1 17.
*2003	Bottles, Stoneware, 1 pint	. ,,	50 ,,	,,	0 5 3	The Hoffman Brick
*2004	Bottles, Stoneware, 1 quart	.,,	14 ,,	,,	0 7 8	& Potteries Ltd.
*2005	Decanters, Glass	N.S.W.	14 ,,	,,	2 14 0	Crown Crystal Glass
*2006	Tumblers, Glass, Unbadged, 10 oz	.,	1000 ,,	,,	0 3 10	Co. Ltd.
*2007	Pots, Glazed, Earthenware, for paste (outside diameter to be exactly to sample exhibited)		8 ,,		•••	Nil
2008-	2009—Nil					

#### OFFICE REQUISITES

8. As regards Items 2014 to 2016, 2018, 2029-2034, 2038, 2041, 2042, 2044, 2046, 2047, 2049, 2050, 2054 and 2055, the rates include Telegraphic Transfer Exchange between Australia and London at 25½%, and if this rate of Exchange be varied during the contract period, the difference calculated on 40% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

The rates for Items 2020 to 2023, 2025, 2037, 2043, 2045 and 2053a are firm as regards exchange and conversion, and the rate for Item 2049 is firm as regards conversion.

‡ The rate for Item 2025 is subject to a discount of 10% for payment in approximately 7 days, and the rates for Items 2010 to 2013 and 2026 are subject to a discount of  $2\frac{1}{2}$ % for payment in 30 days.

_							
-	Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	· Rate	Name of Contractor
	*2010	Bands, I.R., Red Circular, extra strong, ½-gross boxes, No. 5 (5 assorted sizes)	Vict. (partly)	5 boxes	box	£ s. d. ‡0 3 7	
	†2011	Bands, Elastic, in 1 oz. boxes (nett weight)—No. 16, $2\frac{1}{2}$ " x $\frac{1}{16}$ " x $\frac{1}{4}$ " (20 grs. to lb.)	,,	800 ,,	,,	10 0 6	Barnet Glass
	†2012	No. 19, $3\frac{1}{4}$ " x $\frac{1}{16}$ " x $\frac{1}{32}$ " (13 grs. to lb.)	,,	100 ,,	,,	‡0 0 6	Rubber Co. Ltd.
	†2013	No. 33, $3\frac{1}{2}$ " $x\frac{1}{3}$ " $x\frac{1}{3}$ " (7 grs. to lb.)	,,	180 ,,	,,	$10 \ 0 \ 5\frac{1}{2}$	
	†2014	Binders, Paper— No. 642	U.K.	300 gross	gross	0 1 10	
	†2015	No. 644	,,	100 "	,,	0 3 1	Sands & McDougall Pty. Ltd.
	†2016	Bodkins, with eye, Sample No. 2	,,	120 ′	each	0 1 3	
	†2017	Bowls, glass, 4" at top, with sponge		100	,,	$0 - 0.10\frac{1}{2}$	
	†2018	Clips, Bulldog, $2\frac{1}{2}$ "	(partly) U.K.	140 doz.	dozen	$^{\ddagger 0}$ 1 $^{7\frac{1}{2}}$	Mullens Ltd. Sands & McDougall Pty. Ltd. Greer & Ashburner
	*2019	Clips, Wire, diamond shape, for labels	Vict.	350,000	1000	0 4 6	
	†2020	Crayons, Pencil, solid, "Cosmic, L 3," 4g"—Blue	U.K.	72 doz.	dozen	$0 \ 1 \ 3\frac{1}{2}$	)
	†2021	Crimson	٠,,	32 ,,	,,	0 1 9	
	†2022	Green	,,	12 ,,	,, .	0 1 3	Australian Stationery Co.
	†2023	Yellow	,,	440. ,,*	,,	$0 \ 1 \ 3\frac{1}{2}$	
	†2024	Crayons, School, White, in boxes of 1 gross	Vict.	250 boxes	box	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Robertson and
	†2025	Cylinders, Dictaphone, without cartons in	U.S.A.	200	100	†5 °0 0	Mullens Ltd. Dictaphone Co.
	†2026	case lets of 100 Erasers, Combined Ink and Pencil, small	'Vict.	5 doz.	doz.	‡0 1 4½	(Aust.) Ltd. Barnet Glass Rub-
	†2027	Erasers, I.R., Pencil, small	. "	240 ,,	,,	0 1 4	ber Co. Ltd. Sands and McDou-
	†2028	Erasers, I.R., Pencil, double bevel, "Ever- green"	,,,	70 ,,	. "	$0 \ 1 \ 5\frac{1}{2}$	gall Pty. Ltd.  Dunlop Perdriat  Rubber Co. Ltd.
		Fasteners, Paper, ordinary, in boxes of 1					
†∢	2029	gross— S. 00 "Premier"	U.K.	2 boxes	box	$0  0  3\frac{1}{2}$	1
	2030	S. 0 ,,	,,	2 "	,,	$0  0  3\frac{3}{4}$	
	2031	·S. 1 ·,,	,,	120 ,,	,,	0 0 31	Spicers and Det-
	2032	S. 3· ,,	,,	600 ,,	,,	0 0 43	
	2033	S. 6 . "	,,	250 ,,	, ,,	0 0 73	
•	2034	R. 1 ,	,, ,,	350 ,, Less 2½% p	ayment	0 0 3½ 30 days	٠ .

## OFFICE REQUISITES—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
*2035	Figures, rubber, in sets, in wooden holders	Vict.	80 sets	set	£ s. d. 0 3 3.	C. J. Roeszler & Son
*2036	Files, Foolscap, clip	**	200	each	0 1 5	Sands & McDougall
†2037	Gum, Art, $2\frac{1}{4}$ " x $1\frac{1}{8}$ " x $1\frac{1}{8}$ "	U.S.A.	30 doz.	doz.	$0 \ 3 \ 1\frac{1}{2}$	Pty. Ltd. R. E. Mustow
2038	Holders, Pen, small, "Short taper 3860"	U.K.	45 gross	gross	0 5 3	Spicers & Detmold
†2039	Inkstands, Glass, round, 3½", with fixed	·N.S.W.	300	each	$0 \ 1 \ 2\frac{1}{2}$	Ltd. Sands & McDougall
†2040	metal top Pads, Blotting, 23" x 18", with leather corners	Vict.	50	,,	0 2 11	Pty. Ltd. R. E. Mustow
	Pens, Nibs, in boxes of 1 gross-					
†2041	No. 9 Steel, "Bakfin"	U.K.	1200 boxes	box	$0 - 0 - 11\frac{1}{2}$	Arthur J. Wallace
†2042	"Chronicle"	,	<sup>350</sup> ,,	,,	0 2 5	Sands & McDougall
†2043	Brandeurs, "Herald," No. 404	,,	80 ,,	,,	0 2 5	Pty. Ltd. R. E. Mustow
†2044	"Bak-Fin," Ideal No. 23	,,	200 ,,	,,	0 3 3	Arthur J. Wallace
†2045	"Gillots 303 "	,,	20 ,,	"	0 4 6	R. E. Mustow
†2046	" Gillots 404F"	,,	10 ,,	,,	0, 2 5	Sands & McDougall
†2047	Pens, Manifold, "Bak-Fin, 94"	,,	100 ,,	,,	0 3 9	Pty. Ltd. Arthur J. Wallace
†2048	Pins, Best, Drawing, small, in boxes of 1		8 ,,		•••	Nil .
†2049	gross Pins, Best, Drawing, medium, No. 4, in boxes of 1 gross, "Diana"	Germany	120 ,,	box	0 0 7	
†2050	Pins, Best London, mixed, in packets of	U.K.	700 lb.	lb.	0 2 11	Spicers & Detmold
†2051	l oz., D. F. Taylor & Co. Rulers, Flat, 15", brass edge	Vict.	250	each	0 0 43	Ltd.
†2052	Sponges, for 4" bowls	. "	450	,,	0 0 33	[]
†2053	Staples, Wire, No., 1A, for Hotchkiss Ma-	,,	200,000	1000	0 1 11	Robertson & Mullens Ltd.
†2053a	chines, "Acorn" Staples, wire, "Genuine Hotchkiss" No 1A	U.S.A.	200,000	,,	0 1 4	Australian Stationery
†2054	Staples, Wire, for Acme No. 2 Machines, "McGill's"	U.K.	300,000	,,	0 1 9	Robertson &
†2055	Staples, Wire, for No. 4a Machines; No. 2 Staples, 24" shanks, "McGill's"	,,	200,000	,,	0 1 74	Mullens; Ltd.
†2056	Staples, for Bostitch or Star Machines, as ordered		200,000			To be purchased under item 2053A
†2057	Wax, Sealing, Red, 73" long	Vict.	70 lb.	lb.	0 1 51	Sands & McDougall Pty. Ltd.
≈2058–	2061—Nil	1	I	ı	l .	1

# DRAWING PAPÈRS, PAPER BAGS, ETC.

8. As regards Items 2068, 2069 and 2071, the rates include Telegraphic Transfer Exchange between Australia and London at  $25\frac{1}{2}\%$ , and if this rate of Exchange be varied during contract period, the difference calculated on 40% of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

‡ As regards Items 2064 and 2067, rates are subject to  $2\frac{1}{2}\%$  discount for payment within . 30 days.

As regards Items 2062, 2064, 2065, 2067 and 2070, the rates are firm as regards Conversion and/or Exchange.

# DRAWING PAPERS, PAPER BAGS, ETC.—continued.

Item No.	Descri	iption		Country of Manuf're	Estimat Requireme		Rate per		Rate		Name of Contractor
	·										·
	Paper, Drawing—						i	£	s.	d.	
†2062	Antiquarian, hand-	made, "James	What-	U.K.	8 qui	ires	quire	3	14	0	R. C. Paterson & Co
†2063	man," "N.O.T Antiquarian, moun	ted on linen, 2	5 yards		4 rol	ls	roll	13	0	0	Pty. Ltd. W. & G. Dean Pty.
†2064	per roll Double Elephant, Whatman," or	hand-made, '	' James	(partly) U.K.	3 qu	ires	quire	‡1	6	6	Ltd. Amax. Wurcker (1930
†2065	Cartridge, 60" wide of 50 yards, 73	e, continuous,		**	15 rc	olls	roll	1	5	0	Ltd. Wiggins, Teape & Ale
†2066	Cartridge, 54" wide in rolls of 50 y	le, mounted or	n linen,	٠,	3	,,	,,				Pirie (Export) Ltd Nil
†2067	Tenax, 60" wide, of 25 yards, "3	continuous, i	n rolls	Belg.	3	,,	,,	11	7	6	Max. Wurcker (1930 Ltd.
	Cloth, Tracing-	•		,							
*2068	30" wide, 24 yards	in roll, "Saga	ars ''	U.K.	70	**	,,	3	11	0	W. & G. Dean Pt
*2069	38″ ,, ,,	" "		,,	30	,,	٠,	4	1	0	Ltd.
†2070	Paper, Tracing, unoi wide, 22 yards in	led, continuou	us, 30"	,,	10	,,	,,	. 0	3	6	R. C. Paterson & Co
†2071	Paper, Tracing, und wide, 25 yards in	oiled, continuo	us 40"	,,	20	,,	,,	0	9	6	W. & G. Dean Pty Ltd.
	Bags, Paper, Brown, ordered—	long or squ	are, as						•		
*2072	1 lb.	•••	•••	Vict.	500,000	)	1000	0	2	31	h .
*2073	2 lb.	•••		,,	500,000	•	,,	0	.2	11	
*2074	3 lb.	•••		,,	250,000	)	,,	0	4	03	
*2075	4 lb.	•••		,,	500,000	•	,,	0	4	11	Arthur J. Wallace
*2076	6 lb.	•••	.:.	,,	150,000	•	<b>"</b> .	0	5	111	
	Bags, Paper, Confect	ionery—				٠					
*2077	4 oz. '	•••	•••	Vict. (partly)	50,000	)	,,	0	1	$5\frac{1}{2}$	J
*2078	8 oz.	•••	•••	,,	75,000	)	,,	0	1	81	Andrew Jack, Dyson & Co. Pty. Ltd.
*2079	16 oz.		• •••	<b>,,</b>	50,000	)	,,	.0	2	$^{\cdot}2^{\frac{1}{2}}$	Arthur J. Wallace
	Bags, Paper, Kraft,	Brown, heavy-	_								
*2080	1 lb.	•••		,,	3000	)	,,	0	4	6	Andrew Jack, Dysc & Co. Pty. Ltd.
*2081	2 16.	•••		,,	5000	)	,,	0	Ģ	3	Arthur J. Wallace
*2082	3 lb.	•••		,,	3000	•	,,	0	7	11	Andrew Jack Dynn
*2083	4 lb.	•••	•••	,,	3000	•	,,	0	9	4	& Co. Pty. Ltd.
*2084	6 lb.	•••	•••	,, ,	4000		,,		12		Arthur J. Wallace
*2085	8 lb.	***	•	,,	21,000		,,		15		Andrew Jack, Dyso & Co. Pty. Ltd.
*2086	10 lb.	•••	•••	,,	500		,,	1	_	0	Arthur J. Wallace
*2087	12 lb.		•••	,,	20,000		,,	1		8	Andrew Jack, Dyso & Co. Pty. Ltd.
*2088	16 lb.	•••	•••	,,	10,000	)	,,	1	5	0	Arthur J. Wallace

## DRAWING PAPERS, PAPER BAGS, ETC.-continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
*2091	Bags, Coin, 5" x 7"	Vict.	15,000	1000	£ s. d.	- Arthur J. Wallace
-2031			,			
*2092	Boxes, Cardboard—  7¼" x 4" x 2½" inside	,,	50 doz.	doz.	0 1 0	The Modern Printing Co. Pty. Ltd.
†2093	Cards, Gent.'s Visiting, round or square cornered, as ordered (boxes of 50's) "Rajah"	Vict. (partly)	100 boxes	box	0 0 27	Spicers & Detmold Ltd.
	Envelopes—					
†2094	Glazed Manila, Pocket, 23/ x 51/	Vict.	10,000	1000	0 3 5	Sands & McDougall Pty. Ltd.
*2095	First Quality, White, Note, $5\frac{3}{8}$ " x $3\frac{1}{8}$ "	Vict.	40,000	,,	0 3 7	The Modern Printing Co. Pty. Ltd.
†2096	"No. 90" Pence, M.G. Manila, 3" x 2\frac{3}{4}"	(partly) Vict.	40,000	,,	0 3 7	Sands & McDougall Pty. Ltd.
†2097	Rolls of Paper— Burroughs Adding Machine Paper, 3 76" in 100 yard rolls	Vict. (partly)	500 rolls	roll	0 0 61	Spiçers & Detmold Ltd.
†2098	Barrett's Adding Machine, $2\frac{5}{10}$ " wide in 100 yard rolls		40 ,,	100 rolls	2 8 6	Arthur J. Wallace
†2099	Paper, Brown, Gummed Adhesive, 1' wide, 800' to roll	Vict.	250 ,,	each	0 0 11	Spicers & Detmold Ltd.
†2100	White News, 12" wide x 50 yards long		900 ,,	,,	0 0 7	Arthur J. Wallace
*2101	Tabulating Rolls for Powers Machine	(partly)	900 ,,	,,	0 0 11	Spicers & Detmold Ltd.
†2102 •	Tape, Telegraph Instrument, ½" white in approximately 450 yard rolls	, Vict.	650 lb.	lb.	0 0 7	Robertson & Mullens Ltd.
2103-2	2 107—Nil.		ļ			1

### PRINTING AND WRITING PAPERS, ETC.

## (Period 1st October, 1934-30th September, 1935.)

- 7. The Printing Papers shall be equal in quality, weight, and color to the samples furnished by the Contractor and accepted by the Corporation, and shall be cut to the true size ordered. Each ream shall contain 500 sheets, and shall be supplied flat (not folded). No creased or damaged paper will be accepted.
- 8. The Writing Papers shall be equal in quality, weight and color to the samples furnished by the Contractor and accepted by the Corporation, and shall be cut to the true size ordered. Each ream shall contain 480 sheets, and shall be supplied flat (not folded). No creased or damaged paper will be accepted.
- 9. As regards Item No. 2125, the Corporation undertakes to order during the contract period the full quantity shown opposite to this item, and delivery will be taken of the full quantity under this item in two deliveries as arranged by the Corporation.

As regards the imported items, the rates include Telegraphic Transfer Exchange between Australia and London at  $25\frac{1}{2}\%$ , and if this rate of Exchange be varied during the Contract period, the difference calculated on  $66\frac{2}{3}\%$  of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T. T. Exchange is effective as notified by the Commonwealth Bank. In the case of Items 2125 and 2149 the difference shall be calculated on 50% of the Contract rates.

All rates are firm as regards Conversion.

Items 2125 and 2149 are subject to adjustment for variation in sea freight rates, documentary evidence to be produced, showing rates paid, etc.

Sufficient time to be allowed to import stocks under Items 2125 and 2149 to meet initial orders.

PRINTÍNG AND WRITING PAPERS, ETC .- continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Printing Papers—				£ s. d.	
†2108	Quad. Crown, News, 44½ lb	Canada	260 reams	ream	0 5 11	Gordon & Gotch
†2109	" M.G. Litho., 70 lb	Sweden	, 60 `,,	,,,	1 1 10	(A'sia) Ltd. Alex. Cowan & Sons
†2110	" White, 48 lb. " Sawku "	U.K.	430 ,,	,,	0 12 1	Ltd. Wiggins, Teape & Alex.
†2111	. " Sup. Cal. 72 lb		Ni!			Pirie (Export) Lide
†2112	Double Royal, Kraft Brown, 40 lb	Vict.	- 500 ,,	,,	0 10 5	Australian Paper
†2113	" Blue 48 lb	(partly) 	Nil			Manufacturers Ltd.
†2114	" Cerise, 48 lb	Finland	60 ,,	,,	0 10 11	, ,
†2115	. " Green, 48 lb	,,	85 "	,,	0 10 11	Gordon & Gotch (A'sia) Ltd.
†2116	" Red, 48 lb	,,	50 ,,	1,	•••	Nil
†2117	" Salmon, 48 lb	,,	120 "	,,	0 10 11	)
†2118	" Yellow, 48 lb	,, .	130 "	,,	0 10 11	Gordon & Gotch
†2119	" Pink, 48 lb	,,	45 ,,	,,	0 10 11	(A'sia) Ltd.
†2120	" White, 40 lb. " Sawku "	U.K.	900 ,,	,,	0 10 1	) Wiggins, Teape &
†2121	" White, 50 lb. " Sawku "	,,	230 ,,	**	0 12 7	Alex. Pirie (Export) Ltd.
†2122	" · News, 37 lb	Canada	580 "	,,	0 4 111	
†2123	" M.G. 80 lb	Sweden	20 .,	,,	1 5 0	(A'sia) Ltd. Alex. Cowan & Sons
†2124	Quad. Foolscap, White, 37 lb." Sawku"	UK.	1000 ,,	,,	0 9 4	Ltd. Wiggins, Teape & Alex.
†2125	" Yellow, 40 lb	Scand.	150 ,,	,,	0 8 5	Pirie (Export) Ltd. Arthur J. Wallace
†2126	Double Medium, Ccrise, 80 lb	Sweden	4 ,,	,,	1 0 0	7
†2127	,, Yellow, 80 lb	,,	2 ,,	,,	1 0 0	Alex. Cowan & Sons
†2128	", . Salmon, 80 lb	,,	4 "	٠,,	1 0 0	Ltd.
†2129	" Blue, 80 lb	•••	2 ,,	5)		)
†2130	" Old Gold, 60 lb	•	,,	,,		Nil
†2131	Glazed Cap, 36" x 24", 45 lb	N.S.W.	60 ,,	,,	0 15 0	Australian Paper
†2132	Smooth Cartridge, 20" x 25", 40 lb	(partly)	120 ,,	. ,,	0 17 6	Manufacturers Ltd.
†2133	Double Demy, Yellow, 40 lb	(partly) Finland	70 ,,	,,	0 9 1	)
†2134	" Green, 40 lb	,,	20 ,,	,,	0 9 1	•
†2135	Double Demy, Pink, 40 lb	,,	40 ,,	.,	0 9 1	Gordon & Gotch
†2136	, " Salmon, 40 lb	. ,,	12 ,;	,,	0 9 1	(A'sia) Ltd.
†2137	" News, 29 lb	Canada	650 ,,	,,	$0  3  10\frac{1}{2}$	J
†2138	,, White, 40 lb. "Sawku"	U.K.	320 - ,,	,,	0,10 1	} .
†2139	Demy, White, Gummed, 1st quality, 500's, non-curling "Don" . '	,,	6 "	,,	1 3 3	Wiggins, Teape &
†2140	Demy, White, Gummed, 2nd quality 500's, non-curling "Dee"	,,	180 "	,,	0 16 10	Alex. Piric (Ex- port) Ltd.
†2141	Double Crown, Manilla, Carte, 20" x 30", 100 lb.	Vict. (partly)	100 ,,	"	1 17. 6	Australian Paper Manufacturers Ltd.

# PRINTING AND WRITING PAPERS, ETC.—continued.

Item No.	. Description	Country óf Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Printing Pagers continued				£, s. d.	
†2142	Printing Papers—continued  Double Crown, White Cap., 7–8 lb	;	350 reams	ream		Nil .
†2143	Double Crown, 19" x 29" clear, Grease-	Nõrway	140	.	0 4 7	Spicers & Detmold
2144	proof, 15-17 lb. Paper, Striped Scaling or Brown Cap,		6 ,,	,,,		Ltd.
- حمل	19″ x 29″, 8 lb.					. •
	White Art, 1st Quality, 500's—"Perfect"					
†2145	Quad. Crown, 72 lb., 84 lb., 100 lb., or 120 lb., as ordered	U.K.	100 ,,	1b.	0 0 81	Wiggins, Teape &
†2146	Double Royal, 60 lb., 70 lb., 84 lb., 90 lb., 100 lb., or 110 lb., as ordered	,,	30 ,,	,,	0 0 81	Alex. Pirie (Export) Ltd.
†2147	Double Medium; 56 lb., 60 lb., 70 lb., 80 lb., 100 lb. or 110 lb., as ordered	,,	140 ,,	,,	0 0 8 <u>1</u> ,	
	Lithographic Papers—					
†2148	51" x 31", 160 lb	,,	2 tons	,,	0 0 3 3	'Alex. Cowan & Sons Ltd.
	Writing Papers—					Liu.
†2149	Double Large Post, Bank, White, 22 lb.	Scand.	90 reams	ream	0 7 4	Arthur J. Wallace
†2150	" White, 36 lb	Norway	30 ,,	,,	0 12 0	Spicers & Detmold
†2151	,, White, 46 lb. "Inverdon"	U.K.	90 ,,	,,	1 1 10	Wiggins, Teape & Alex. Pirie (Ex-
$\dagger 2152^{\circ}$	" Azure, 46 lb. "Inverdon"	,,	45 ,,	27	1 1 10	port) Ltd.
†2153	Double Medium Bond, White, 36 lb	Norway	300 ,,	lb.	$0 \ 0 \ 4\frac{1}{8}$	]
†2154	" Blue, 36 lb	,,	15 ,,	,,	$0 \ 0 \ 4\frac{1}{2}$	
†2155	, Green, 36 lb	,,	10 "	,,	$0 \ 0 \ 4\frac{1}{2}$	Alex. Cowan & Sons Ltd.
†2156	", Pink, 36 lb	,, '	20 "	,,	$0 \ 0 \ 4\frac{1}{2}$	
†2157	Yellow, 36 lb	,,	20 ,,	,,	$0 \ 0 \ 4\frac{1}{2}$	J
†2158	Double Medium, Azure, 68 lb. "Huntingtower"	U.K.	20 ,,	ream	2 2 0	Wiggins, Teape & Alex. Pirie (Export) Ltd.
†2159	Quad. Foolscap, Bank, 15 lb. (Manifolding)		20 "		•••	Nil
†2160	Quad. Foolscap, Azure Laid, 60 lb. "Huntingtower"	U.K.	35 ,,	,,	1 17 0	Wiggins, Teape &
†2161	" Azure, 48 lb. "Inverdon"	,,	35 ,,	,,	$1 \ 2 \ 8\frac{1}{2}$	
†2162	Quad. Foolscap, White, 48 lb., Wove "Inverdon"	,,	900 ,,	,,	1 2 81	
2163	Quad. Foolscap, Duplicating, White, 48	Vict. (partly)	1000 ,,	,,	1 1 0	Australian Paper Manufacturers Ltd.
†2164	Quad. Foolscap, Duplicating, 48 lb., hard-sized, assorted light tints	(hm.n.)	40 ,,			Nil
†2165	Quad. Foolscap, Bank, White, 28 lb	Vict. (partly)		٠,,	0 12 3	]
†2166	Quad. Foolscap, Bank, Cerise, 28 lb			,,	0 12 3	•
†2167	Double Royal Bank, White, 30 lb	,,	1600 ,,	,,	0 13 12	Australian Paper Manufacturer
†2168	Double Demy Bank, White, 25 lb	· ",		,,	$0\ 10\ 11\frac{1}{4}$	
†2169	Double Demy Old Gold, 25 lb	· ,,	J.	,,	0 10 11	J
†2170	Double Foolscap, Blue, 24 lb. "Strathmerton"	U.K.	5 ,,	,,	0 16 0	Gordon & Gotch (A'sia) Ltd.

## PRINTING AND WRITING PAPERS, ETC .- continued.

Item No.	Description	Country of Manuf're.	Estimated Requirements	Rate. per	. Rate.			Name of Contractor.
					£	s.	d.	
	Writing Papers—continued					•		,
†2171	Double Foolscap, C.L. 28 lb., "Conqueror"	U.K.	90 rms.	ream	]	. 12	8	]
†2172	Double Foolscap, 28 lb., "Abermill Bond"		35 ,,	,,	3	2	8	   Wiggins, Teape
†2173	Double Demy Azure, 48 lb "Huntingtower"	,,	20 ,,	,,	]	. '8	9	Alex. Pirie (Ex-
†2174	Royal, Azure, 42 lb. "Huntingtower"	,,	10 ,,	,,	]	9	8	) port) Eta.
†2175	Azure Laid, 17½" x 40", guillotine trimmed all sides (Quad. Foolscap Azure, 56 lb.substance)	Vict. (partly)	430 ,,	,,	1	1	6	Australian Paper Manufacturers Ltd.
	Blotting Paper-							
†2176	Demy, White, 36 lb		80 ,,					Nil
†2177 2178-	Demy, White, 48 lb., 1st quality, folded or flat. as ordered "Quicksorb" 2188—Nil	U.K.	30 ,,	,,	]	15	10	Wiggins, Teape & Alex Pirie (Export)

# CARBON PAPER.

- 7. As regards Items 2197 to 2200, the carbon paper shall be capable of taking 5 clear copies and be of durable quality.
- 8. As regards Items 2189 and 2190 the rates include Telegraphic Transfer Exchange between Australia and London at  $25\frac{1}{2}\%$ , and if this rate of Exchange be varied during the contract period, the difference calculated on 50 %, of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T. T. Exchange is effective as notified by the Commonwealth Bank.

		Paper, Carbon, blue, extra 20 lb.—" Swallow"	rich, two sie	des,								·
	†2189	Demy Folio, 17½" x 11½	", Pencil		U.K.	36	reams	ream	1	1	3	Taka Wisham & S.
	12190	Foolscap Folio, 13½" x 8	$8\frac{1}{2}$ ", Pencil		,,	1	,,	,,	0	12	6	John Withers & Stranger
	†2191	Paper, Carbon Billing blu 13", in boxes of 100 shee				180	boxes	box	0	3	0	] .
		Paper, Carbon, Pen—" Ha	ll Mark"									
	†2192	Foolscap 4-to, 50 sheet	s per box		,,	60	,,	,,	0	0	10	Ramsay & Hall Pty.
	2193	' $17\frac{1}{2}$ " x $7\frac{1}{2}$ "		• • • •	,,	4000	sheets	100 sheets	0	2	2	T.td
†≺	2194	$17\frac{1}{2}$ " x 10"	•••	•••	, ,,	4000	,,	sileets	0	2	8	
	2195	$18\frac{1}{2}'' \times 16\frac{1}{2}''$	′	•••	. ,,	5000	,,	,,	0	6	0	IJ
		Paper, Carbon, Pencil—" I	Pinnacle "									5
	†2196	Foolscap Folio, 13" x 8	77		N.S.W. (partly)	120,000	) "		0	1	2	
		Paper, Carbon, Pencil, blube coated on 9 lb. pape		, to								
	2197	24" x 4½", to take 5 cop	pies " Pinnacl	e "	,,	8000	"	,,	0	1	7	
	2198	19" x 9" ·,,	,, ,,		,,	2500	. ,,	,,	0	2	> 3	Columbia Ribbon &
1.	2199	18" x 5½" ,,	,, ,,	•••	<b>;</b> ,	16,000	,,	,, .	0	1	7	Carbon Co. (Aust.)
	2200	17" x 12½" ,,	,, ,,	•••	,,	5000	,,	,,	0	. 2	3	
	†2201	27" x 5" "Pinnacle"	***		.,,	800	,,	] <u>"</u> .	0	1	9	] -

#### CARBON PAPER-continued.

Item No.	Description	Country of Manuf're	Estimated Requiremen		Rate	Rate	Name of Contractor
	Paper, Carbon, Pencil, blue, one-sided to be coated on 9 lb. paper—continued					£ s. d.	
†2202	15" x 5" " Hall Mark "	Victoria (partly)	3000 she		100 heets	0 1 3	Ramsay & Hall Pty. Ltd.
2203	15" x 9" "Pinnacle"	N.S.W. (partly)	<b>5000</b>	,,	,,	0 2 1	]
2204	15" x 8" ,,	"	5000 ,	,,	,,	0 2 0	
† 2205	13" x 8" ,,	,,	50,000	,,	,,	0 1 4	Columbia Ribbon & Carbon Co. (Aust.)
2206	13" x 5" ,,	,,	20,000	,,	,,	0 0 11	January
2207	12" x 5" ,,	,,	150,000	,,	,,	0 0 11	J
†2208	11½" x 11½" " Hall Mark "	Victoria	5000	٠,	,.	0 2 2	Ramsay & Hall Pty. Ltd.
, (2209	11" x 9" "Pinnacle"	(partly) N.S.W.	10,000	,,	,,	0 1 10	] .
1 2210	11" x 6" ,,	(partly)	12,000	,,	,,	0 1 0	
	Paper, Carbon, Typewriting, black (corner to be cut off each sheet)—"Pinnacle"						
<b>†22</b> 11	Foolscap Folio, 13" x 8", to produce	,,	42,000	"	,,	0 1 4	
†2212	up to 20 copies Foolscap Folio, 13" x 8", to produce	,,	140,000	"	,,	0 1 2	Columbia Ribbon &
†2213	up to 6 copies Foolscap Folio, 16" x 13", to produce	,,	5000	"	,,	0 2 10	Carbon Co. (Aust.)
†2214	up to 20 copies Foolscap Folio, 16" x 13", to produce up to 6 copies	,,	18,000	"	,,	0 2 5	
	Paper, Carbon, Typewriting-						
(2215)	17½" x 10", Black, to take 3 copies	,,	10,000	,,	***	0 2 2	
$\tau_{2216}$	17½" x 7½", Black, to take 3 copies, "Pinnacle"	, ,,	700	,,	,,	0 1 10	J
†2217	12" x 12", Blue, to take 3 copies, "Hall Mark'		6000	,,	,,	0 2 6	Ramsay & Hall Pty.
†2218	8½" x 10½", Black, to take 3 copies. "Pinnacle"	' (partly) , N.S.W. ' (partly)	6000	,,	,,	0 1 2	Columbia Ribbon & Carbon Co. (Aust.)
, †2219	10" x 4", Black, for Addressograph Ma-	1 **	5000	,,	,,		Nil
2220	chine Nil						1

## GALVANIZED IRON

# 7. SPECIFICATION.

Quality.—The galvanized iron, both corrugated and plain, shall be manufactured from high grade wrought iron or low carbon steel, galvanized with a continuous coating of zinc of uniform thickness, and so applied that it adheres firmly to the surface of the iron or steel. The finished product shall be smooth, without adhering clumps or drops of spelter. The samples submitted shall be subjected to tests to determine the following properties:—

- (a) The weight of zinc coating, expressed in ounces, on both sides of a sheet one foot square;
- (b) The continuity of the zinc coating;

(c) The uniformity of the zinc coating; Consideration will be given to the results obtained, in deciding the galvanized iron to be

Constants obtained on tests.—In the event of the tender being accepted, the results of the above tests, as determined in the departmental laboratory, shall be incorporated in the contract, and all deliveries shall agree therewith.

8. Orders will be placed in case lots and in minimum quantities of 6 tons, made up of one or more items and 14 days from date of order allowed for delivery to permit of importation. Any purchases considered necessary by the Comptroller of Stores from stock in Melbourne,

to meet urgent requirements, shall not be regarded as an infringement of this Contract.

## GALVANIZED IRON-continued

The rates do not include wharfage. The material shall be consigned on the Bill of Lading to the Comptroller of Stores of the Victorian Railways, to enable the Corporation to obtain exemption of wharfage. Copies of orders are to be furnished to the Shipping Clerk.

The rates shall be varied 18s. 6d. per ton for every rise or fall of  $\pounds 1$  per ton or pro rata as the case may be in "Lysaght's" current price list of May, 1934. It shall be the Contractor's obligation within the meaning of clause 21 of the conditions of Contract to advise the Corporation of any amendment to Lysaght's price list within seven days of the receipt of same by the Contractor. The amended rates shall apply to all undelivered material on date of alteration to price list.

Name of Manufacturer-John Lysaght (Aust.) Ltd.

ltem No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Sheet, Corrugated, 26 gauge—"Orb"				£ s. d.	
2221	5', 6', 7' or 8' long, as ordered ·	N.S.W.	15 tons	ton	22 9 9	'n
2222	9' long	,, ′	3.,,	,,	22 19 6	
2223	10' long	,,	2 ,,	,,	23 9 6	
2224	6' or 7' long, as ordered, 1" pitch	,,	2 "	,,	23 17 9	
	Sheet, Corrugated, 24 gauge—" Orb"					
$\dagger \left\{ \begin{array}{l} 2225 \end{array} \right.$	5', 6', 7' or 8' long, as ordered	,,	120 ,,	,,	21 1 11	
2226	9′ long	,,	. 70 ,,	,,	21 11 6	
2227	10' long	,,	2 "	. ,,	22 1 6	
	Sheet, Corrugated, 20 gauge—"Orb"					,
2228	9' long	,,	2 "	,,	21 15 0	
2229	10' long	,,	2 "	,,	22 5 0	Edward Duckett &
	Sheet, Plain, 28 gauge—"Queen's Head"					Sons
2230	6' long x 2', 2' 6" or 3' wide, as ordered	"	5 "	,,	25 10 3	
	Sheet, Plain, 26 gauge—"Queen's Head"					·
2231	6' long x 2', 2' 6" or 3' wide, as ordered	,,	15 ".	,,	24 2 5	
<b>t</b> {	Sheet, Plain, 24 gauge—"Queen's Head"					
2232	6' long x 22", 2', 2' 6" or 3' wide, as ordered	"	100 "	,,	22 14 5	
	Sheet, Plain, 22, 20, 18 or 16 gauge, as ordered—" Queen's Head"					
2233	6' long x 2', 2' 6", or 3' wide, as ordered	,,	100 ,,	,,	22 14 5	<u> </u>
2234-	2238—Nil					, S.

#### YELLOW BRASS CASTINGS (FOR LOCKS)

## 7. SPECIFICATION-

The Castings shall be supplied with runners and burrs removed and shall be true to pattern, sound, clean, smooth and free from any defects, blow holes, etc. The yellow brass castings shall contain 65 per cent. copper, 33 per cent. zinc and 2 per cent. lead.

All patterns shall be supplied by the Corporation and shall be delivered to the Contractor at the Metropolitan Receiving Depot, Spencer-street. All such patterns shall be returned in good order and condition, together with castings, to the Metropolitan Receiving Depot, Spencer-street, Melbourne, by and at the expense of the Contractor.

In the event of the non-return of any of the patterns, or of their being damaged, the cost of replacement or repair shall be paid by the Contractor, or may be deducted from any money due to the Contractor by the Corporation.

## YELLOW BRASS CASTINGS (FOR LOCKS)-continued

Item No.	Description		Estimated Requirements	Rate per	Rate	Name of Contractor
	Castings, Yellow Brass (Rough), to pattern supplied by the Corporation—				£ s. d.	
*2239	V.R. Padlock, 2", to pass	Vict.	2500 sets	set	0 0 9	7
2240	V.R. Padlock, 2", to differ	,,	1000 ,,	,,	0 0 9	
*2241	Switch Padlock	,,	800 ,,	,,	0 0 11	James Coppell Lee Pty. Ltd.
*2242	S.S. Padlock	,,	1000 ,,	,,	0 0 5	]
2243	Nil					,

## CASTINGS, PISTON

- 7. The Contractor shall, during the currency of the Contract, furnish the Comptroller of Stores with the address or addresses of the place or places at which the Castings are being manufactured, and the Comptroller of Stores or any person appointed by him from time to time shall at all times during business hours have free access to such place or places, and shall be afforded every facility for inspecting the Castings ordered while in process of manufacture.
- 8. The Castings are to be clean, sharp, free from surface scale, shell, cold shuts, blow holes, honeycomb, cinder, or any other imperfections, and are to be sound in every respect, and thoroughly close in grain.
- 9. The whole of the patterns and coreboxes, etc., shall be provided by and at the sole expense of the Contractor, and the cost of the same shall be deemed to be included in the rate set opposite to each item.
- 10. Sample Pistons.—Samples of finished pistons may be inspected on application to the Water Supply Engineer, Room 204, Railway Offices, Spencer-street, Melbourne.
- 11. Inspection and Rejection.—Castings are liable to be rejected on delivery, or at any time during the process of machining, and any such castings rejected on account of faulty material or inequalities in walls of castings, etc., shall be replaced by the Contractor by other castings, free of charge.
- 12. Quantities.—The piston castings shall be ordered by the Corporation in lots of not less than—

Item 2244-50 No.

Item 2245-20 No.

Item 2246-25 No.

Item 2247-20 No.

- 13. Finish.—The Castings shall be free from sand and all defects and finished in the annealed and sandblasted condition. The heads of pistons shall be machine centred to ensure uniform thickness in skirt.
- 14. Delivery.—Delivery will be taken at the Metropolitan Receiving Depot, Spencer-street, Melbourne.

2244	Castings, K.S. Type piston casting app. $3\frac{3}{4}$ dia. x $4\frac{1}{8}$ skirt for 2 cycle water cooled engine	Vict.	150	each	0	5	3	1:=
2245	Castings K Type piston casting, app. 4½" dia. x 6" skirt for 2 cycle water cooled engine	**	100	,,	0	8	6	C.B.D. Piston Co.
2246	Castings, Inspection Type B piston casting, app. $3\frac{3}{8}$ dia. x 3" skirt for single cylinder air cooled engine	**	150	,,	0	3	4	4
2247	Castings, Sheffield 40B Type piston casting, app. 4½" dia. x 5" skirt for 4 cycle twin opposed air cooled engine	<b>,</b> , .	. 35	71	0	<b>7</b>	0	]].  - 
2248	Nil		]	]		,		

#### CARBON STEEL CASTINGS

- 7. When specially ordered the Castings shall be run with heads or runners of such weight as may be ordered, and no extra charge will be allowed for same, and the Contractor will be required to remove the head or runner from the Casting where possible in the opinion of the Comptroller of Stores, and charge the Casting at the net weight only, trimmed and clean. In cases where it is necessary to cut off the head in a lathe or machine, such head will be cut off by the Corporation, and, excepting those for the State Coal Mine at Wonthaggi, will be returned to the railway station nearest to the Contractor's works, and delivered to the Contractor at the said railway station free of cost or carriage.
- 8. The Scrap for the manufacture of the Castings under this Contract shall be purchased by the Contractor from the Corporation, and except as hereinafter provided shall be paid for by the Contractor at the following rates delivered in trucks at Spotswood, and the rates set opposite to items numbered respectively 2249 to 2275c in this Schedule must include the cost of the said Scrap.

Mild Steel, small and medium
Steel Tyres
...
Rails and Fishplates
...

£1-15-0 per ton
£2-0-0 per ton
£2-0-0 per ton

To cover waste, the Contractor shall purchase as aforesaid 30 per centum of Scrap in excess of any quantity of Castings which may be ordered from time to time. Provided in the event of the Contractor requiring for the purposes of this Contract any quantity of Scrap exceeding the respective percentages as aforesaid, then in every such case he shall pay for such excess at an increase of 5 per cent. Payment at the rate or rates aforesaid shall be made by the Contractor to the Comptroller of Accounts of the Victorian Railways (within 48 hours after demand) for any Scrap which may be supplied to the Contractor from time to time as hereinbefore provided, and failing payment as aforesaid, the Corporation shall be entitled to deduct any amount owing for the said Scrap from any money due or which may become due, to the Contractor under this Contract.

#### SPECIFICATION FOR CARBON STEEL CASTINGS.

- 9. Quality of Material and Chemical Tests.—(a) The Castings shall be manufactured from steel produced by an approved process and shall show on analysis not more than 0.07 per cent. of Sulphur or of Phosphorous.
- (b) The Contractor shall supply an analysis of each cast with each delivery. A check analysis may be made by the Corporation from the broken tensile test specimen or from a casting representative of each cast. In the latter case the drillings shall be taken not less than one quarter of an inch beneath the surface of the casting.
- 10. Heat Treatment.—(a) All castings except where specified shall be so heat treated as to give the physical properties called for.
- (b) For the purpose of determining the quality of heat treatment, at least two lugs shall be cast on all castings, except where their omission is specifically agreed to by the Corporation. The location and size of the annealing lugs shall be subject to approval by the Corporation unless indicated on drawings or patterns supplied by the Corporation. They shall be cast with and attached to each casting when presented for inspection, and shall be removed by or at the direction of the Receiving Officer. If in the opinion of the Receiving Officer the casting is not properly heat treated, he may, at his option, require the casting to be reheat treated.
- (c) If, after heat treating or reheat treating, any casting is so much out of gauge, as to require heating to bring it within gauge limits, it shall be reheat treated before being accepted.
- (d) Castings shall NOT be dipped in any preservative coating, or painted before being presented to the Receiving Officer for inspection or testing.
- 11. Moulding.—(a) The castings shall be accurately moulded in accordance with the patterns and/or working drawing supplied by the Corporation with the addition of such lettering as may be prescribed.
- (b) When patterns and working drawings are supplied, the patterns shall be so made that sufficient margin is allowed to provide for all variation in shrinkage. The Contractor shall be responsible for calling attention, before work is commenced, to any discrepancy between the patterns and the working drawings supplied, or to insufficient allowance having been made in the patterns for shrinkage.
- (c) Should any pattern or corebox supplied by the Corporation become so badly worn or damaged as to render it impracticable to mould castings from it to the degree of accuracy required, the Contractor shall be responsible for calling attention to the state of disrepair of the pattern or corebox. Failure to thus call attention shall render liable to rejection any castings which have been moulded from such pattern.
- (d) The castings shown opposite Items Nos. 2253 to 2271c shall also conform to limit gauges supplied by the Corporation.

Any further particulars regarding the amount of gauging required for these steel castings may be obtained on application at the Rolling Stock Drawing Office, Room 135, Railway Offices, Spencer-street.

(e) All rivet and bolt holes in castings, cast from patterns leaving their own cores, shall not be more than  $\frac{1}{32}$  over or  $\frac{1}{32}$  under the dimensions of the holes shown on the drawings.





### CARBON STEEL CASTINGS-continued.

12. Patterns, Coreboxes and Gauges.—The Corporation will supply all patterns, coreboxes and gauges (when required) and deliver the same to the Contractor, free of cost, at the Victorian railway station nearest to his works. All patterns, etc., supplied by the Corporation shall be returned in good order and condition and shall be delivered together with the castings.

NOTE.—Whenever only one or two Castings are required, and they can in the opinion of the Comptroller of Stores be moulded from the broken originals, the Contractor shall be bound to mould from such broken originals, without requiring the Corporation to supply any pattern or corebox for same, and without being allowed any extra rate.

- 13. Branding.—The cast number shall be stamped upon each casting, close to the moulded number of pattern, together with the Contractor's name or trade mark, which shall be stamped or moulded on each casting. No moulded brand or mark shall be more than 2 in. high. All stampings shall be so stamped that they will be legible after the casting has been annealed.
- . 14. Fettling.—Castings shall be properly fettled and all surfaces shall be clean and free from sand.
- 15. Repairs to Defective Castings.—Any defects or unsound metal which a casting may have, from whatever cause arising, shall be left bare, and no filling with the object of obliterating such defects will be permitted unless previously sanctioned by the Receiving Officer. Any casting upon which such work has been done without such sanction having been obtained will be rejected. When such repairs have been sanctioned, the casting shall be reheat treated, as provided in clause (10) of this Specification, unless specific permission to the contrary is given by the Comptroller of Stores.
- 16. Selection of Test Pieces.—The Receiving Officer will examine all castings before delivery, and make a selection from the bulk of castings from which the specified tests are to be taken. He will select and stamp pieces for testing purposes, to be cut from the casting, or from lumps formed on each casting, of such size and in such position in the mould as will furnish test pieces which shall be truly representative of the remainder of the metal.
- 17. Number of Tests.—The Castings will be required to pass the tests specified according to classification.

If any test specimen shows defective machining or discloses flaws, it may be discarded, in which case another specimen from the same casting or group of castings shall be substituted.

Should a tensile test piece break outside the middle half of its gauge length, the test may, at the manufacturer's option, be discarded, and another test made from the same heat treatment charge.

General Castings.—Tensile Tests (Grades A. B and C). One tensile test shall be taken from each cast.

General Castings.—Bend Tests (Grades B and C). One bend test shall be taken from each

General Castings.—Impact Test (Grades B and C). One impact test shall be taken from each batch of castings heat treated together, or if there is more than one cast represented in such batch, then one impact test shall be taken from each cast in the batch.

Frame Stays.—At least one tensile test shall be taken from each cast, and one bend test, and one impact test shall be taken from each casting.

18. Tensile Tests.—(a) The Australian Standard Test Piece D, having a gauge length of 3" and a sectional area of  $\frac{1}{2}$  sq. in., or failing a 3" test piece, a Standard Test Piece C, having a gauge length of 2" and a sectional area of  $\frac{1}{4}$  sq. in., shall, without reheating or any other manipulation whatever, conform to the following physical tests:—

#### GRADE A.

## For Castings with wearing surfaces.

Ultimate tensile breaking strength, tons per sq. in. minimum ... 35. Elongation, per cent., minimum ... ... 10.

#### GRADES B. and C.

Yield point, tons per sq. in., minimum Elongation, per cent., minimum	 Grade B. 16 714	Grade C. 13.5 714	
	Ten. Str.	Ten. Str.	(Ult. tons)
Elongation, per cent., minimum Reduction of areas, per cent., minimum	 $\frac{22}{30}$	$\begin{array}{c} 24 \\ 35 \end{array}$	

In the case of Grades B and C, the ultimate tensile strength shall be reported.

(b) The yield point shall, for the purpose of this Specification, be the load per sq. in., at which a distinctly visible increase occurs in the distance between gauge points on the test piece, observed by using dividers; or at which, when the load is increased at a moderately fast rate, there is a distinct drop in the testing machine lever, or in a hydraulic machine, of the gauge finger.

#### CARBON SHEET CASTINGS-continued.

- 19. Cold Bend Test.—Except in the case of Grade A Castings, a test piece 9" long turned to 1" diameter, must withstand, without fracture being bent cold through an angle of 90 degrees round a bar  $2\frac{1}{2}$ " in diameter.
- 20. Impact Test.—A standard "Izod" three-notch impact test piece, machined to the form and dimensions of B.S.S. 131-1920, shall, on being tested, average not less than 20 ft. lb., and no single notch less than 15 feet lb. Alternatively, a three-notch impact round specimen, as provided for in Appendix I. of B.S.S. 5005-1924, may be used. At the time of testing, the "Izod" test bar shall be at a temperature of between 65° F. and 75° F.
- 21. Additional Tests before Rejection.—(a) Should a test piece first selected by the Receiving Officer not fulfil the test requirements, two additional tests of the same kind from the same casting or group of castings shall be made. Should one of the additional test pieces fail to fulfil the specified test requirements, the castings shall be rejected.
- (b) General Castings (Grades A, B and C).—The tensile test shall be repeated from pieces cut from the same lump.

General Castings (Grades B and C).—The bend test shall be repeated from pieces cut from the same lump.

General Castings (Grades B and C).—The impact test shall be repeated on pieces cut from the same batch or cast.

- (c) Frame stays.—Tensile test pieces shall be taken from two or more castings from the same cast, or two more bend tests shall be taken from the test pieces cut from the same lump. The impact test shall be repeated on pieces cut from the same casting.
- 22. Inspection and Rejection.—(a) The Receiving Officer shall have free access to the works of the Contractor at all reasonable times during the course of manufacture of the Castings. He shall be at liberty to inspect the manufacture at any stage, and to reject any Casting or material that is unsound or does not otherwise conform to the terms of this Specification.
- (b) All tests and inspection of the material shall be completed at the Contractor's works, or elsewhere, as provided in Clause 23, and shall be final prior to shipment, and shall be so conducted as not to interfere unnecessarily with the operation of the works.
- (c) Should any portion of the material show injurious defects in the course of fabrication, the Contractor shall be notified and, provided the material has been properly treated by the Corporation, it shall be rejected and the Contractor shall replace it.
- (d) After all material has passed the prescribed tests and is ready for shipment, the Receiving Officer shall stamp the parts with the acceptance mark.
- 23. Testing Facilities.—The Contractor shall supply the material for testing free of charge and shall, at his own cost, furnish and prepare the necessary test pieces and supply labor and appliances except gauges for such testing and gauging (when required) as may be carried out on his premises in accordance with this Specification. Failing facilities at his own works for making the prescribed tests, the Contractor shall bear the cost of carrying out the tests elsewhere, as agreed upon between the Contractor and the Corporation, but within the State in which the works of the Contractor are situated, provided always that suitable facilities exist in that State.
- 24. Latent Defects.—In the event of any casting supplied under this Contract proving unserviceable during the first six months' use, due to any defect which could not reasonably have been discovered by visual or other examination of the casting, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective casting.

The rates cover supply of general types of castings, and if castings of a complicated nature be required, the Contractor shall have the right of appealing against payment at the Contract rate. The decision of the Comptroller of Stores shall be final.

If the cost of production be varied as the result of any alteration in any industrial award, or should there be any serious alteration of the monetary system of financial conditions during the currency of the Contract the Contract rates shall be subject to amendment as may be determined by the Comptroller of Stores or Contract cancelled.

The Corporation has the right to satisfy itself that the Contract rates are equitable by an inspection of the Contractor's books, and the right to determine the Contracts forthwith if in its opinion the Contract rates are not fair and reasonable.

Provided satisfactory service is rendered and it is found convenient to do so, orders should be placed in the following proportions. Storekeeper, Newport Loco., to arrange.

Chas. Ruwolt Pty. Ltd. 45 per cent. Steel Co. of Aust. Pty. Ltd. 27 per cent. Thompson's Eng. & Pipe Co. Ltd. 18 per cent. Davies & Baird Pty. Ltd. 10 per cent.



# CARBON STEEL CASTINGS—continued.

		1	<u> </u>	<u> </u>	Ī	
Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Castings, Carbon, Steel (Grade "A" B," or "C,") as ordered and specified—	as	,		£ s. d.	~
2249	Weights under 2 lb	Vict.	]	ton	85 0 0	Chas. Ruwolt Pty.
28A9A	Weights under 2 lb	,,		,,	85 0 0	Steel Co. of Aust. Pty.
22 9в	Weights under 2 lb	,,	3 tons	,,	85 0 0	Thompson's Eng. &
2249c	Weights under 2 lb	,,		,,	85 0 0	Pipe Co. Ltd. Davies & Baird Pty. Ltd.
2250	Weights 2 lb. and up to 14 lb.	,	}	,,	56 0 0	Chas Ruwolt Pty.
2250 <sub>A</sub>	Weights 2 lb. and up to 14 lb.	,,		,,	56 0 0	Steel Co. of Aust. Pty. Ltd.
2250 <u>B</u>	Weights 2 lb. and up to 14 lb.	,,	50 ,,	*,,	56 , 0 0	Thompson's Eng. & Pipe Co. Ltd.
2250c	Weights 2 lb. and up to 14 lb.	,,		, ,,	56 0 0	Davies & Baird Pty.
2251	Weights over 14 lb. and up to 1 cwt.	,,	<u> </u>	",	44 0 0	Chas. Ruwolt Pty.
2251a	Weights over 14 lb. and up to 1 cwt.	,,	600	**	44 0 0	Steel Co. of Aust. Pty.
2251 R	Weights over 14 lb. and up to 1 cwt.	,,	, ,	**	44 0 0	Thompson's Eng. & Pipe Co. Ltd.
‰äig ;	Weights over 14 lb, and up to 1 cwt.	,,		**	44 0 0	Davies & Baird Pty.
2252	Weights over 1 cwt	,,	1	,,	42 0 0	Chas. Ruwolt Pty.
2252a	Weights over 1 cwt	,, ,		,,	42 0 0	Steel Co. of Aust. Pty.
325%в	Weights over 1 cwt. ,	,,	\\ \begin{align*} 150    \end{align*}	21	42 0 0	Thompson's Eng. & Pipe Co. Ltd.
2252c	Weights over 1 cwt	,,		,,	42 0 0	Davies & Baird Pty.
	Castings, Carbon Steel (Grade "A, moulded within the limits of gauge and as specified—	/I	,			<u>.</u>
	(a) Weights over 14 lb. and up to cwt.—	1			, • •	, . 
2553	Follower Blocks to V.R. Drawings No	os. ,,	1	,,,	44 0 0	Chas. Ruwolt Pty.
2253a	Follower Blocks to V.R. Drawings No.	os. ,,	}	٠ ,,	44 0 0	Steel Co. of Aust. Pty.
ZZÑIB	7611.5 or 7611.6 Follower Blocks to V.R. Drawings No. 7611.5 or 7611.6	os. ,,	100 ,,	,,	44 0 0	Thompson's Eng. & Pipe Co. Ltd.
325 <b>3c</b>	Follower Blocks to V.R. Drawings No. 7611.5 or 7611.6	os. ' ,,		, "	44 0, 0	Davies & Baird Pty, Ltd.
•	(b) Weights over 1 cwt					
2254	Engine Striking Plates to V.R. Drawin Nos. S. & X. 63.5, 5191.2 or 5297.3	ıgs ,,		,,	50 0 0	Chas Ruwolt' Pty.
2254A	Engine Striking Plates to V.R. Drawir Nos. S. & X. 63.5, 5191.2 or 5297.3	ıgs ,,	,	· ,,	50 0 0	Steel Co. of Aust. Pty.
2254в	Engine Striking Plates to V.R. Drawir Nos. S. & X. 63.5, 5191.2 or 5297.3	ıgs "	10 ,,	,, ,	50 0 0	Thompson's Eng. & Pipe Co. Ltd.
2254c	Engine Striking Plates to V.R. Drawin Nos, S. & X. 63.5, 5191.2 or 5297.3	ngs ,,		,,	50 0 0	Davies & Baird Pty.

# CARBON STEEL CASTINGS—continued.

Item	Description	Country	Estimated	Rate	Rate	Nome of Clarks
No.		Manuf re	Requirements	per	Nate	Name of Contractor
	Castings, Carbon Steel (Grade "A" or "C,") as ordered, moulded within the limits of gauges, as specified—				£ s. d.	
$\boldsymbol{2255}$	Axle Boxes, Car, Van, Wagon, and Engine Tender	Vict.	1	ton	53 0 0	Chas. Ruwolt T
2255A	Axle Boxes, Car, Van, Wagon, and Engine Tender	,,,		,,	53 0 0	Ltd. Steel Co. of Ausilian
. 2255в	Axle Boxes, Car, Van, Wagon, and Engine Tender	,,		,,	53 0 0	Ltd. Thompson's Eng.
2255c	Axle Boxes, Car, Van, Wagon, and Engine Tender	,,		"	53 0 0	Pipe Co. Ltd. Davies & Baird P: Ltd.
	•		   }150 tons			
2256	Axle Boxes, Engine, Engine Trailing Truck, or Engine Bogie	"		"	<b>44 0</b> 0	Chas. Ruwolt T:
2256A	Axle Boxes, Engine, Engine Trailing Truck, or Engine Bogie	"		,,	44 0 0	Steel Co. of Aust. P:
2256в	Axle Boxes, Engine, Engine Trailing Truck, or Engine Bogie	"		,,	44 0 0	Thompson's Eng. Pipe Co. Ltd.
2256c	Axle Boxes, Engine, Engine Trailing Truck, or Engine Bogie	٠,,		,,	44 0 0	Davies & Baird P: Ltd.
	Castings, Carbon Steel (Grade "C,")					
, , , , , , , , , , , , , , , , , , ,	moulded within the limits of gauges, as specified—					٠,
1	(a) Weights over 14 lb. and up to 1				į	
2257 .	Draft Cheeks to V.R. Drawings Nos. 7642,	,,	1	,,	48 0 0	Chas. Ruwolt P:
2257A	7611.7, 6430, P.E.T. 3.31 and 3.32 Draft Cheeks to V.R. Drawings Nos. 7642,	,,		,,	48 0 0	Ltd. Steel Co. of Aust T
2257B	7611.7, 6430, P.E.T. 3.31 and 3.32 Draft Chesks to V.R. Drawings Nos. 7642, .7611.7, 6430, P.E.T. 3.31 and 3.32	,,	50 ,,	,,	48 0 0	Ltd. Thompson's Eng.
2257c	Draft Cheeks to V.R. Drawings Nos. 7642, 7611.7, 6430, P.E.T. 3.31 and 3.32	. ,,		,,	48 0 0	Pipe Co. Ltd. Davies & Baird P:
- ; - ; - ; - ; - ; - ; - ; - ; - ; - ;	7011.7, 0±30, 1.12.11. 3.31 and 3.32		را			Ltd.
2258	Carry Irons to V.R. Drawings Nos. I.Z. 45.2, 7611.2, and 7636.15	,,	<u>}</u>	,,	48 0 0	Chas. Ruwolt T
2258a	Carry Irons to V.R. Drawings Nos. I.Z. 45.2, 7611.2, and 7636.15	,,		,,	48 0 0	Ltd. Steel Co. of Aust. T Ltd.
2258в	Carry Irons to V.R. Drawings Nos. I.Z. 45.2, 7611.2, and 7636.15	"	30 ,,	,,	48 0 0	Thompson's Eng. Pipe Co. Ltd.
2258c	Carry Irons to V.R. Drawings Nos. I.Z. 45.2, 7611.2, and 7636.15	,,		٠,,	48 0 0	Davies & Baird F.
2259	Head Stock Stiffeners to V.R. Drawings,	,,,	)		44 0 0	Chas. Ruwolt r
2259A	Nos. 7604 8, 7636.16 or I.Z. 3.49 Head Stock Stiffeners to V.R. Drawings,	1		,,	44 0 0	Ltd. Steel Co. of
2259B	Nos. 7604.8, 7636.16 or I.Z. 3.49 Head Stock Stiffeners to V.R. Drawings,			,,	44 0 0	Pty Ltd. Thompson's Eng.
2259c	Nos. 7604.8, 7636.16 or I.Z. 3.49 Head Stock Stiffeners to V.R. Drawings,	l		,,	44 0 0	Pipe Co. Ltd. Davies & Baird P
	Nos. 7604.8, 7636.16 or I.Z. 3.49		נן			Ltd.
.2260	(b) Weights over 1 cwt.— Draft Gear Housing to V.R. Drawings,				56 0 0	Chas Dumale ~
, 2260A	Nos. 5191.3 and 5297.1 Draft Gear Housing to V.R. Drawings.			,,,	56 0 0	Chas. Ruwolt T Ltd. Steel Co. of A
, 2260в	Nos. 5191.3 and 5297.1 Draft Gear Housing to V.R. Drawings	"	30 ,,	,,	56 0 0	Pty. Ltd. Thompson's Eng.
<b>22</b> 60c.	Nos. 5191.3 and 5297.1 Draft Gear Housing to V.R. Drawings			,,	56 0 0	Pipe Co. Ltd. Davies & Baird T
	Nos. 5191.3 and 5297.1	Ι	IJ,	"	1	Ltd.

# CARBON STEEL CASTINGS—continued.

		<del></del>	<del></del>	7		<del></del>
Item No.	Description !	Country of Manuf're	Estimated Requirements	Rate. per	, Rate	Name of Contractor
			, , ,		£ s. d.	
	Castings, Carbon Steel (Grade "C,") etc.— continued—					٠.
- Table .	(b) Weights over 1 cwtcontinued		17. 1 19	141		
Z2261,4,	Draft Cheeks to V.R. Drawings, Nos. S. and X. 63.4	Vict.	] . ,	ton	48 .,0 0.	Chas. Ruwolt Pty. Ltd.
; 2261a	Draft Cheeks, to V.R. Drawings Nos. S. and X. 63.4				48,,0 0	Steel Co. of Aust. Pty. Ltd.
2261в	Draft Cheeks, to V.R. Drawings Nos. S. and X. 63.4	i, ' !	., 5 tons .,		48 0 0	Thompson's Eng. & Pipe Co. Ltd.
2261c	Draft, Cheeks, to V.R. Drawings Nos. S. and X. 63.4	! "	] " · · · · · · · · · · · · · · · · · ·	111,, 11	480 0	Davies & Baird Pty, Ltd.
		<b>!</b>		1	. 1	
11 st	Castings, Carbon Steel (Grade "B'); moulded within the limits of gauges, as specified—	1	Set of Mar	,	yo	,
1, 11 1	(a) Weights over 14 lb. and up to 1 cwt.—	; ;	,11 of 3.1 1		te training	
2262	Back Stops, to V.R. Drawings Nos. I.Z. 45.7, and 8, 47611.8, 7636.13, 7643, Q.N. 3.21	,,	11.9 . 1	1,4°	40 0 0	Chas. Ruwolt Pty.
2262A	Back Stops, to V.R. Drawings Nos. I.Z. 45.7 and 8, 7611.8, 7636.13, 7643,			,,	40 0 0	Steel Co. of Aust. Pty. Ltd.
2262B	Q.N. 3.21 11 11 13 Back Stops, to V.R. Drawings Nos. I.Z. 45.7 and 18,7611.8, 7636.13, 7643, 1.Q.N. 3.21		150 ,;; )	,,,	40 0 0	Thomson's Eng. & Pipe Co. Ltd.
2262c		, ,,	'Ec'   H.C   .o   on . 	· '1 · ;;	40 0 0	Davies and Baird Pty. Ltd.
	Q.N. 3.21		80	a. II.	. / .+ 1Bc	
2263 4	Front Stops, to V.R.; Drawings Nos. I.Z.	į .	٠, ا	. ,,	40 0 0	Chas Ruwolt Pty.
2263a	45.9 and .10, 7725.3, 7636.13 Front Stops, to V.R.; Drawings Nos. I.Z.; 45.9 and .10, 7725.3, 7636.13	· ,, .,	1	,,,	40 0 0	Ltd., Steel Co. of Aust. Pty. Ltd.
2263в:	Front Stops, to V.R., Drawings Nos. I.Z. 45.9 and .10, 7725.3, 7636.13		1 1	1,397	40 0 0	Thompson's Eng. & Pipe Co. Ltd.
2263c	Front Stops, to V.R.; Drawings Nos. I.Z. 45.9 and 10, 7725.3, 7636.13	**		1337 14   14	40 0 0	Davies & Baird Pty. Ltd.
2264 17	Centre Plates; to V.R. Drawings, Nos,		) 	,,, ,	,40 0, 0	Chas. Ruwolt Pty.
2264a	V. 3.50 and V. 31.21 Centre Plates, to V.R. Drawwings Nos.		, at 9	1.10	.40 0 0.	Ltd. Steel Co. of Aust.
эд 22264в	Vi. 3.50 and V. 31.21 Centre Plates; to V.R. Drawings Nos.	}	}, ·}, 5 , ,,	10.15	40 0 0	Pty. Ltd. Thompson's Eng. &
2264c	V. 3.50 and V. 31.21 Centre Plates, to V.R. Drawings Nos. V. 3.50 and V. 31.21	1: "	] ,,	1 1 1	40 0 0	Pipe Co. Ltd. Davies & Baird Pty. Ltd.,
2265	Yokes, to V.R. Drawing No. 6430 or	, ,,	<u> </u>	'not	40 .0 0	Chas. Ruwolt Pty.
2265A	P.E.T. 45.1 Yokes, to V.R. Drawings No. 6430 or	1	1		1	Steel, Co. of Aust.
2265в (	Yokes, to V.R. Drawing No. 6430 or	i I	l <b>i</b> >		,40 <sub>1</sub> , 0 0	Pty.,Ltd.,Thompson's Eng. &
2265c,	P.E.T. 45.1 Yokes, to V.R. (Drawing No. 6430 or P.E.T. 45.1	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	$\int_{0}^{1} a(n, \alpha) = 0$	1,,0	40 0 0	Pipe Co. Ltd. Davies, & Baird Pty. g. Ltd.

# CARBON STEEL CASTINGS-continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Castings, Carbon Steel (Grade "B"), etc.	-	, ,		£ s. d.	
	Weights over 14 lb. and up to 1 cwt.— continued					
2266	Striking Plates, to V.R. Drawing No	Vict.	1	ton	5 <b>2</b> 0 '0	Chas. Ruwolt' Pty
2266á	1.Z.'45.6 Striking Plates, to V.R. Drawing No	.,,		,,	5 <b>2</b> 0 0	Steel Co of Aust.
2266в	Striking Plates, to V.R. Drawing No	. ,,	5 tons	,,	5 <b>2</b> 0 0	Pty. Ltd. Thompson's Eng. &
2266c	Striking Plates, to V.R. Drawing No I.Z: 45.6	. ,,	,	,,	52 /0 0	Pipe Co. Ltd. Davies & Baird Pty. Ltd.
	(b) Weights over 1 cwt.—			,		
2267 .	Yokes, to V.R. Drawings Nos. I.Z. 45.11 or 5297.2	,,		,,	40 0 0	Chas. Ruwolt Pty.
2267A	Yokes, to V.R. Drawings Nos. I.Z. 45.11 or 5297.2	,,		,,	40 0 0	Steel Co. of Aust. Pty. Ltd.
2267в	Yokes, to V.R. Drawings Nos. I.Z. 45.11	۰,,	50 ,,	,,	40 0 0	Thompson's Eng. & Pipe Co. Ltd.
2267c	Yokes, to V.R. Drawings Nos. 1.Z. 45.11 or 5297.2	۰,,		,,,	40 0 0	Davies & Baird Pty Ltd.
	J. 10		١.	•,		Latt.
2268	Striking Plates, to V.R Drawings Nos 7636.14, 7611.1, V. 45.11 or Q.R. 45.1		)	,,	48 10 0	Chas. Ruwolt Pty.
2268a'	Striking Plates, to V.R. Drawings Nos 7636.14, 7611.1, V. 45.11 or Q.R. 45.1	.,,	.	,,	48 10 0	Steel Co. of Aust. Pty. Ltd.
2268в	Striking Plates, to V.R. Drawings Nos 7636.14, 7611.1, V. 45.11 or Q.R. 45.1	., ,,	200 ,,	,;	48 10 0	Thompson's Eng. & Pipe Co. Ltd.
2268c	Striking Plates, to V.R. Drawings Nos 7636.14, 7611.1, V. 45.11 or Q.R. 45.1	. ,,		,,	48 10 0	Davies & Baird Pty. Ltd.
. 2269	Centre Plate, to V.R. Drawings Nos. "['	,,,	1	,,	40 0 0	Chas. Ruwolt Pty.
, 2269a	Sided M. 31.66 and M. 31.67 Centre Plate, to V.R. Drawings Nos "["	,,		,,	40 0 0	Ltd. Steel Co of Aust.
2269в	Sided M. 31.66 and M. 31.67 Centre Plate, to V.R Drawings Nos. "['	,,	5 ,,	,,	40 0 0	Pty. Ltd. Thompson's Eng. &
2269c	Sided M. 31.66 and M. 31.67 Centre Plate, to V.R. Drawings Nos. "[' Sided M. 31.66 and M. 31.67	,,,		,,,	40 0 0	Pipe Co. Ltd. Davies & Baird Pty. Ltd.
2270	Transition Coupler Shanks, to V.R. Drawings Nos. 7711 or 5191.13	. ,,	ή	,,	40 0 0	Chas. Ruwolt Pty.
· 2270A	Transition Coupler Shanks, to V.R. Draw-	. "	.   ' :	,,	40 0 0	Steel Co. of Aust.
2270в	ings Nos. 7711 or 5191.13 Transition Coupler Shanks, to V.R. Drawings Nos. 7711 or 5191.13	,,	5 "	,,	40 0 0	Thompson's Eng. &
2270c	Transition Coupler Shanks, to V.R. Drawings Nos. 7711 or 5191.13	,,		,,	40 0 0	Davies & Baird Pty. Ltd.
2271	Engine Coupler Pocket to V.R. Drawing	,, ,	<u> </u>	,,	48 0 0	Chas. Ruwolt Pty.
2271A	No. 5193.5 Engine Coupler Pocket to V.R. Drawing	,,		,,	48 0 0	Steel Co. of Aust.
2271в	No. 5193.5 Engine Coupler Pocket to V.R. Drawing	•••	10 ,,	, 19	48 0 0	Pty. Ltd. Thompson's Eng. &
2271c	No. 5193.5 Engine Coupler Pocket to V.R. Drawing No. 5193.5	,,		"	48" 0 0	Pipe Co. Ltd. Davies & Baird Pty. Ltd.

## CARBON STEEL CASTINGS-continued.

Item No.	Description ,	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	1 (1 ) (1 ) (1 ) (1 ) (1 ) (1 ) (1 ) (1	 21 i			£ s. d.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
	Castings, Carbon Steel. (Grade "B" with- out machining, as specified—	٠,٠	-·	į		
2272	Crossheads A1, A2, C, D1, 2, 3, and 4, K,	Vict.	)	ton	60 0 0	Chas. Ruwolt Pty. Ltd.
2272A	N, S, and X Class, as ordered Crossheads, A1, A2, C, D1, 2, 3, and 4, K,	,,		,,	60 0 0	Steel Co. of Aust. Ptv. Ltd.
2272в	N, S, and X Class, as ordered Crossheads, A1, A2, C, D1, 2, 3, and 4, K,	,,	5 tons	,,	60 '0 0	Thompson's Eng. & Pipe Co. Ltd.
2272c	N, S, and X Class, as ordered Crossheads, A1, A2, C, D1, 2, 3, and 4, K, N, S, and X Class, as ordered	, , , , , , , , , , , , , , , , , , ,		,,	60 0 0	Davies & Baird Pty. Ltd.
2273	Crossheads, narrow gauge	 	J .	,,	60 0 0.	Chas. Ruwolt Pty.
2273A	Crossheads, narrow gauge	"		,,	60- 0 0	Steel Co. of Aust. Pty. Ltd.
2273в	Crossheads, narrow gauge	,,	` 	,,	60 0 0	Thompson's Eng. &
2273c	Crossheads, narrow gauge'	. ,,		,,	60 0 0	Pipe Co. Ltd. Davies & Faird Pty. Ltd. Ltd.
2274	Crossheads, Garratt	,, .	1 ,,	,,	60 0 0	Chas Ruwolt Pty.
2274A	Crossheads, Garratt	17		· ,,	60 0 0	Steel Co. of Aust. Pty. Ltd.
2274в	Crossheads, Garratt	,,,		1,	60 0 0	Th mpson's Eng.
2274c	Crossheads, Garratt	,,		,,	60 0 0	Davies and Baird Pty, Ltd.
	Castings, Carbon Steel (Grade B) as speci- fied—					
2275	Frame Stays	,,	]	,,	54 0 0	Chas. Ruwolt Pty.
2275a	Frame Stays	,,		,,	54 0 0	Steel Co. of Aust. Pty. Ltd.
2275в	Frame Stays	,,	5 ,,	,,	54 0 0	Thomps n's Eng.
2275c	Frame Stays		-	.,	54 0 0	Davies and Baird Pty. Ltd.

# STEEL CASTINGS-JUNCTION FISHPLATES.

# SPECIFICATION.

7. Patterns.—The Corporation will supply all patterns to the Contractor at the Way and Works Branch Workshops, Spotswood, Victoria, upon requisition to the Comptroller of Stores.

The patterns shall be kept in proper repair by the Contractor, and shall be returned in good order and condition to the Workshops Manager, Spotswood, on completion of each service ordered.

- 8. Description.—The cast steel junction fishplates shall be of the classes and weights ordered from time to time.
- 9. Quality of Material.—The castings shall be manufactured from steel produced by an approved process, and must not show on analysis more than 0.05 per cent. of sulphur or phosphorus.
- 10. Heat Treatment.—All castings shall be thoroughly annealed by heating to a temperature not less than the normalising temperature (not exceeding 900 deg. C.), and allowing to cool flowly from the maximum temperature in a practically uniform manner.

# STEEL CASTINGS-JUNCTION FISHPLATES!-continued.

11. Moulding.—The castings shall be accurately moulded in accordance with the patterns supplied, with the letters and figures well defined (denoting the hand, etc., and weights of rails), and in addition shall have a test bar of  $\frac{1}{2}$  inch square section and 2 inches long cast thereto for the cold bend test.

The castings shall be of the highest quality and finish, free from shrinkage, recesses, holes, sand and scale, with smooth and straight bearing faces so that a perfect fit to the heads and flanges of the rails is always maintained.

- 12. Repairs to Defective Castings.—Any defects or unsound metal which a casting may have, from whatever cause arising, shall be left bare and no filling with the object of obliterating such defects will be permitted.
- 13. Cold Bend Test.—The test bar attached to each casting must withstand, without fracture, being bent double by striking with a 1½ lb. hammer. Should any test bar fail to fulfil the test the casting from which the test bar was tested will be rejected.
- 14. Inspection.—The Superintending Officer shall have free access to the works of the Manufacturer at all reasonable times during the course of manufacture of the castings. He shall be at liberty to inspect the castings at any stage and to reject any casting or material that is unsound or does not otherwise conform to the terms of this Specification (even if they have withstood the cold bend test), and shall have the right to destroy or witness the destruction of any rejected fishplates. Every approved cast steel junction fishplate shall be indelibly stamped by the Superintending Officer at one end thus—(\*\*) (\*\frac{3}{4}\$ inch diameter), also a letter indicating the Manufacturer's initial; thus—R. The castings shall NOT be coated with any substance.
- 15. Latent Defects.—In the event of any casting supplied under this Contract proving unserviceable during the first six months' use, due to any defect which could not reasonably have been discovered by visual or other examination of the casting, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores, replace or make good the defective casting.
- 16. Delivery.—The cast steel junction fishplates shall be delivered to the Storekeeper at the Way and Works Workshops, Spotswood, Victoria.

Item No.	. Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
2279 · , 2280	Fishplates, Junction, Cast Steel (annealed) with wearing surfaces.  Nil	Vict.	· '! 50 tons	ton	£ s. d.	Chas. Ruwolt Pty.

## SPECIAL ALLOY STEEL (FOR AXLES).

## 7. SPECIFICATION-

Ultimate stress 50-55 tons per square inch. Elongation 20 per cent. Reduction in area 45 per cent. Impact test 50 ft. pounds.

The Steel shall be supplied in the heat treated state and rolled to a bright finish, free from scale, rust and other surface imperfections, having a high resistant to abrasive wear, free cutting, true and free from kinks, in Bars of 6 feet lengths or multiples thereof. The actual diameter shall not be less than the nominal diameter to within 1/1000" nor greater than 4/1000" above nominal diameter.

Orders placed under either item to be for minimum quantity of 10 cwt.

	and the contract of the contra	-
	Special Alloy Steel, for the manufacture of Axles for K.S. and K. Motors, to Specification—	
	Specification—	
	Specification— Carbon—3% to 4%; 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	
	Wanganese—1 170 to 1 170	
2281	lit diameter, in 6' lengths or multiples thereof diameter, in 6' lengths or multiples thereof diameter, in 6' lengths or multiples thereof diameter, in 6' lengths or multiples thereof diameter, di	
	1. Wick. 19 100 CWI. 2 12. 0	
		Melbourne Iron &
2282	17 diameter, in 6' lengths or mul-	Steel Mills Pty.
	tiples thereof	Liu.
2283	Nil Sun Comment to the best season of the se	١, ,
	· • • • • • • • • • • • • • • • • • • •	

#### ROLLED IRON

SPECIFICATION FOR WROUGHT IRON FLATS—(Item 2284) and WROUGHT IRON BARS—(Items 2285 to 2289).

7. Particulars.—The Wrought Iron Flats and Bars shall be in accordance with British Standard Specification No. 51-1929, as applied to Best Yorkshire Grade (except where shown otherwise in this Specification).

The W.I. Bars shown opposite 2289 for crown stays shall be as specified above, except that the nicked bend test shall be performed at each end of each bar. The fracture test shall not be performed on these bars.

The W.I. Bars shall be commercially straight.

8. Limits of Tolerance.—The W.I. Flats and Bars (Item 2288 excepted), shall be true to the ordered dimensions within the following limits of tolerance:—

		Minus.	Plus.
Up to ½ in. diam., thickness or width	•••	0.007 in.	0.007 in.
Over 1 in. to 1 in. diam., thickness or width	•••	0.010 ,,	0.010 ,,
Over I in. to 2 in. diam., thickness or width	•••	1/64 ,,	1/32 ,
Over 2 in. to 3 in. diam., thickness or width		1/32 ,,	3/64 ,,
Over 3 in. to 5 in. diam., thickness or width		1/32 ,,	3/32 ,
Over 5 in. to 8 in. diam., thickness or width	•••	1/16 ,,	1/8 ,,

Item 2288 for the manufacture of Steam Tight Studs,

 $\frac{3}{4}$  in. and over, minus nil. Plus 0.020  $\frac{1}{2}$  in. and  $\frac{5}{8}$  in., minus nil. Plus 0.015

Length. All Items. Plus 2", minus Nil.

- 9. Inspection and Tests.—All inspections and tests will be conducted by and at the cost of the Corporation at its premises.
- 10. Rejection.—Should the material fail to comply in any particular with this Specification it shall be liable to rejection.
- 11. Defects Showing During Fabrication.—Should any portion of a W.I. Flat or Bar show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified, and provided the W.I. Flat or Bar has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores, replace or make good the defective Wrought Iron Flat or Bar.
- 12. Painting.—Each Flat and Bar shall prior to delivery be clearly and durably painted on each end with RED paint by and at the cost of the Contractor.

#### ROLLED IRON (Items 2290-2306)

13. The whole of the Scrap for the manufacture of the Rolled Iron under these items shall be purchased by the Contractor from the Corporation, and except as hereinafter provided shall be paid for by the Contractor at a fixed rate of £1/5/- per ton, delivered in trucks at Spencer-street Railway Station, and the rates set opposite to items numbered respectively 2290 to 2306 in this Schedule must include the cost of the said Scrap.

To cover waste in the case of the Double Rolled Iron, the Contractor shall purchase as aforesaid 25 per centum of Scrap in excess of any quantity of Double Rolled Iron which may be ordered from time to time. To cover waste in the case of the Treble Rolled Iron, the Contractor shall purchase as aforesaid 30 per centum of Scrap in excess of any quantity of Treble Rolled Iron which may be ordered from time to time. Provided in the event of the Contractor requiring for the purposes of this Contract any quantity of Scrap exceeding the respective percentages as aforesaid, then in every such case he shall pay for such excess at the rate of £1/15/- per ton. Payment at the rate or rates aforesaid shall be made by the Contractor to the Comptroller of Accounts of the Victorian Railways (within 48 hours after demand) for any Scrap which may be supplied to the Contractor from time to time as hereinbefore provided, and failing payment as aforesaid, the Corporation shall be entitled to deduct any amount owing for the said Scrap from any money due, or which may become due, to the Contractor under this Contract

Only the net weight of Rolled Iron delivered (after crop and bad ends have been cut off) shall be paid for.

14. The Rolled Iron shall be entirely manufactured from the Scrap purchased from the Corporation as aforesaid, and shall be paid for by the Corporation on the basis of the net weight of such Rolled Iron, when supplied and delivered in strict accordance with all the provisions and requirements of the annexed Conditions of Contract and this Schedule, and to the satisfaction in every respect of the Comptroller of Stores.

# SPECIFICATION DOUBLE ROLLED IRON-Items 2290 to 2302 (inclusive).

15. Freedom from Defects.—All Rolled Iron Bars and Flats shall be sound, free from flaws, cracks, crop ends, and any other injurious defects and finished in a workmanlike manner.

The R.I. Bars shall be commercially straight.

#### ROLLED IRON (Double)-continued.

16. Rolling and Cutting Margin.—The Rolled Iron Bars and Flats shall be well and cleanly rolled, true to the ordered dimensions within the following limits of tolerance:—

19 x x	٠.	Minus.	Plus.
'Up to ½ in. diam, thickness or width		0.007 in.	0.007 in.
Over ½ in. to 1 in. diam., thickness or width		0.010 in.	0.010 in.
Over 1 in., to 2 in. diam., thickness or width		1/64 in.	1/32. in.
Over 2 in. to 3 in. diam., thickness or width		1/32 in.	3/64 in.
Over 3 in. to 5 in. diam., thickness or width		1/32 in.	3/32 in.
Over 5 in. to 8 in. diam., thickness or width		1/16 in.	1/8 in.

The Bars and Flats shall be cut to the ordered length within the following limits of tolerance. Plus 2 inches, minus nil.

17. Tensile Tests.—Double Rolled Iron Bars and Flats. An Australian Standard Test Piece "A" or test piece "B" (only if the material as rolled does not permit of the cutting of test piece "A") cut from the Flats, and an Australian Standard Test piece "B" cut from the Bars as rolled, for round and square bars up to one inch diameter or thickness, or turned down for bars over one inch diameter or thickness, shall show a tensile breaking strength of 21 to 24 tons per square inch, with an elongation of not less than 18 per cent.

Any straightening of test pieces which may be required shall be done cold.

- 18. Number of Tensile Tests.—One tensile test will be taken from every three tons or portion thereof in each delivery of rolled iron, and shall be held as representing the lot from which it was taken.
- 19. Inspection and Tests.—All inspection and tests will be conducted by and at the cost of the Corporation at its premises.
- 20: Rejection.—Should the material fail to comply in any particular with this Specification, it shall be liable to rejection.
- 21. Defects Showing During Fabrication.—Should any portion of a Flat or Bar show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified, and provided the Flat or Bar has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores, replace or make good the defective Flat or Bar.
- 22. Painting.—The Rolled Iron shall prior to delivery be clearly and durably painted at each end by and at the expense of the Contractor as follows, that is to say:—
  - Double Rolled Iron shall be painted with WHITE paint.

Treble Rolled Iron shall be painted with BLACK paint.

# SPECIFICATION TREBLE ROLLED IRON-Items 2303 to 2306.

23. Treble Rolled Iron, shall be in accordance with the Specification for Double Rolled Iron, except that the tensile test pieces shall show a tensible breaking strength of 22 to 25 tons per square inch with an elongation of not less than 22 per cent.

The Contract rates are subject to adjustments by mutual arrangement between the Comptroller of Stores and the Contractor, should there be any alteration in the working hours or wages due to awards of any properly constituted tribunal.

Item No.	Description	Country of Manufre	Estimated Requirements	Rate per .	'· Rate	Name of Contractor
	Wrought Iron (Yorkshire Grade) as speci- fied	.·				Sur
2284	Flat Bars—All sizes mentioned for Double Rolled Iron—Items 2290-2299	Vict. (partly)	5 tons	ton	£ s. d. 28 18 0	
	Round or Square Bars any length ordered by any of the following diameters or thick-				·	
2285	Up to §" advancing by 1/16"	,,	]	<b>,</b> .	28 18 . 0	Melbourne Iron
2286	Over § up to 1½ advancing by 1/16"	,,		٠,,	28 18 0	
2287	Over 1½" up to 3" advancing by ½"	,,	150 ,	,,	28 18 0	
2288	½", ¾", ¾" ¼", or 1" dia. Round Bars for steam tight studs	,,			28 18 0	
2289	1" diam. Bars for Crown Stays	Ι,	ן ו	<b>,,</b>	28 18 0	]

#### ROLLED IRON—continued.

	ltem No.	Description	Country of Manuf're	Estimated Requirements	. Rate per	Rate	Name of Contractor
	2290	Double Rolled Iron (as specified)— Flat Bars, any length ordered, and in any of the following thicknesses and sizes as ordered 7 and 7 x 7/16" to 7 advancing by 1/32"	Vict.	<u> </u>	ton	£ s. d. 15 0 0.	
سر	2291	I" x ¼" to §" advancing by 1/32"	**		,,	15 0 0,	,,,,,,
7	2292	$1\frac{1}{8}$ " x $\frac{1}{4}$ " to $\frac{3}{4}$ " advancing by $1/32$ "	,, ,		,, ,	15 0 0	1 1160
	2293	] 1 4" x 4" to 4" advancing by 1/32"	,,		,,	15 0 0	1
	2294	$1\frac{3}{8}$ " and $1\frac{1}{2}$ " x $\frac{1}{4}$ " to 1" advancing by 1/32"	,, <u>,</u>	80 tons	,,	15 0 0	
	2295	$1\frac{3}{4}$ " and 2" x $\frac{1}{4}$ " to $1\frac{1}{4}$ " advancing by $1/32$ "	,, .	, ao tons	,,	15 0 0	
	2296	21, 21, and 23, x 1, to 11, advancing by	,,		,, .	15 , 00	
	2297	1/32" 3", 31" 4" and 41" x 1" to 2" advancing by	,,		,,	15 0 0	Melbourne Iron
	2298	$1/32''$ 5" and $5\frac{1}{2}$ " x $\frac{1}{4}$ " to $2\frac{1}{2}$ " advancing by $1/32''$	,	<u> </u>	,,	15, 0 , 0	Steel Mills Pt
	2299	6" x ¼" to 2" advancing by 1/32"	۰,,	jJ	١,,	15 0 0	1 12 12 12 13
	2300	Round or Square Bars, any length ordered by any of the following diameters or thicknesses ordered 1.2" Up to \$\frac{8}{2}" advancing by 1/16"		)	, , , ,	15 0 0,	1 (20) (1 1 (20) (1 26 (1) (2) (1 27 (2) (1) (1
	2301	Over §" up to 1½" advancing by 1/16"	, ,,	150 ,,,	. ,, , '	15 0 0	
	2302	Over 1½" up to 3" advancing by ½"	,,			15 0 0	The state of the s
	2303	Treble Rolled Iron (as specified)— Round or Square Bars, any length ordered, by any of the following diameters or thicknesses ordered 1/2" Up to 8" advancing by 1/16"	, , , , , , , , , , , , , , , , , , ,	The second of th	;	ا ار ا 20(10/10)	6
	2304	Over §" up to 1½" advancing by 1/16"	, ' ; <b>,</b> ,	ا	;,	20 10 0	
	2305	Over 11 up to 3" advancing by 1"	. ! "	}, 10 ,,		20 10 0;	Or of con-
	2306 2307-	Over 3" up to 4" advancing by \frac{1}{3}" \qquad \dots \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qqqq \qqq \qqqq qqqq qqqq qqqq qqqq qqqq qqqq qqqq			12.33	20 10 0	J ,

SPECIFICATION—

*A* 

Particulars.—The Bright Round and Hexagon Steel Bars shall be in accordance with British Standard Specification No. 32-1927 for grade 2 steel and the Bright Free Cutting Round and Hexagon Steel Bars shall be in accordance with grade 3 steel (clause 1 of the B.S.S. and where stated otherwise in this Specification excepted).

Tolerance.—The Steel Bars shall be within the limits of tolerance, given in Table (I) for Round Bars, and Table (III.) for Hexagon Bars, in B.S. Specification No. 32-1927.

Tests.—The Contractor shall supply documentary evidence that each cast in each delivery of Steel Bars has passed the specified tests. All other inspections will be conducted by and at the cost of the Corporation at its premises.

Defects Showing during Fabrication.—Should any portion of any Steel Bar show injurious defects in course of fabrication by the Corporation the Contractor shall be notified, and provided the Bar has been properly treated by the Corporation, the Contractor shall at his own expense, and at the discretion of the Comptroller of Stores, replace or make good the defective Bar.

Rejection.—Should the material fail to comply in any particular with this Specification, it shall be light to rejection. it shall be liable to rejection.

8. The rates for Items of N.S.W. manufacture include wharfage, and in the event of time for importation being allowed, wharfage will be cleared by the Corporation and the amount involved deducted from the Contractor's invoice. Bills of lading shall be made out in favor of the Victorian Railways Commissioners to enable this to be done.

# BRIGHT STEEL BARS—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
2311	Bars, Bright Round Steel—as specified— "H. V. McKay—Massey Harris Pty. Ltd." "B" diameter, any lengths ordered	1	2 cwt.	cwt.	£ s. d.	)
2312	1, , , , , , , , , , , , , , , , , , ,	,,	3 ,,	,,	1 13 9	Dane, Taylor & Co.
2313	5" ,, ,, ,,	. ,,	3 ,,	,,	1 8 9	Pty. Ltd.
2314	3" 3 11 11 11	,,	6 ,,	,,	1 5 0	Briscoe & Co. Ltd.
2315	1	. ,,	5 ,,	,,	1 3 9	)
2316	10" " " " " " " " " " " " " " " " " " "	. ,,	20 ,,	,,	1 3 9	Į.
2317	\[ \frac{5}{8}''	٠, ,,	20 ,,	,,	$\begin{bmatrix} 1 & 2 & 9 \\ 0 & 10 & 0 \end{bmatrix}$	· ·
2318	3, , , , , , , , , , , , , , , , , , ,	٠, ,,	25 ,,	11	0 18 9	Dama Tanka & C
2319	8" ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	٠, ،,	100 ,,	**	$\begin{bmatrix} 0 & 18 & 9 \\ 0 & 18 & 9 \end{bmatrix}$	Dane, Taylor & Co.
2320	I" to 1\frac{8}{3}", advancing by \frac{1}{16}" diameter any lengths ordered	, ,,	450 ,,	,,	0 10 9	Pty. Ltd.
2321	13" to 2½", advancing by 16" diameter any lengths ordered	, ,,	1000 ,,	,,	0 18 9	
2322	23" to 4", advancing by 3" diameter any lengths ordered	, ,,	50 "	,,	0 18 9	٠ .
2323-	2324 Nil					
•	Bars, Bright Round Steel, Free Cutting	,	•			•
2325	as specified, "McKay-Massey Harris"  1" to 1\frac{1}{8}" diameter, advancing by \frac{1}{16}'	,,	<u> </u>	,,	0 18 9	)
2326	diameter, any lengths ordered  13" to 21" diameter, advancing by 16"	, ,,	300 "	"	0 18 9	Dane, Taylor & Co.
2327	diameter, any lengths ordered  23" to 4" diameter, advancing by 3" diameter, any lengths ordered	,,,	)	,,	0 18 9	Pty. Ltd.
2328-	2329 Nil					
2330	Bars, Bright Hexagon Steel, as specified any lengths ordered—"Martins" 0.710" width across flat, for \(\frac{3}{8}\)" nuts	N.S.W.	)	,,	1 2 6	<u> </u>
2331	,, ',, free cutting	,,	}	,,	1 2 6	
2332	0 920" width across flat, for ½" nuts	<b>,,</b>		,,	1 0 6	
2333	" free cutting	,,		,,	1 0 6	
2334	1.100" width across flat, for §" nuts	,,		,,	1 0 6	
2335	", ", free cutting	,,		,,	1 0 6	
2336	1.300" width across flat, for 3" nuts	,,		,,	1 0 6	
2337	" free cutting	,,	}600 ,.	<b>)</b> 1	1 0 6	Dane, Taylor & Co.
2338	1.480" width across flat, for \( \frac{7}{6}\)" nuts	,,		"	1 0 6	Pty. Ltd.
.o <sup>2339</sup>	" " free cutting …	′,,		,,	1 0 6	36
2340	1.670" width across flat, for 1" nuts	,,		,,	1 0 6	
2341	" " free cutting …	1		,,	1 0 6	
2342	1.860" width across flat, for 11 nuts	,,		,,	1 0 6	
2343	", free cutting			,,	1 0 6	
2344	2.050" width across flat, for 11" nuts	,,		,,	1 0 6	
2345	", ", free cutting	,,	ן	,,	1 0 6	
2346-	-[2348 Nil	I	l į		. 1	•

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#### KEROSENE, MOTOR SPIRIT AND FUEL OILS.

(See Appendix "I" for Specification.)

The quantity to be paid for shall be determined on the following basis:-

Gallonage of Kerosene and Motor Spirit in Cases to be ascertained by measurement by certified Imperial gallon measure after delivery to destination shown on order. 4 per cent. of each delivery shall be measured, and the average contents shall determine the quantity to be paid for the full delivery.

As regards Items Nos. 2361-2363, measurements as disclosed by bowser will be accepted as basis for payment.

Gallonage of kerosene (except high test kerosene), motor spirit, benzol or benzoline, delivered in bulk (other than in cases or tins), shall be ascertained by calibrated stick, at actual temperature. Standard drums and dip sticks shall be used.

Net weight of Fuel Oil and Pintsch Gas Oil shall be ascertained by weighing over Departmental weighbridge or scales.

#### High Test Kerosene.

\*\* As regards Items Nos. 2350 to 2350c, the rates do not include Exchange between. Australia and London, and are based on the par rate of conversion between London and the country of production. London-New York conversion is based on 4.86% dollars to the £1 sterling.

The contract rate is to be adjusted to cover the rate of Exchange and conversion operating on the date of delivery between Australia and the country of production in the following manner:—

The factor shown will be multiplied by the percentage of Exchange ruling on the date of delivery between Australia and the country of production shown in the Schedule. The result will determine the amount by which the contract rate per gallon will be increased or decreased.

The rate of Exchange and conversion notified by the Commonwealth Bank of Australia as ruling on the date of delivery to the Corporation will be in all cases be accepted.

Payment for High Test Kerosene will be on gallonage calculated on net weight ascertained by approved methods by the Comptroller of Stores or his representative at the place of delivery, and the specific gravity ascertained in the Victorian Railways Laboratory from samples drawn from such delivery.

† The whole of the rates in this Schedule, excepting Items Nos. 2350 to 2350c, are the nett wholesale selling prices ruling on the 1st October, 1934, and are subject to all market fluctuations in the Contractors' wholesale nett selling prices. It is agreed that any special allowance to specific classes of buyers shall not necessarily constitute a variation in the wholesale selling rates. All deliveries will be invoiced at the nett wholesale selling price ruling on the actual date of delivery, and clause 7 of the Conditions of Contract shall not apply.

The rates for Kerosene and Motor Spirit, with the exception of 300 deg. High Test Kerosene, are the nett wholesale prices, and have been arrived at by deducting ½d. bulk allowance, where applicable, 1d. special allowance, which is subject to cancellation without notice, and 1d. cash discount for payment within 30 days. The rates shown in the schedule are the nett prices.

The Contractor shall deliver Kerosene, Motor Spirit, Benzol and Benzoline under Items Nos. 2349 to 23570, 2364 to 2365A at the places and in the manner provided in clause 12 of the conditions of contract, or if so required and indicated on the order covering such supplies, shall deliver at any railway depot within the Metropolitan Area.

The necessary drums for despatching the Motor Spirit or Kerosene to country depots, shall be loaned by the Contractor, free of charge, but the Corporation shall return the drums within a reasonable time on demand or pay the Contractor at the rate of 40s. and 10s. each for heavy and light drums respectively.

As regards Items Nos. 2367 and 2368, Fuel Oil delivered in 40-gallon drums at Company's Works, will be charged \( \frac{1}{4} \)d. per gallon for filling in drums provided by the Corporation. Should the Company provide the drums, a charge of \( \frac{3}{4} \)d. per gallon for filling will be made current.

As regards Item No. 2368, Fuel Oil in 40-gallon drums delivered in the Metropolitan Area will be subject to a cartage charge of 1s. 8d. per drum for six drums or over. Delivery under Item 2367 cannot be given in less than truck loads at Company's Siding.

Fuel oil provided under Items Nos. 2367A and 2368A, is for oil engines and for use at Buffalo Chalet. C.O.R. fuel oil to be used for all other purposes.

Drums containing fuel oil, supplied by Shell Co and C.O.R. Co., shall remain the property of the Contractor, and are returnable free of all charges by the Corporation. In the event of non return of drums to the Shell Co., such drums shall be charged at 30s. for heavy steel drums and 10s. for one trip drums.

. As regards 2350-2350c the Shell Coy. is to receive one-third of business and Vacuum Oil Coy. two-thirds.

Allotment of orders and method of ordering are to be arranged as per instructions on contained in circular of 24/10/34.

# KEROSENE, MOTOR SPIRIT AND FUEL OILS—continued.

					1	<u> </u>
Item No	Description	Country of Manuf're	Estimated 'Requirements	Rate per	Rate	Name of Contractor
			٠.	,		
	Kerosene, Illuminating Oil, Specification			,	£, s. d.	
60040	N.1—" C.O.R."—		ر مانمس	iman	+0 1/4	
$+$ $\begin{cases} 2349 \\ \end{cases}$	in cases, 2 x 4 gal. tins	Vict. (partly)	175,000	imp. gal.	10 1 4	The Common 14
2349A	in 24 or 44 gal. drums	,,	J.	",	ţ0 0 10 <u>‡</u>	Oil Refineries Ltd
•	· · · · · · · · · · · · · · · · · · ·		•	!		
	Kerosene 300° High Test, Specification ''N.3.—" Shell"—			,	,	
2350	in cases 2 x 4 gal. tins	U.S.A.	) '.	,,	**0 1 5	
† { 2350A	Exchange Factor '11d. gal. in 44 gal. drums	,,		,,	**0 1 2	The Shell Co. of Aust. Ltd.
(2000%	Exchange Factor 11d. gal.			l ".		
			4500 ,,	·	. ,	
	Kerosene, 300° High Test, Specification	٠,	<b>.</b>		٠,	
(2350в	in cases 2 x 4 gal. tins	,,		,,	**0 1 5	)
† { 2350c	Exchange Factor 11d. gal. in 44 gal. drums, "M1103"	,,	]	٠,,	**0 1 2	Vacuum Oil Co. Pty Ltd.
	Exchange Factor 11d. gal.	Vict.			10 1 13	5
† <sup>2351</sup>	Kerosene, for Engine Cleaning Purposes— "C.O.R."—in cases, 2 x 4 gal. tins.	(partly)	2500 ,,	,,		The Commonwer!"
2351A	Kerosene, for Engine Cleaning Purposes— "C.O.R."—in 24 or 44 gal. drums.	,,	١. ١	. ,,	10 .0 8	Oil Refineries Ltd
2352	Kerosene, for Lux Lamps, "Pennant"-in	E. Indies	14 000	. 11	‡0 1 4	The Shall Co. of
†{ 2352A	cases, 2 x 4 gal. tins in 44 gal. drums. Kerosene, for Lux Lamps, "Pennant"—in	,,	14,000 ,,	33	10 0 10 <u>1</u>	The Shell Co. of Aust. Ltd.
_	44 gal. drums Kerosene Power Fuel, for Coulson or other		h .		   <u>†</u> 0 l 1}	5
$\uparrow \begin{cases} 2353 \end{cases}$	' Kerosene Engines, Specification N.1	1	24,000 ,,	, ,		The Community
2353A	"C.O.R."—in cases 2 x 4 gal. tins.  Kerosene Power Fuel, for Coulson or other	. ,, .		,, .	to 0 8½	Oil Refineries U
(2000	Kerosene Engines, Specification N.1.— "C.O.R."—in 24 or 44 gal. drums.			. '		· · · · ·
	C.O.K. —III 24 of 44 gai. drums.					
2354	Motor Spirit, Specification N.4, "Shell"—	East	17,500 ,,	• "	‡0 1 10½	
1 2355	Ist Grade, in cases, 2 x 4-gallon tins lst Grade, delivered by road tanker into	Indies	8000 ,,	,,	‡0 ·1 3½	
	drums or tanks or delivered in 44-gallon drums at any railway depot within the	ı				The Shell Co. of
	Metropolitan Area, "Shell"	1 .				Aust. Ltd.
	Motor Spirit, 2nd Grade, Specification N.4, in cases, 2 x 4-gallon tins—	1	s í			
<b>†23</b> 56	"Shell"	.,,	]	٠,,,	10 1-10	
†2356A	"Plume"	U.S.A.		,,	‡0 .1 10	Vacuum Oil Co.
†2356в		Vict.	140,000 ,,	,,	‡0 1·10	Pty. Ltd. The C mmonwealth
•		(partly) East				Oil Refineries Ltd. Atlantic Union Oil
†2356c	100	Indies		,,		Co. Ltd.
†2356p	"Texaco 400" Motor Spirit, 2nd Grade, Specification	U.S.A.	٠	,,,	10 1 10	The Texas Co. (A'asia) Ltd.
	N.4, delivered by road tanker into drum	s			. , ;	
	or tanks, or delivered in 44-gallon drum at any Railway Depot within the Metro	s .				
100	politan Area	East	1	;	10 1 3	The Shell Co. of
†2357	"Shell" •	Indies	, ,	,,		Aust. Ltd
†2357A	aet Pluine "	U.S.A.	-	. 15	10, 1 3	Vacuum Oil Co. Pty. Ltd.
†2357E		Vict.	600,000 ,,	,,	‡0 1 3	
†23570	"Atlantic"	East	15	);::1• **	‡0. 1 3	Atlantic Union Oil
†2357r	"Texaco 400"	. Indies U.S.A.	J .	,,		Co. Ltd. The Texas Co.
1200,2		1	1	1 - 1	اللا بالداد ا	(A'asia) Ltd.

# KEROSENE, MOTOR'SPIRIT, AND FUEL OIL—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
					,£, s. d.	
$\left\{ ^{2358}\right.$	Motor Spirit 2nd Grade, Specification N4, delivered by road tanker into the Corpor- ation's underground tank at Echuca Rail-	East Indies	40,000 gals.	imp. gallon	‡0 1 5¾	The Shell Co. of
	way Station, "Shell"					Aust. Ltd.
2359	Motor Spirit, 2nd Grade, Specification N4, delivered in bulk by road tanker into the Corporation's underground tank at the State Coal Mine, at Wonthaggi, "Shell"		6000 ,,	,,	't0 '1 5½	
†2360	Motor Spirit, 2nd Grade, Specification N4, delivered by road tanker into the Corporation's underground tank at Gee- long, "C.O.R. Straight"		500 ,,		‡0 1 4½	The Commonwealth Oil Refineries Ltd.
	Motor Spirit, 2nd Grade, Specification N4, delivered from Contractor's Bowser into the Corporation's road motor vehicles, as					i sa
2361	required at— Geelong, "Shell"	East Indies	12,000 ,,	,,	10 1-4½	
2362	Ferntree Gully, "Shell"	,, .	18,000 ,,	,,	10 1 3½ plus 1d.	
2363	Warburton, "Shell"	<b>,,</b> ·	5000 ,,	,,,	charge 10 1 42 plus 1d. bowser	
2364	Benzol, in 44-gal. Corporation's d'rums,	N.S.W.	j	. "	to 1 10	
2364A	"Shell" Benzol, in 44-gal. Contractor's drums, "Shell"	,,	2500 ,,	,,	‡0 1 11	i
$\int 2365$	Benzoline, in Corporation's 44-gal. drums, "Plume"	U.S.A.	ľ	,,	10 2 6	Vacuum Oil Co.
2365A		,,	1600 ,,	,,	10 1 2 7	Pty. Ltd.
	Fuel Oil (Petroleum Oil Product), Specifi-					6 900
$\begin{cases} 2366 \\ \end{cases}$	Delivered in Corporation's railway tank trucks at Company's siding at New- port or Port Melbourne, "C.O.R."		6000 tons	ton	<b>‡3</b> 15 0	The Commonwealth
2367	(See notes)  In 40-gallon Corporation's drums, in trucks at Company's siding at Newport or Port Melbourne, "C.O.R." (See notes)	.,	250 ,,	"	‡3 15 0	Oil Refineries Ltd.
†2367a			. 40 ,,	»,	‡5 <b>7</b> 0	The Shell Co. of Aust. Ltd.
†2368 Æ	In 40-gallon drums, delivered by Contractor in the Metropolitan Area, "C.O.R." (See notes)	Vict. (partly)	, 50	,,	‡3 15 0 	The Commonwealth Oil Refineries Ltd.
†2368a	In 44-gallon drums, delivered by Con- tractor in the Metropolitan Area, "Shell" (Furnace Oil)	East Indies	Included in Item 2367A	} "	15 7 0	The Shell Co. of Aust. Ltd.
2369	Delivered by Contractor into Departmental tank, at Railway Buildings, Spencer-street, in approximately 4-ton loads, "C.O.R."	Vict. (partly)	150 ,,	;	‡3 15   0	
2370	Oil, for the manufacture of Pintsch Gas, delivered in Departmental railway tank trucks, at Contractor's siding, at New- port or Port Melbourne, Specification	<b>99</b>	250 ,,	,,,	‡3 15 0	The Commonwealth : Oil Refineries Ltd.
į	O.I., "C.O.R."		٠.	,		j
2371-	2375—Nil		1	1		

## CORRUGATED JOINTING RINGS.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Rings, Corrugated Jointing, Steel—				£ s. d.	
*†2376	½" hole, 4" outside dia., small corr., sample	Vict.	270	each	0 0 4	ገ
*†2377	. No. 273 . 3" hole, 4" outside dia., sample No. 274	**	430	,,	0, 0 4	
*†2378	1" hole, 5" outside dia., sample N6. 275	,,	250	,,	0 0 6	.ಭ.ಕ್ಕ
*†2379	11/2" hole, 5" outside dia., sample No. 276	,,	260	,,	0 0 6	
*†2380	$1rac{1}{2}$ " hole, $5rac{1}{4}$ " out side dia., sample No. $277$	,,,	140	,,	0 0 7	'
*†2381	2" hole, 6"out side dia., sample No. 279	,,,	490	,,	0 0 7 2	
*†2382	2½" hole, 7" outside dia., sample No. 283	,,	100	,,	0 0 10	
*†2383	3" hole, 8" outside dia., sample No. 286	"	240	·" ,,	0 1 0	· · · · · · · · · · · · · · · · · · ·
*†2384	Rings, Corrugated Jointing, Brass— 1¼" hole, 2" outside dia., small corr. Whistle Valve Seats, sample No. 223		100		0.03 <del>3</del>	
*†2385	13" hole, 21" outside dia., small corr. Gauge Glasses sample No. 225	"	120	,,	0.0.3	
*†2386	2½" hole, three cornered, small corr., sample No. 228	**	100	"	0 1 0	William Black
*†2387 *†2388	2½" hole, small corr., Non-return Blow- down Valves, sample No. 230 Bye Pass Valves to Cylinder C.K., N.	,,	100	. ,,	.0.09.	to those t
*†2389	and X. Engines  Bye Pass Valves to Cylinder, A1-2, D1-4	. "	440	,,	0 0 10	
*†2390	Engines Blower Mountings in Smoke Box, En-	**	730	,,	0 0 9	
•	gines in general;	**	500	,,	0 0 6	
*†2391	Injectors, A1-2 Engines	**	800	,,	0 1 6	1 to 6.2
*†2392	Injectors, D1-4 Engines	**	730 :	,,	0 1 6.	in the second se
*†2393	Safety Valves, A1-2, D1-4 Engines	,,	700	,,	0 0 9	
*†2394	Blow Off Cocks, Engines in general	,,	880	,,	0 1 0	
*†2395	Water Gauge Cock Mountings, Engines		460		0 0 6	
*†2396	Chime Whistle Flanged Base, Engines in general	,,	300	, ,,	0 0 9	
2397-	2420Nil			"	,	

## ROLLED STEEL

(See Appendices "L" to "X" inclusive for Specification.)

## PLACE AND CONDITIONS OF DELIVERY

A. The rates for material of N.S.W. manfacture are provisionally delivered c.i.f., Melbourne. The stores shall be shipped in such a manner as will enable the Corporation to take provisional delivery direct from Ships' Slings into railway trucks at Williamstown or Victoria Dock. Stevedoring charges will be to the Corporation's account.

B. The stores of Victorian manufacture shall be delivered at Spencer-street Receiving Depot or in trucks at Brooklyn, at Contractor's option.

Notwithstanding that such provisional delivery has been given the stores shall be subject to rejection if not received at destination in good order and condition and to the satisfaction of the Comptroller, of Stores.

In the event of the Contractor requiring stores that have been rejected, forwarded by rail to any other location, freight shall be payable by the Contractor.

Wharfage and Stevedoring is to the Corporation's account and copies of orders are to be forwarded to the Shipping Clerk.

All rates for material supplied by the Broken Hill Co., McPherson's Pty. Ltd., are subject to a discount of  $3\frac{1}{2}\%$ .

In regard to the Contracts with the Broken Hill Pty. Co. Ltd. and McPherson Pty. Ltd., in the event of the current market prices falling or rising during the currency of the contract, such, fall or rise, as the case may be, shall apply to all unsupplied orders at the date of such alteration in price.

Time for Delivery—Maximum eight weeks, provided this fits in with Contractor's rolling programme.

The Contract with the Melbourne Iron and Steel Mills is subject to the contract rates being amended by mutual arrangement between the Comptroller of Stores and the Contractor should there be any alteration in the working hours or wages due to awards of any properly constituted Tribunal which will affect cost of production. Further, in the event of there being any rise or fall in the price of Broken Hill and/or Australian Iron and Steel Coy's blooms, the Contract rates for Mild Steel manufactured from either of these Coy's blooms shall be adjusted by a like amount, plus 10 per cent. to cover waste, for deliveries made on and after the expiration of a period of 2 months from date of such alteration.

Name of Manufacturers-McPherson's Contract, Australian Iron and Steel Ltd.

See also Special instructions of Comptroller of Stores, dated 27/10/34, re method of ordering nd discount.

#### BLACK STEEL SHEETS. Items 2615-2638.

## Name of Manufacturer-Lysaght's Pty. Ltd.

Steel Sheets, 16G and heavier, will be packed in bundles.

Steel Sheets, lighter than 16G. will be packed in steel envelopes.

Payment will be made on gross weights as ascertained on Corporation's weighing machines.

Eight weeks to be allowed for delivery from date of receipt of order.

The Contract rates are subject to variations to the extent of any rise or fall in "Lysaght's" current rates, and shall apply to the undelivered portion of orders, the Contractor to be under obligation to advise the Comptroller of Stores of any such alteration.

	Item No.	Description .	Country of Manuf're	Estimated Requirements	Rate per	]	Rate	, 1	Name of Contractor
		STEEL ANGLES  Mild Steel Angles (as specified in Appendix L). In lengths up to 60' 0", as may be ordered.—	,			£	s.	d.	
	2421	2 united inches up to 6 united inches by \( \frac{1}{8} \) thickness and over (as rolled by the Company)	Vict.	220 tons	ton	12	19	6	
	2422-	2427 (Inclusive)—Nil	į						
X.	2428	Extra to the above rate (Item 2421) for <b>Boiler Quality</b> angles (as specified in Appendix P)	"	15 ,,	,,	0	15	0	
	2429	Extra for cold straightening	,,	•••	,,	0	5	0	
	2430-	2435 (Inclusive)—Nil							Melbourne Iron & Steel Mills Pty.
	2436	Extra for lengths over 60' 0" and up to 70' 0" in addition to preceding extras listed—	**	, ,	,,	1.	0	0	Ltd.
	2437-	2440 (Inclusive)—Nil							+.11
	2441	Extra for cutting lengths to a margin of plus or minus \(\frac{1}{6}\)" in addition to preceding extras listed.	:		,.	0	10	<b>0</b>	



tem No.	Description	Country of Manufre	Estimated Requirements	Rate per	Rate	Name of Contractor
	r 10		<u> </u>	t. , ;	<u>'</u>	
	HEAVY STEEL ANGLES.	, ,			£, s. d.	
	(See also Items 2422A-2456A and 2442B-2456B).		10.0		1	• •
	Heavy Mild Steel Angles (as specified in					•
	Appendix L). In lengths up to 60' 0", as may be ordered			, .		<del>-</del> 9
2442	In the following sizes only, as ordered-	Vict.	1	ton	12 19 6	Melbourne Iron &
	$3\frac{1}{4}$ " x $3$ " x $\frac{5}{16}$ " to $\frac{5}{8}$ "		.			Steel Mills Pty. Lto
	$3\frac{1}{8}$ " x $3\frac{1}{8}$ " x $\frac{5}{8}$ " to $\frac{5}{8}$ " 4" x $3$ " x $\frac{3}{8}$ " to $\frac{5}{8}$ ".	_				
	4" x 4" x 1" to 15"	*		l '		
	5" x 2½" x ¾" to ½".		350 tons			
2443	Over 12 united inches by ½" thickness and over	,,	<b>.</b> .	•••		Nil
	· •	· · ·	-		0.15 0	
2444	Extra to the above rate (Item 2442) for Boiler Quality Heavy Angles (as speci-	. ,,		. "	0 15 0	
	fied in Appendix P.)		J	,		
2445	Extra for cold straightening	· "		,,	0 5 0	
2446	to 2449 (inclusive) Nil.	,	. 31	, ,		1
	Lengths exceeding 60' 0" will be subject	·····		,		Melbourne Iron & Steel Mills Pty. Ltd
	to the following extras in addition to those already listed	.6	re, te			,
2450	Over 60' 0" and up to 65' 0"	٠,,		,,	1 0 0	
2451	Over 65' 0" and up to 70': 0"	**	,	,, .	1 0 0	}
2452	to 2455 (inclusive) Nil.	. ''			ļ	•
2456	Extra for cutting lengths to a margin of plus or minus 3° in addition to preceding extras listed	• **		,,	0 10 0	Melbourne Iron & Steel Mills Pty, Lto
			, ,,		,, ,	e e
			· ·			•
	HEAVY STEEL ANGLES.				,	
	(See also Items 2442-2456 and 2442s-2456s).	•	·		<i>t</i> ,	
	Heavy Mild Steel Angles (as specified in					•
	Appendix L). In lengths from 10' 0" to 40' 0", as may be ordered		. ,	;		
	•	NI C SAI			+10 10: 0	, · · · · · · · · · · · · · · · · · · ·
142a	Over 8 united inches and up to and including 12 united inches by 4" thickness and over	N.S.W.			10 10 0	
142 <sub>AA</sub>	5" x 3" x ¼" thickness and over	. ,,		1)	‡10 10 O	
443a	Over 12 united inches by ½" thickness and over, in sizes rolled by Contractor	. "	Included   in Items   2442-2444	.".	‡11 10 0	The Broken Hill
444a	Extra to the above rates (Items 2442A to 2443A) for Boiler Quality Heavy Angles (as specified in Appendix P.)	,,		,,	‡0 10 0	Pty. Co. Ltd.
445a	Extra for cold straightening	,,			No extra	
	‡ Rates are c.i.f. Mel	ł	11. 6104	ļ.,	' charge	J

	-KOLLE		continued.			
Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	HEAVY STEEL ANGLES—continued.				£ s. d.	-
	Lengths under 10' 0" or exceeding 40' 0" will be subject to the following extras in addition to those already listed.					
32446A	Extra for Long lengths.  Over 40' 0" and up to 45' 0"	N.S.W.		ton	10 5 0	,
2447a	Over 45' 0" and up to $50^{>}$ 0"	,,		,,	‡1 0 0	
2448A	Over 50' 0" and up to 55' 0"	,,		,,	‡l 5 0	
2449a	Over 55' 0" and up to 60' 0"	,,		,,	‡1 15 0	
2450a	Over 60' 0" and up to 65' 0"	,,		,,	‡2 5 0	
2451a	Over 65' 0" and up to 70' 0"	,,		,, ,	‡3 0 0	The Broken Hill Pty. Coy. Ltd.
2452a	Over 70' 0" and up to 75' 0"	,,	 	,,	‡3 10 0	Tiy. Coy. E.a.
2453A	Extra for Short lengths. Under 10' 0" down to 5' 0"	,,-		,,	ţ0 10 0	
2454a	Under 5' 0" down to 3' 0"	.,,		,,	‡1 0 0	
2455A	Under 3' 0"	,,,		ינו	‡1 10 · · 0	
2456a	Extra for cutting lengths to a margin of plus or minus \frac{1}{8}" in addition to preceding extras listed	<b>,,</b>		<b>,,</b>	†1 5 0	J
	HEAVY STEEL ANGLES. (See also Items 2442-2456 and 2442A-2456A)	)			† 	., τ.
2442в	Heavy Mild Steel Angles (as specified in Appendix L.). In lengths from 10' 0" to 40' 0", as may be ordered  Over 8 united inches and up to and including 12 united inches by \frac{1}{2}" thickness and over in sizes rolled by Contractor	,,	· ]	, ,,	‡10 10 0	
2442вв	5" x 3" x ½" thickness and over	.,,	Included	<b>,</b> "	†10 10 O	
2443в	Over 12 united inches by ½" thickness and over, in sizes rolled by Contractor	۱,,	in Items 2442-2444	,,,	111 10 0	
2444в	Extra to the above rates (Items 2442B to 2443B) for Boiler Quality Heavy Angles (as specified in Appendix P).	3		.,,,,	‡0 10 0	•
2445в	Extra for cold straightening	,,		,,	No extra	
<i>%</i>	Lengths under 10' 0" or exceeding 40' 0' will be subject to the following extras ir addition to those already listed				Charge	McPherson's Pty.
2446в	Extra for Long lengths.  Over 40' 0" and up to 45' 0"	, ,,	,	,,	·‡0 5 0	
2447в	Over 45' 0" and up to 50' 0"	. "	,	,,	‡1 0 0	·
2448в	Over 50' 0" and up to 55' 0"	. ,,		,,,	‡1 5 Ô	
2449в	Over 55' 0" and up to 60' 0"	.,,,,		,,	‡1 15 0	
2450в	Over 60' 0" and up to 65' 0"	,,		,,	‡2. 5 0	
2451в	Over 65' 0" and up to 70' 0"	. "		,,	<b>13</b> 0 0	
2452в	Over 70' 0" and up to 75' 0" ‡ Rates are c.i.f. M	.  ,, Ielbourne	less 31% die	,,	‡3 10 0	Ŋ.,
1906	1 Rates are C.1.1. W	terpourne,	, 1000 0 g /0 th	~~~####		

		Country				
Item No.	Description	of Manuf're	Estimated Requirements	Rate per	· Rate	Name of Contractor
!	HEAVY STEEL ANGLES—continued					
	Extra for Short lengths.				£ s. d.	
2453в	Under 10' 0" down to 5' 0"	N.S.W.		tons	‡0 10   0	<u> </u>
2454в	Under 5' 0" down to 3' 0"	,,		,,	‡1 0 0	
2455в	Under 3' 0"	,,		,,	‡1 10 0	McPherson's Ptyc
2456в	Extra for cutting lengths to a margin of plus or minus \{ \}'' in addition to preceding extras listed	,,		,,	‡1 5 0	
•	STEEL CHANNELS AND JOISTS	:		,		
	(See also Items 2457A-2476A)					
	Steel Channels (as specified in Appendix L) In lengths of 10' 0" to 40' 0" inclusive as may be ordered					
2457	6" to 15" depth inclusive	,,	h	,,	‡10 17 6	h
<b>24</b> 58	Under 6" to 4" depth inclusive	,,	2000 tons	,,	‡11 <b>1</b> 0 0	
2459	3" x 1½"'	,,	]}	,,	‡12 i7 6	
	Steel Joists (as specified in Appendix L). In lengths of 10' 0" to 40' 0" inclusive as may be ordered			:		
` 2460	6" to 16" depth inclusive	,,	h	,,	‡10 17 6	
2461	Over 16" depth up to 20" depth	,,		<b>,,</b> (	‡11 7 6	
2462	22° x 7°	,,	} 100 tons	,,	‡11 12 6	
<b>24</b> 63	24" x 7½"	,,	Too tons	,,	‡11 17 6	
2464	Under 6" to 4" inclusive	,,		,,	‡11 7 6	
2465	3" x 284"	,,	]	,,	‡13 17 6	
	Extra for long lengths of Channels and Joists					
<b>24</b> 66	Over 40' 0" and up to 45' 0"	,, .		,,	‡0 5 0	The Broken Hill Processing Co. Ltd.
2467	Over 45' 0" and up to 50' 0"	,, ·	, ,	,,,	‡1 0 0	· ·
2468	Over 50' 0" and up to 55' 0"	,,		,,	‡1 5 0	
2469	Over 55' 0" and up to 60' 0"	,,		,,	‡1 15 0	.
2470	Over 60' 0" and up to 65' 0"	,,	i	,,	12 5 0	
- 2471	Over 65' 0" and up to 70' 0"	,,		,,	‡3 0 0	<u> </u>
2472	Over 70' 0" and up to 75' 0"	,,		,,	‡3.10 0	
	Extra for short lengths of Channels and Joists					
2473	' Under 10' 0" down to 5' 0"	,,		,,	‡0 10 0	
2474	Under 5' 0" down to 3' 0"	,,		,,	‡1 0 0	
2475	Under 3' 0"	,,		,,	‡1 10 0	
2476	Extra for cutting lengths of Channels and Joists to a margin of plus or minus \frac{1}{2}" in addition to preceding extras listed			. "	‡1 5 0	J

	ROLLED	SIEEL	—continued.			
Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	STEEL CHANNELS AND JOISTS (See also Items 2457-2476)	·	·			
×.	Steel Channels (as specified in Appendix L) In lengths of 10' 0" to 40' 0" inclusive, as may be ordered				£ s. d.	,
2457A	6" to 15" depth inclusive	N.S.W.	Included	ton	‡10 17 6	}
2458A	Under 6" to 4" depth inclusive	,,	in Items	**	‡11 10 0	McPherson's Pty.
2459A	3" x 1½"	**	2457-9	,,	‡12 17 6	Ltd.
	Steel Joists (as specified in Appendix L). In lengths of 10' 0" to 40' 0" inclusive, as may be ordered	ı				
2460A	6" to 16" depth inclusive	,,,	η	,,	‡10 17 6	) ·
2461A	Over 16" depth up to 20" depth	,,		,,	‡11 7 6	
2462A	22" x 7"	,,	Included	,,	‡11 12 6	McPherson's Pty.
2463A	24" x 7½"	,,	in Items 2460-2465	,,	‡11 17 6	Lu.
2464A	Under 6" to 4" inclusive	,,	2400-2400	"	‡11 7 6	J
2465A	3" x 2 <sup>2</sup> / <sub>8</sub> 4"	••• •	IJ	•••		Nil
	Extra for long lengths of Channels and Joists		. :			
2466A	Over $40'$ 0" and up to $45'$ 0"	N.S.W.		ton	ţ0 5··0	<b>)</b>
2467A	Over 45' 0" and up to 50' 0"	**,	,	,,	‡1 0 0	
2468A	Over 50' 0" and up to 55' 0"	23.		,,	‡1 5 0	
2469A	Over 55' 0" and up to 60' 0"	"	. !		‡1 15 0	
2470a	Over $60'$ $0''$ and up to $65'$ $0''$	,,		"	‡2 5 0	
2471A	Over 65' 0" and up to 70' 0"	1,		,,	‡3 0 0	McPherson's Pty.
2472A	Over 70' 0" and up to 75' 0"	,		,,	‡3 10 0	Ltd.
-	Extra for short lengths of Channels and Joists					
2473A	Under 10' 0" down to 5' 0"	,,		,,	‡0 10 0	
2474A	Under 5' 0" down to 3' 0"	<b>"</b> .		,,	‡1 0 0	
2475A	Under 3' 0"	,,		,,	‡1 10 0	
2476A	Extra for cutting lengths of Channels and Joists to a margin of plus or minus 1/8" in addition to preceding extras listed			,,	‡1 5 0	] ``   '
	STEEL, ROUND AND SQUARE BARS.					
	Mild Steel ROUND Bars (as specified in Appendix L). In lengths as may be ordered		,	,	_	
2477	½" to 3" diameter inclusive, excluding Dogspike steel	Vict.	]	,,	. 12 2 0	Melbourne Iron & Steel Mills Pty. Ltd.
2477A		N.S.W.	300 tons	<b>,,,</b>	‡10°10°0	The Broken Hill Pty. Co. Ltd.
2477в	3" diameter, 18' to 20' lengths, for manu- facture of Dogspikes	. "		",	tio 10 0	McPherson's Pty.
	‡ Rates are c.i.f. Me	ibourne,	and less 31%	discou	nt.	

tem Vo.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contracto
	STEEL ROUND AND SQUARE BARS— continued. Mild Steel ROUND Bars (as specified in Appendix L). In lengths as may be				£ s. d.	
2477с	ordered—continued. <sup>3</sup> diameter, 18' to 20' lengths, for manufacture of Dogspikes	Vict.		ton	12 2 0	Melbourne Iron
2478	Over 3" diameter up to 4" diameter	. "		,,	12 2 0	Steel Mills
2479	§" diameter 10' 0" to 35' 0" lengths as may be ordered	N.S.W.		,,	‡10 10 0	The Broken Hill
2479a	å diameter ,, ,,	., ,,		<b>,</b> ,	‡10 10 O	Co. Ltd. McPherson's Pty Ltd.
2480	5 diameter ,, ,,	.,,		,,	‡12 0 0	The Broken Hil
2481	‡" diameter ,, ,,	. "	} ,	,,	‡12 10 0	Co. Ltd.
2482	36 diameter ,, ,,		300 tons	·		Nil
	Mild Steel REINFORCING Rods (as specified in Appendix L). In lengths from 10'0 to 35'0" as may be ordered	1				
2483	§ diameter	N.S.W.		ton	‡10 10 0	The Broken Hill
2483a	§ diameter	. ,,		,,	‡10 10 0	McPherson's Pt
2484	5 diameter	. "		,,	‡12 0 0	The Broken Hil
2485	1 diameter	. "	J	,,	‡12 10 O	Co. Ltd.
2486 2486a	Fishbolt Quality (as specified in Appendix V). In 18' to 20' lengths  g" or 1" diameter, as ordered  T" or 1" diameter, as ordered	,,	] 100 ,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	‡10 10 0 ‡10 10 0	The Broken Hill Co. Ltd. McPherson's Pty
	Mild Steel SQUARE Bars (as specified in Appendix L). In lengths from 10'0" to 35'0" as may be ordered	_	-	, ,	1	
2487	1/2" to 3" square	. Vict.	1	. , ,,	12 2 0	Melbourne Iron Steel Mills Pty
2488	Over 3" square	. ,,				Nil
2489	īē" square	. N.S.W.	F.	ton	‡11 0 0	The Broken Hi
2489a	78″ square	. ,, .	<b> </b>	"	‡11 .0 .0	McPherson's Pty
2490	₹ square	,,		,,	‡11 0 0	The Broken Hill Co. Ltd.
2490A	,, ,	,,		,,	‡11 0 0	McPherson's Pty
2491	5. square	,,		,,	‡13 10 0	The Broken Hill Co. Ltd.
2491A		,,	ן "	",	113 10 0	McPherson's Pty
·2492	Extra to the above rates (Items 2477-247 and 2487) for the following Qualit Differentials, ROUND or SQUARE. Low Carbon (Ingot Iron) Quality (a specified in Appendix Q)	у	220 ,,	,,	2 10 0	Melbourne Iro
2493	Rivet Quality (as specified in Appendix I. In sizes & less in diameter than nominal, size of rivets		1000 "	,,,	0 17 6	Steel Mills P
2493A	Rivet Quality (as specified in Appendix I (for sizes in contract only, excluding Iter 2477)		J	,,,	10.10 0	McPherson's Pty

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Steel, Rolled and Square Bars—continued.				£ s, d.	
	Extra to the above rates (Items 2477-2478 and 2487) for the following Quality Differentials, ROUND OR SQUARE—continued					
<u>£2</u> 494	Boiler Quality (as specified in Appendix P)	Vict.	]	ton	0 15 0	Melbourne Iron & Steel Mills Pty. Ltd.
2494A	Boiler Quality (as specified in Appendix P) (for sizes in contract only, excluding Items 2477 and 2487)	N.S.W.	30 tons	,,	‡0 10 0	McPherson's Pty. Ltd.
2495	Bescom Quality (Grade "B") as specified in Appendix R	Vict.	120 "	,,	6 15 0	Melbourne Iron & Steel Mills Pty. Ltd.
2496	Carbon Spring Steel Quality (as specified in Appendix N). Rounds § dia. up to 3" dia.	N.S.W.		. "	Full Contract Rate 115 17 6	The Broken Hill Pty.Co. Ltd.
2496a			300 ,,	,,	Full Contract Rate  115 17 6	McPherson's Pty. Ltd.
2496в	Carbon Spring Steel Quality (as specified in Appendix N).	Vict.	J	,,	5 1 6	Melbourne Iron & Steel Mills Pty. Ltd.
2497	to 2506 (inclusive)—Nil.					
	Extra for short lengths					
2507	Extra for cutting to a margin of plus or minus in addition to preceding extras listed	,,	,	,,	0 10 0	
	STEEL FLAT BARS					
	Mild Steel FLAT Bars (as specified in Appendix L). In lengths up to 60' 0" a may be ordered	-   -				
2508	1" wide up to 6" wide by 1" thickness and over, up to 1" thickness	i "	]	,,	12 2 0	
2509	1" wide up to 6" wide by $\frac{3}{16}$ " thickness	.,,		,,	12 2 0	
2510	1" wide up to 2" wide by $\frac{5}{32}$ " thickness	. ,,		,,	12 2 0	
2511	1" wide up to 2" wide by \frac{1}{8}" thickness	. "		,,	12 2 0	
2512	§" wide by §" and ½" thickness	. "		,,	12 2 0	
2513	$\frac{2}{8}$ " wide by $\frac{7}{16}$ " and $\frac{3}{8}$ " thickness	. "		,,	12 2 0	Melbourne Iron &
2514	7 wide by 5 thickness	. "		,,	12 2 0	
2515	7 wide by 1 thickness	. "	1200 tons	,,	12 2 0	
2516	7 wide by 3 thickness	. "		,,	13 2 0	
2517	7 wide by 7 thickness	. "		,,	14 2 0	-
, 2518	3" wide by 5" and 1" thickness	.,		,,	12 2 0	.
2519	, -	., ,,		,,	12 2 0	, [[
2520		, "		,,,	12 2 0	∭
2521		,,		- ,,	13 12 0	,
2522		,,		,,	14 2 0	
2523					14 12 0	11
2020	‡ Rates are c.i.f.	Melbourr	ie, and 3½% di	scount.	•	•

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Steel Flat Bars—continued.  Mild Steel Flat Bars (as specified in Appendix L). In lengths up to 60' 0" as may be ordered—continued.		•		£, s. d.	
2524 2525 2526	# wide by # thickness  # wide by # thickness  # wide by # thickness	Vict.		ton ,,	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Melbourne Iron & Steel Mills Pty. I
2527 2528	Over 6" wide up to 9" wide by ½" thick- ness to 1" thickness Over 9" wide up to 12" wide by ½" thick-	<b>,,</b> .		"	12 2 0 111 10 0	The Broken Hill P
2528a	ness to 1" thickness x 10' 0" to 35' 0" lengths  Over 9" wide up to 12" wide by \frac{1}{4}" thick-	**	1200 tons	,,	‡11 10 O	Co. Ltd. McPherson'sPty.
2529	ness to 1" thickness x 10' 0" to 35' 0" lengths  Extra to the above rates (Items 2508-2527)	Vict.			no extra	Ltd.  Melbourne Iron &
2529A	for thicknesses over 1" (Item 2528A)			"	charge ‡ 0 10 0	Steel Mills Pty. I McPherson's Pty. Ltd.
2530	10" and 12" wide by 16" thickness	•••	J ·	•••	•••	Nil
, ,	Extra to the above rates (Items 2508-2527 and 2529) for the following Quality Differentials					
2531 2532	Low Carbon (Ingot Iron) Quality (as specified in Appendix Q) Bescom Quality (Grade "B") as speci-	Vict.	100 ,,	"	2 10 0 6 15 0	
	fied in Appendix R				Full Contract Rate	The Broken Hill
2533	Carbon Steel Quality for Laminated Springs (as specified in Appendix M), any length ordered x 1" to 8" wide x 16"	N.S.W.		,,	‡15 7 6	Pty. Co. Ltd.
2533a	thick and over  Carbon Steel Quality for Laminated  Springs (as specified in Appendix M), any length ordered x 1" to 6" wide x 3" thick and over	<b>"</b>	150 ,,	"	Contract Rate ‡15 7 6	McPherson's Pty. Ltd.
2533в		Vict.	J .	"	5 1 6	Melbourne Iron & Steel Mills Pty. 1
2534	Carbon Steel Quality for Volute Springs (as specified in Appendix N), any length ordered x 1" to 8" wide x 3" thick and			<b>**</b>	Contract Rate 115 17 6 Full	The Broken Hill Pty. Co. Ltd.
2534 <sub>A</sub>	over  Carbon Steel Quality for Volute Springs (as specified in Appendix N), any length ordered x 1" to 6" wide x 16" thick and over		220 ,,	**	Contract Rate	McPherson's Pty. Ltd.
2534в		Vict.	J	**	5 1 6	)
2534c			80 ,,	**	6 16 6	
9535 2536-	Boiler Quality (as specified in Appendix P) 2539 (inclusive) Nil.	,,		,,	0 15 0	Melbourne Iron &
2540	Extra for lengths over 60' 0" and up to 70' 0"	 "		"	1 0 0	Steel Mills Pty Ltd.
2541- 2545	2544 (inclusive) Nil.  Extra for exact lengths—cutting to a margin of plus or minus \( \frac{1}{3} \).			**	0 10 0	
2546	5" x 1\frac{1}{8}" ROUND Edge to V.R. Drawing No. 7645 (as specified in Appendix W). In lengths as ordered, up to 17' 6", for Draft Keys		75 tons	' ,,	Contract Rate 16 10 0	

Item No.	. Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	STEEL FLAT BARS—continued.					
	Nut Quality Steel (as specified in Appendix S), or Mild Steel (as specified in Appendix L). In 18' 0" to 20' 0" lengths $\frac{7}{8}$ " x $\frac{9}{16}$ " for $\frac{1}{2}$ " nuts				£ s. d.	
2547	2 x 16 for ½ nuts	N.S.W.	)	ton	‡10 10 0	McPherson's Pty, Ltd.
2547∧	$\frac{7}{8}$ " x $\frac{9}{16}$ " for $\frac{1}{2}$ " nuts (Mild Steel)	Vict.		,,	12 2 0	Melbourne Iron & Steel Mills Pty.
2547в	$\frac{7}{8}$ " x $\frac{9}{10}$ " for $\frac{1}{2}$ " nuts (Nut quality)	,,		37	14 12 0	Ltd.
2548	$l_{\frac{3}{2}}^{1}$ " x $\frac{45}{64}$ " for $\frac{5}{8}$ " nuts	N.S.W.		"	‡10 10 0	McPherson's Pty.
25 <b>4</b> 8A	1 32" x 45" for 5" (Mild Steel)	Vict.		"	12 2 0	Melbourne Iron & Steel Mills Pty.
2548в	$1_{3^{1}2}$ " x $\frac{45}{64}$ " for $\frac{5}{8}$ " nuts (Nut Quality)	1,	,	,,	14 12 0	Ltd.
2549	$1\frac{7}{32}$ " x $\frac{53}{64}$ " for $\frac{3}{4}$ " nuts	N.S.W.		,,	‡10 10 0	McPherson's Pty. Ltd.
2549A	$1_{372}$ " x $\frac{5}{6}\frac{3}{4}$ " for $\frac{3}{4}$ " nuts (Mild Steel)	Vict.		,,	12 2 0	Melbourne Iron & Steel Mills Pty.
2549в	$1_{\frac{3}{2}}^{7}$ x $\frac{5}{6}\frac{3}{4}$ for $\frac{3}{4}$ nuts (Nut quality)	1,	100 tons	**	14 12 0	Ltd.
2550	$1\frac{1}{3}\frac{3}{2}$ " x $\frac{6}{6}\frac{1}{4}$ " for $\frac{7}{8}$ " nuts	N.S.W.		,,	‡10 10 O	McPherson's Pty. Ltd.
2550a	$1\frac{13}{32}$ x $\frac{61}{4}$ for $\frac{7}{8}$ nuts (Mild Steel)	Vict.		,,	12 2 0	Melbourne Iron &
2550в	$1\frac{13}{3}$ x $\frac{6}{6}$ $\frac{1}{4}$ for $\frac{7}{8}$ nuts (Nut quality)	,,	\ \ .	,,	14 12 0	Steel Mills Pty. Ltd.
2551	$1\frac{9}{16}$ " x $1\frac{5}{84}$ " for 1" nuts	N.S.W.		<b>,</b> "	‡11 0 0	McPherson's Pty. Ltd.
2551 A	, $1\frac{9}{16}$ " x $1\frac{5}{64}$ " for 1" nuts (Mild Steel)	Vict.		,,	12 2 0	Melbourne Iron &
2551в	$1\frac{9}{16}$ " x $1\frac{5}{64}$ " for 1" nuts (Nut quality)	,,		٠,	14 12 0	Steel Mills Pty. Ltd.
2551c	Section bars for nuts over 1" as may	N.S.W.		,,	‡11 0 0	<u> </u>
	be ordered  Bescom Quality (as specified in Ap-					McPherson's Pty.
2552	pendix R)— 1 % x 1 % for 1" Superheater Element	,,		,,	‡15 17 6	J Liu.
2552a	Bolt Nuts  1 % x 1 % for 1 Superheater Element Bolt Nuts	Vict.	]	<b>"</b>	18 17 0	
	SPECIAL SECTIONS.					\ \
	Mild Steel Tyre Retaining Ring Bars					
2553	(as specified in Appendix T)— To V.R. Drawing No. 40.5 and to V.R. Gauge Drawing No. 48.2, in	**	<u> </u>	,,	25 0 0	
2554	lengths as ordered Channel to V.R. Drawing No. 40.6 and to V.R. Drawing No. 48.1, in	"		"	22 0 0	Melhousen Ison &
2555	lengths as ordered To V.R. Drawing No. 6748, amended	"	<b>75</b> ,,	,,	22 0 0	Melbourne Iron &   Steel Mills Pty
2556	10.8.31, in lengths as ordered To V.R Drawing No. 7761, in lengths as ordered (for Item 47B, 48B and	"		,,	21 0 0	Ltd.
2557	50B Tyres) To V.R Drawing No. 7762 in lengths as ordered (for Item 45, 45B, 46 and	,,		,,	21 0 0	
*2558	46B Tyres)  Mild Steel Interlocking Channel (as specified in Appendix L) in lengths from 12'	" .	2 "	127	17 10 0	
.*2559	to 23' Mild Steel Fishplate for Interlocking Channel (as specified in Appendix L) in	,,	10 "	,,	17 10 0	
2560	lengths as ordered Mild Steel Coping (as specified in Appendix L) 1" and 1½" x ½"		60 ,,	.,.		Nil

······	KOLLED S			·	,	·
Item No.	Description	Country of 'Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	Special Sections.—continued.			, .	£ s. d.	
	Regular Trapezoidal Carbon Steel Section—	,				
2561	13" wide at base tapering to 13" wide at top x 11" high, (as specific in Appendix N) is any lengths as any		<u>]</u> .	ton	‡15 17 6	The Broken Hill Pty. Co. Ltd.
2562	Appendix N) in any lengths as may be ordered. (For helical springs) \$\frac{1}{2}^n\$ wide at base tapering to \$\frac{1}{2}^n\$ wide at top x \$\frac{3}{3}^n\$ high in 18' to 20' lengths (as specified in Appendix O). (For	,,	60 tons	,,	‡24 10 <b>0</b>	McPherson's Pty. Ltd.
2562A	spring washers for fishbolts)  1/3 ½" wide at base tapering to 1/3 ½" wide at top x 3/8" high in 18' to 20' lengths (as specified in Appendix O). (For spring washers for fishbolts)		} 	"	28 0 0	Melbourne Iron & Steel Mills Pty. Ltd.
	STEEL BILLETS, BLOOMS AND SLABS.					,
	(See also Items 2563a-2579a.)					
	Billets, Blooms or Slabs, Forging Quality Class J, K, L, M, or P; Axle Quality Class S, T, or U; or Mild Steel (as specified in Appendix U) or Low Carbon (Ingo: Iron) (as specified in Appendix Q); with rounded corners. In lengths of 4'0" or over, as may be ordered					
2563	BILLETS AND BLOOMS $1\frac{1}{2}$ " square to 12" square	N.S.W.	) }	,	‡11 9 6	· ·
2564	Over 12" square to 13" square	,,		,,	‡11 19 <b>6</b>	
2565	Over 13" square to 14" square	,,		,,	‡12 9 6	
2566	Over 14" square to 15" square	11		. ,,	‡13 9 6	
2567	Rounds up to 8" diameter	"		,,	‡12 9 <b>6</b>	, ` .
2568	Over 8" diameter to 9" diameter	"	<b>750</b> "	,,	‡12 9 6	•
2569	Over 9" diameter to 10" diameter	,,			‡12 9 6	
2570	SLABS. 2.25 sq. in. in area to 144 sq. in	"		1,	‡11 <u>9</u> 6	
2571	Over 144 sq. in. in area to 169 sq. in	. , , , , ,		٠,,	‡11 19 6	
2572	Over 169 sq. in. in area to 196 sq. in	,, ,,		,,	‡12 9 6	McPherson's Pty. Ltd.
2573	Over 196 sq. in. in area to 225 sq. in	· "	} ' '	"	‡13 9 6	•
2574	Extra to the above rates (Items 2563-2573) for the following Quality Differentials:— Bescom Quality (Grade A or B) (as speci-	, ,	75 ,,	,,	‡1 0 0	-
2575	fied in Appendix R)  Carbon Spring Steel Quality (as specified in Appendix M)	, ri	75 ,,	<b>, "</b> .	‡1 0 0	
2576	Extra for short lengths Under 4' 0" down to 3' 0"	. "	.;		‡1 5 0	
2577	Under 3' 0" down to 2' 0"	<b>&gt;&gt;</b>		,,	‡1 10 0	
2578	Under 2' 0" down to 1' 6"	,,		,,	‡1 15 0	
2579	Under 1' 6" down to 1' 0"			1	12 0 0	1

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	STEEL BILLETS, BLOOMS AND SLABS.			:	£ s. d	i. ,
	(See also Items 2563-2579)					• •
· ·	Billets, Blooms or Slabs, Forging Quality Class J, K, L, M or P; Axle Quality Class S, T, or U; or Mild Steel (as specified in Appendix U); with rounded corners. In lengths of 4'0" or over, as may be ordered.					
	Billets and Blooms.					
2563A	$1\frac{1}{2}$ " square to 12" square	N.S.W.	h '	ton	‡11 9 6	)
2564A	Over 12" square to 13" square	,,		,,	‡11 19 6	
2565A	Over 13" square to 14" square	,, .		٠,,	‡12 9 6	The Broken Hill Pty. Co. Ltd.
2566a	Over 14" square to 15" square	,,		,,,	‡13 9 6	J <sup>.</sup>
2567A	Rounds up to 8" diameter					1
2568a	Over 8" diameter to 9" diameter					
2568a	Over 9" diameter to 9" diameter	·	Included		,	Nil. See Items 2567–2569
2569a	Over 9" diameter to 10" diameter		in Items 2563-2573		·	IJ
	Slabs.					
2570a	2.25 sq. in. in area to 144 sq. in	,,		,, .	‡11 9 6	ή
2571a	Over 144 sq. inin area to 169 sq. in	,, .		,,	‡11 19÷6	
2572a	Over 169 sq. in. in area to 196 sq. in	"		,,	112 9 6	
2573A	Over 196 sq. in. in area to 225 sq. in	"		,,	‡13 9 6	
٠	Extra to the above rates (Items 2563a to 2566a and 2570a to 2573a) for the following Quality Differentials:—					
2574a	Bescom Quality (Grade A or B) (as specified in Appendix R)	,, .	Included	,,	‡1 0 0	<b>!</b>
2575a	Carbon Spring Steel Quality (as specified in Appendix M)	,,	in Items 2574, 2575	,,	‡1 0 0	The Broken Hill Hill Pty. Co. Ltd
	Extra for short lengths				ļ.	IIII Tty. Co. Eta
2576a	Under 4' 0' down to 3 0"	,,	,	,,	‡1 5 0	
2577A	Under 3' 0" down to 2' 0"	,,		,"	‡1 10 0	
2578A	Under 2' 0" down to 1' 6"	,,		,,	ţì 15 0	·
2579a	Under 1' 6" down to 1' 0"	,,	•	,,	12 0 0	•
	MILD STEEL PLATES.					
•	(See also items 2580A-2612A)		:			
•	Mild Steel Rectangular Plates (as specified in Appendix L) to any size ordered.	· · ·		, ,		
<b>2580</b> .	76" thick and up to 2" thick x any width from 36" up to 84" x any length up to 30' 0"	,,	See next page	!;, i: .	‡11 10 0.	

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	MILD STEEL PLATES—continued Mild Steel Rectangular Plates (as specified in Appendix L) to any size ordered				£ s. d.	
2581	—continued  §" thich x any width from 36" to 78" x any length up to 30' 0"	N.S.W.	)	ton	‡11 10 0	<b> </b> 1
2582	16" thick x any width from 36" to 66" wide x any length up to 30' 0"	,,	-	,,	‡11 15 O	
2583	1" thick x any width from 36" to 60" x any length up to 30' 0"	**		,,	ţ12 0 0	
2584	36" thick x any width from 36" to 60" x any length up to 30' 0"	,,		,,	‡12 5 0	
2585	No. 7. B.G. (0.176") x any width or length ordered within the maximum sizes shown below	"	1100 tons	,,	‡13 0 0	
2586	No. 8 B.G. (0·157") x any width or length ordered within the maximum sizes	"		,,	‡14 0 0	
2587	shown below  No. 9 B.G. (0·140") x any width or length ordered within the maximum sizes shown below	"		"	‡14 10   0	The Broken Hill Pty. Co. Ltd.
2588	No. 10 B.G. ( $\frac{1}{8}$ ") x any width or length ordered within the maximum sizes shown below	,,		,,	‡15 O O	
,	Maximum sizes of Plates 7 to 10 B.G. inclusive 60" wide by 22' 0" long 48" wide x 30' 0" long 36" wide x 36' 0" long	•		,		
	Extra to the above rates (Items 2580–2584) for Width					
2589	Widths over 78" up to 84"	<b></b>				Nil
2590	<sup>5</sup> / <sub>18</sub> " THICK Widths over 66" up to 72"	N.S.W.		ton	‡ 0 5 0	The Broken Hill
2591	Widths over 72" up to 78"	,,		,,	† 0 10   0	Pty. Co. Ltd.
2592	Widths over 78" up to 84"	•••			••••	Nil
2593	½" THICK Widths over 60" up to 66"	N.S.W.		ton	‡ 0 5 0	)
2594	Widths over 66" up to 72"	,,		,,	‡ 0 10 0	The Broken Hill Pty. Co. Ltd.
2595	Widths over 72" up to 78"	,,		,,	10150	] 19. 66. 2.4.
2596	Widths over 78" up to 84"	•••				Nil
2597	3" THICK Widths over 60" up to 66"	N.S.W.		ton	1015 0	)
2598	Widths over 66" up to 72"	,,		"	1100	The Broken Hill Pty. Co. Ltd.
2599	Widths over 72" up to 78"	,,	•	,,	† 1 10 O	J Pry. Co. Liu.
2600	Widths over 78" up to 84"	·				Nil
2601 2602 2603	Extra to the above rates for NARROW PLATES all thicknesses, up to 30' 0" long In widths under 36" down to 24" In widths under 24" down to 18" In widths under 18" down to but not including 12"	N.S.W.		- ,,	1 0 7 6 1 0 12 6 1 1 0 0	The Broken Hill
2604	Extra to the above rates (Items 2580-2584) and 2589-2603) for LENGTH Over 30' up to 40'  Rates are c.i.f. Mel	,, bourne, a	nd l <del>e</del> ss 3½% d		† 0 12 6	Pty. Co. Ltd.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	MILD STEEL PLATES—continued.				.£ s. d.	
•	Mild Steel Rectangular Plates (as specified in Appendix L) to any size ordered —continued.				!	· .
	Extra to the above rates for— Small Rectangular Plates					
2605	3" thick and over 8 sq. ft. but not including 12 sq. ft	N.S.W.		ton	‡ 0 10 0	]
2606	4 sq. ft: but not including 8 sq. ft	"		,,	‡ 0 15 0	
.2607	2 sq. ft. but not including 4 sq. ft	,,		,,	‡ 1 10 0	
2608	1 sq. ft. but not including 2 sq. ft	,,	·	,,	1 2 0 .0	ll mi b i rin
2609	Under ¾" thick 8 sq. ft. but not including 12 sq. ft.`	<b>,,</b> .		,,	<b>1</b> ⋅0 15 0	The Broken Hill Pty. Co. Ltd.
2610	4 ft. sq. but not including 8 sq. ft	, ,,		,,	1 5 0	
2611	2 sq. ft. but not including 4 sq. ft	,,	:	,,	‡ 2 0 °	
2612	1 sq. ft. but not including 2 sq. ft	,,		,,	‡ ·2 ·10· · 0	IJ
	MILD STEEL PLATES.					
	(See also Items 2580-2612.)				·	,
2580a	Mild Steel Rectangular Plates (as specified in Appendix L) any size ordered.  To thick and up to 2" thick x any width from 36" up to 84" x any length up to 30' 0"	,		. ,,	‡11 10 O	
2581a	§" thick x any width from 36" to 78" x	,,	'	,,	‡11 10 0	
2582A	any length up to 30' 0"  16" thick x any width from 36" to 66" wide	,,		,,	‡11 15 0	
2583a	x any length up to 30' 0"  1" thick x any width from 36" to 60" x any length up to 30' 0"	, ,,		,,	‡12 0 · 0	-
2584a	3" thick x any width from 36" to 60" x any length up to 30' 0"	,,	Included	,,	‡12 5 0	McPherson's Pt
2585a	No. 7 B.G. (0.176") x any width or length ordered within the maximum sizes shown below		>in Items 2580–2588	,,	113 0 0	Ltd.
2586a	No. 8 B.G. (0.157") x any width or length ordered within the maximum sizes shown below			"	‡1 <b>4</b> 0 0	
2587a	No. 9 B.G. (0.140") x any width or length ordered within the maximum sizes shown below			,,	‡14 10  0	
2588a	No. 10 B.G. († thick) x any width or length ordered within the maximum size shown below		J	<b>"</b>	‡15 0 0	J
	Maximum sizes of Plates 7 to 10 B.G. in clusive 60" wide x 22' 0" long	-				
	48" wide x 30' 0" long					
	36" wide x 36' 0" long		ľ		1,	1

Item No.	<b>Description</b>	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	MILD STEEL PLATES—continued. Mild Steel Rectangular Plates (as specified in Appendix I.) to any size ordered—continued.					
,	Extra to the above rates (Items 2580a-2584a for Width	)			£ s. d.	
2589A	<sup>3</sup> Thick Widths over 78" up to 84"	N.S.W.		ton	ţ0 7 6	) )
2590A	5" Thick Widths over 66" up to 72"	., ,,		,, .	to 5 0	•
2591A	Widths over 72" up to 78"	. ,,		,,	‡0 10 0	
2592A	Widths over 78" up to 84"	. ,,		,,	‡0 15 0	
2593A	Thick Widths over 60" up to 66"	. "		,,	ţ0 5 0	
2594a	Widths over 66" up to 72"	. "	<b>'</b>	,,	‡0 10 0	
2595a	Widths over 72" up to 78"	. "	,	,,	‡0 15 0	
2596a	Widths over 78" up to 84"	. "	.	,,	‡1 0 0	
2597A	16" Thick Widths over 60" up to 66"	, .		,,	ţ0 15 0	
2598a	Widths over 66" up to 72"	. "		,,	‡1 0 0	
2599a	Widths over 72" up to 78"	. "		,,	‡1 10 0	·
2600A	Widths over 78" up to 84"	. ,,		,,	‡2 10 0	-
2601a	Extra to the above rate for Narrow Plates all thicknesses, up to 30' 0" long In widths under 36" down to 24"			·,,	10 7 6	McPherson's Pty.
2602A	In widths under 24" down to 18" .	,,		,,	10 12 6	Ltd.
2603A	In widths under 18" down to but no including 12"			,,,	‡1 0 0	
	Extra to the above rates (Items 2580a-2584 and 2589a-2603a) for Length	A				
2604A	Over 30' up to 40'	,,		,,	‡0 12 6	}
	Extra to the above rates for Small Rec- tangular Plates.					
2605A	8 sq. ft. but not including 12 sq. ft.	"		,,	to 10 0	'
2606a	4 sq. ft. but not including 8 sq. ft.	"		,,	‡0 15 O	]].
2607a	· 2 sq. ft. but not including 4 sq. ft	"		,,	ti 10 0	-
2608A	1 sq. ft. but not including 2 sq. ft	"		,,	12 0 0	
2609A	Under 3 thick 8 sq. ft. but not including 12 sq. ft.	,,		, ,,	‡0 15 0	
2610A	4 ft. sq. but not including 8 sq. ft.	,,		,,	‡1 5 0	
2611A	2 sq. ft. but not including 4 sq. ft.	.,		,,	12 0 0	
2612A	1 sq. ft. but not including 2 sq. ft.	"	j	,,	‡2 10 0	•

		ROLLEI	STEEL.				
	tem No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
Šķ.	-	BLACK STEEL SHEETS  (Cold Rolled, Close Annealed)  Black Steel Rectangular Sheets (as specified in Appendix L), any lengths or widths as may be ordered within the following maximum sizes:—			·	£ s. d.	
		Gauge.    Maximum.   L'gth   Width   Area	_				
		S and 9 B.G 96					
		Note.—The maximum length and widt cannot be supplied in the same sheet, only the maximum area. The latter divided by the length will give the maximum widt for that length, and vice versa.	y y			c.i.f. Melb.	
	2615	10 BG. (·125") and heavier, up to 8' (	N.S.W.	h ·	ton	18 10 0	)
	2616 2617	long, and up to 38" wide  11 BG. (-111") to 20 BG. (-039"), up t 8' 0" long, and up to 38" wide  21 BG. (-035") to 24 BG. (-025"), up t	ο ,,		"	19 0 0 19 15 0	
	2618	8' 0" long, and up to 38" wide 25 BG. (·022") to 26 BG. (·019"), up to 8' 0" long, and up to 38" wide	,,	120 tons	"	20 12 6	Briscoe & Co. Ltd
	2619 2720	27 BG. (-017" to 28 BG. (-016"), up to 8' 0" long, and up to 38" wide 29 BG. (-014"), up to 8' 0" long, and u			"	21 2 6	
	2621	to 38" wide 30 BG. (-012"), up to 8' 0" long, and u to 38" wide	р "		,,	22 2 6	
	•	Extra to the above rates (Items 2615-262 for the following—	1)	- "			, ,
e_ }'		Extras for Length				,	
<b>A</b> **	2622	Over 8' 0" long up to 9' 0"	., ,,		,,	0 10 0	<b>]</b> ]
	2623	Over 9' 0" long up to 10' 0"	<b>"</b>	. , , ,	,,,	1 0 0	Briscoe & Co. Ltd
	2624	1 0,01 20 0	".	, ,	,,	1 10 0	
	2625	1 ~	.,		, ,,	2 0 0	[]. · · ·
	2626	Over 12'.0"					Nil
		Extras for Width					
	2627	Over 38" wide up to 42"	N.S.W.		ton	0 10 0	Briscoe & Co. Ltd
	2628	Over 42" wide up to 48"	,,		"	0 12 6	IJ

Item No.	Description .	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
	BLACK STEEL SHEETS—continued.				£, s. d.	
٠.	Extras for the following quality Differentials in addition to preceding extras listed—					
2629	Blue Oxide Annealed finish					h
2630	10 BG. and heavier					X.
2631	Lighter than 10 BG					
2632	Panel Sheets			,		} Nil
2633	10 BG. and heavier					
2634	Lighter than 10 BG				-	) .
2635	Deduction for Mill Finished Sheets. (Hot roll finished and unannealed)	N.S.W.		ton	Minus 1 0 0	
	Process extras, in addition to preceding extras listed				•	Briscoe & Co. Ltd.
2636	Reshearing to exact size (plus or minus	,,		,,	2, 0 0	
2637	Cropping (cutting off of flattening machine	,,		,,	1 10 0	
2638	grip marks) Fully reshearing (covers cropping and reshearing)	,,		,,	3 0 0	J
2639-	2759—Nil				-	

#### MINERAL LUBRICATING OILS

(See Appendix "J" for Specification).

#### (Period 1/10/34 to 30/6/35.)

The different classes of oil required shall be supplied in containers branded "Super Cyl. Oil," "Sat. Cyl. Oil," "Sum. Bear," "Win. Bear," "C. & W.," "Car," as the case may be.

Payment.—Payment will be on gallonage calculated on net weight ascertained by approved methods by the Comptroller of Stores or his representative at the place of delivery, and the specific gravity ascertained in the Victorian Railways Laboratory from samples drawn from such delivery.

† With the exception of Items 2762A, 2763A and 2765c, the rates do not include Exchange between Australia and London, and are based on the following rates of conversion between London and the country of production:—London-New York conversion  $4.86\frac{2}{3}$  dollars to the £1 sterling. Items 2752 and 2753—London-Japan conversion one yen equalling  $1/2\frac{9}{3}$  sterling.

T.T. Exchange and variation in conversion are to the Corporation's account and the contract rate is to be adjusted by adding or deducting the rate of exchange and/or conversion operating on the date of delivery between Australia and the country of production in the following manner:—

the date of delivery between Australia and the country of production in the following manner:—
For each item, a factor in pence is shown. This is to be multiplied by the percentage of exchange ruling on the date of delivery between Australia and the country of production shown and the result will determine the amount to be added to or deducted from the contract rate per gallon. As regards Items 2761, 2762 and 2763, it will be noted that the computation is to be made on certain percentages of the factors. In this connection it will be noted that the London-Japan conversion rate included in the contract is I yen equalling  $1/2\frac{9}{32}$  sterling for Items 2762 and 2763.

As regards Items 2762 and 2763, two factors are shown, and they are to be used separately for calculating the Australia-New York and Australia-Japan Exchange respectively.

The rate of exchange and conversion notified by the Commonwealth Bank of Australia as ruling on the date of delivery to the Corporation will in all cases be adopted.

Excepting Items 2764 and 2765, all rates in this Schedule include wharfage, and where time for importation can be allowed, the Contractors should be requested to have the Bill of Lading made out in the name of the Victorian Railways Commissioners so that wharfage may be saved and the amount involved deducted from the Contractor's invoice, in addition to obtaining the benefit of the lower contract rate for delivery ex wharf in the case of Item 2765B.

Item 2764-2765, the rates cover delivery ex store. No deduction is to be made for wharfage. The contract rates cover delivery direct to the Oil Store, Newport, if so ordered.

#### MINERAL LUBRICATING OILS-continued.

Item 2760a is provided for the use of the State Rivers and Water Supply Commission.

As regards Items 2762A and 2763A, trial orders are to be placed with Ramsay and Treganowan Ltd., and if results are satisfactory it is expected this Contractor will be allotted up to about 15% of the estimated requirements for these oils.

As regards Items 2765 and 2765c, orders should as far as possible be placed with the Contractors so that the respective estimated quantities may be realised.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor
†2760 †2760A	Locomotive Cylinder Oil, Specification L.1, Superheater Steam— "C.796" in 40-44-gallon drums Exchange Factor 174d. gallon "600 W." in 40-44-gallon drums Exchange Factor 21d. gallon (for use by State Rivers and Water Supply Commission)	and Vict.	15,000 gals. 2000 ,,	gallon	£ s. d. ‡0 2 7½ ‡0 3 4	\right\{ Vacuum Oil Co. Pty. Ltd.
†2761	Locomotive Cylinder Oil, Specification L.1, Saturated Steam—"Atlantic" In 40-44-gallon black drums Exchange Factor 95 per cent. of 178d. gallon	. ,,	12,000 "	33	‡0 2 5½	Atlantic Union Oil Co. Ltd.
†2762	Locomotive Bearing Oil, Specification L.2, Summer—  "Shell" in 40-44-gallon iron drums Exchange Factor 80 per cent. of  '028d. gallon U.S.A. and 20 per cent. of '25d. gallon Japan	U.S.A.		,,	‡0 1 10 <u>‡</u>	The Shell Co. of Aust. Ltd.
†2762a	Summer— "XL" in 40-44-gallon iron drums	U.S.A. Japan and Vict.	7500 ,,	<b>33</b>	0 1 11½	Ramsay and Treganowan Ltd.
†2763	Winter—  "A. Shell" in 40-44-gallon drums  Exchange Factor 87½ per cent. of 035d.  gallon U.S.A. and 12½ per cent. of 25d. gallon Japan	U.S.A. and Japan	7500 ,,	· ";	‡0 1,8½	The Shell Co. of Aust. Ltd.
†2763a	"XL" in 40-44-gallon drums	U.S.A., Japan & Vict.		,,	0 1 11	Ramsay and Treganowan Ltd.
†2764	Car and Wagon Axle Oil (Black Oil), Specification L.3— "B.817" in 40-44-gallon drums exstore Exchange Factor 072d. gallon	. •	9000 ,,	23	‡0 l 4 <u>1</u>	Vacuum Oil Co. Pty. Ltd.
72765	Car Oil (Red Oil), Specification L.3A— Winter— "L.9" in drums ex store Exchange Factor 082d. gallon	**	34,000 ,,	**	‡0 I 4¾	Vacuum Oil Co. Ptv Ltd. (Socogy Divisiya)
†2765A	Summer " P.982" in 40-44-gallon drums ex store Exchange Factor 115d. gallon	**	10,000 ,,	**	ţ0 1 8 <u>1</u>	i I
†2765в	Summer— "P.982" in 40-44-gallon drums ex wharf Exchange Factor 115d. gallon	. **	J 10,000 ,,	. "	‡0 1 7≩	Vacuum Oil Co. Pty. Ltd.
†2765c	'XL Red Axle" in 40-44-gallon drums	U.S.A. and Vict.	1000 ,,	,,	0 1 4½	Ramsay and Treganowan Ltd.

#### GREASES

#### (See Appendix K for Specifications) (Period-1/10/34-30/6/35)

#### · 14. SPECIFICATION FOR PARAFFIN WAX.—Item No. 2788.

The Parastin Wax shall be a pure petroleum of shale product of the very best quality, free from color, mineral acid or alkali, and mineral matter. The Paraffin Wax shall have a freezing point of not less than 135 degrees Fahrenheit when tested, in accordance with the standard method of the American Society for Testing Materials.

The Paraffin Wax shall be packed in cotton wrappers inside single gunny bags and delivered

at the Newport Workshops.

Orders for Paraffin Wax are to be placed in minimum lots of 1 ton., and sufficient time allowed for importation. The contract rates do not include wharfage, but in order that the Corporation will obtain exemption of wharfage, each shipment should be consigned to the Victorian Railways Commissioners, and the Bill of Lading made out in their favor. Wharfage will be arranged by the Corporation, and the Bill of Lading returned to the Contractor to complete delivery. Six weeks are to be allowed for delivery.

11 The rates for Paraffin Wax are firm for deliveries up to 1/1/35 and thereafter will be subject to market fluctuations in accordance with the selling rate in force for Paraffin Wax 135/40° when each

delivery arrives in Melbourne.

15. ‡ With the exception of Items 2779, 2786, 2788 and 27884 the rates do not include Exchange between Australia and London, and are based on the par rate of conversion between London and the countries of production. London—New York conversion to be based on 4.86%dollars to the £1 sterling.

As regards Item 2777, T.T. Exchange between Australia and London only will apply. The Contract rates will be adjusted to cover the rates of Exchange and/or conversion operating on the date of delivery between Australia and the country of production in the following

For each item a factor in pence is shown. This will be multiplied by the percentage of exchange ruling on the date of delivery between Australia and the country of production shown in The result will determine the amount by which the Contract rate, per gallon, lb. or cwt., as the case may be, is to be increased or decreased.

The rate of Exchange and conversion notified by the Commonwealth Bank of Australia

as ruling on the date of delivery to the Corporation will in all cases be adopted.

More than one tender has been accepted for each of the following items and provided satisfactory service is rendered the business should be allotted-as follows:-

Items 2772 and 2772A) 50% to each Contractor. 2773 and 2773A 2774 and 2774A) Atlantic Coy. 80% 2775 and 2775A 2776 and 2776A H. C. Sleigh 20% Shell Coy. 60% 2788 and 2788A } Vacuum Coy. 40%

Estimated quantities have been amended accordingly.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate	Rate	Name of Contractor
†2771	Specification M1; Grease suitable for lubrication of Gears, Conveyors, Compression Cups, in barrels "Voco Dark Gear"	& Vict.	100 cwt.		£ s. d.	Vacuum Oil Co. Pty Ltd
- 1 ) ; i	Exchange Factor 007d. lb.  Specification M2; Grease, suitable for use in lubrication of road and rail motor chassis parts, gears, and of such parts of Motor Equipment and other machinery				,	**. **********************************
i ,	as are lubricated by means of compression cups. (Items Nos. 2772-2773A may also be used for Ball Bearings, grease packed or lubricated with grease gun. Items Nos. 2774 to 2776A may also be used for Ball Bearings lubricated with compression cups)—	,,				;
†2772	Grease, Cup, No. 2, in 5lb tins "Atlantic" Exchange Factor '0225d. lb.	U.S.A. & Vict.	2½ "	lb.	‡0 0 5½	Atlantic Union Oil Co. Ltd.
†2772A	Grease, Cup, No. 2, in 5lb tins, "Summit" Exchange Factor '01d, lb.	,,,	$\left \right\rangle 2\frac{1}{2},$	,,	*‡0 0 4‡	H. C. Sleigh

### GREASES—continued.

Item No.	Description	Country of Manuf're	Estimated Requirements	Rate per	Rate	Name of Contractor		
	Specification M2, etc.—continued		-		£ s. d.			
†2773	Grease, Cup, No. 2, in barrels "Atlantic" Exchange Factor 0225d. lb.	U.S.A. & Vict.	} 15 cwt.	cwt.	‡1 12 8	Atlantic Union Oil Co. Ltd.		
†2773A	Exchange Factor '01d. lb.	, ,,,	] 15 ,,	,, 	11 7 0.	H. C. Sleigh		
†2774	Grease, Cup, No. 3, in 5lb. tins "Atlantic" Exchange Factor 0225d. lb.	",	$\left.\right\}$	lb.	10 0 51	Co. Ltd.		
+9775	Grease, Cup, No. 3, in 5lb. tins, "Summit" Exchange Factor 013d. lb. Grease, Cup, No. 3, in 36 lb. containers	19	β 6 ,, γ 32 ,,	,,	$\begin{bmatrix} 10 & 0 & 41 \\ 10 & 0 & 4 \end{bmatrix}$	H. C. Sleigh Atlantic Union Oil		
†2775	"Atlantic" Exchange Factor 0225d. lb.	"	32 ,,	"	100 4	Co. Ltd.		
†2775a	Grease Cup, No. 3, in 36 lb. containers "Summit"	,,	8 "	,,	‡0 0 3§	H. C. Sleigh		
†2776	Exchange Factor 013d. lb. Grease, Cup, No. 3, in barrels "Atlantic" Exchange Factor 0225d. lb.	"	} 4 "	cwt.	‡1 12 8	Atlantic Union Oil Co. Ltd.		
†2776a		33	} 1 "	"	‡1 7 3	H. C. Sleigh		
†2777	Grease, Cup, No. 4 (Pantograph Collector), in harrels, "Voco"	U.K.	60 ,,	,, :	‡1 19 3	Vacuum Oil Co. Pty. Ltd.		
†2778	Exchange Factor 024d. lb. Grease, Cup, No. 5, in 5lb. tins, "Atlantic" Exchange Factor 034d. lb.	U.S.A.	50 lb.	іь.	10 0 61	Atlantic Union Oil Co. Ltd:		
†2779	Specification M3: Grease, Antifriction, for lubrication of Rough Machinery, Rails, Switches, Curves and other purposes, in	Vict.	20 cwt.	cwt.	0 13 9	Ramsay & Treganowan Ltd.		
† <b>27</b> 80	40 lb. tins "XL," Dark Grease, Lubricating, "TN Brake Cylinder," for lubrication of Westinghouse Brake Cylinders and Triple Valves, to specifica- tion, in drums		650 gals.	gal.	‡0 2 5¥	Vacuum Oil Co. Pty. Ltd. (Socony Div.)		
†2781	Exchange Factor 187d. gal. Grease, Compound, for Locom tive Journals, to specification, in 100 lb. cases "Texaco Driving Journal Compound M"	1	1800 lb.	lb.	‡0 0 6½	Texas Co. (Austra- lasia) Ltd.		
†2782	Exchange Factor 018d. lb.  Grease, Compound, for Locomotive Crank and Coupling Rod Pins, to specification, in barrels, "Shell"	U.S.A. & Vict.	 4000 lb.	. ,,	‡0 · 0 6½	The Shell Co. of Australia Ltd.		
†2782A	Exchange Factor '018d. lb. Grease, Compound, for Locomotive Crank			,,	‡0 0 6¾	1		
	and Coupling Rod Pins, to specification, in barrels, "Texaco Rod Cup Grease"  Exchange Factor 018d. lb.		,,	<b>.</b>		Texas Co. (Austra- lasia) Ltd.		
†2783	Compound, Lubricating, for use in the open gears of wheel lathes and other heavy machines, in 36 lb. tins "Crater Compound No. 2"	1	400 ,,	,	10 0 23			
2784 ▲	Exchange Factor 013d. lb.  Petroleum Jelly, to Specification for Tarpaulin dressing and for use by Country  Roads Board, in barrels approx. 5 cwt.	,,	25,000 ,,	, "	‡0 0 1 <del>8</del>	The Shell Co. of		
2785	each,"" Shell Crude" Exchange Factor 013d. lb. Petroleum Jelly, to Specification in 36 lb.	,,,	144 ,,	ı	‡0 0 23	Australia Ltd.		
†2786	tins, "Shell Crude" Exchange Factor 013d. lb. Petroleum Jelly (Amber), for use on Accumulators and Dynamo Bearings, in		300 ,,	,,	0 0 4	Ramsay & Treganowan Ltd.		
†2787	5 lb. tins, "XL Light Amber" Petroleum Jelly (Vaseline), for use of Ambulance, in 5 lb. tins, "Shell Pale Yellow"	U.S.A.	15 "	,,	‡0 0 5 <u>1</u>	Shell Co. of Austra-		
†2788	Exchange Factor '017d. lb.  Wax, Paraffin, for Tarpaulin Dressing, to  Specification	D.E. Indies	<b>48,000</b> ,,	**	‡‡0 0 <b>4</b> 3	lia Ltd.		
†2788a	main * m m m m m m m m m m m m m m m m m m		∫ 32,000 <sup>'</sup> ,,	ļ. ···	110 0 4 <del>7</del>	Vacuum Oil Co. Pty.		

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#### APPENDIX "A".

#### OILS, VARIOUS.

### 7. MOTOR ENGINE OILS.—Specification L4—Items 1 to 13.

Scope.—This Specification covers the grade of petroleum oil required for the lubrication of Internal Combustion Engine Cylinders and Refrigerating Machinery.

Seven grades are specified known as extra light, light, medium, heavy medium, heavy, extra heavy and extra heavy special, and the order or Contract shall state the grade of oil required and the purpose for which it is to be used.

Manufacture.—The oil shall be a thoroughly refined, filtered petroleum oil, without the admixture of fatty oils, resins, soaps and other compounds.

Properties and Tests.—The oil shall be free from mineral acids and alkali, and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

:	Viscosity at per s	140° Dynes q. c.m.	Fire Point Degrees F.	Pour Point Degrees F.	Carbon Residue Per Cent.
	Maximum	Minimum	Minimum	Maximum	Maximum
Extra Light Light Medium Heavy Medium Heavy Extra Heavy Special	-15 -25 -35 -50 -65 -85 1-20	·12 ·18 ·25 ·35 ·50 ·65 ·95	370.4400.430.470.500.530.570	0 10 15 20 25 30 35	-05 -10 -40 -50 -70 -90 1-00

Special Tests.—The oils submitted under this Specification will be submitted to tests to determine the following properties:—

Specific Gravity, 15.5° C./15.0° C.,
Viscosity at 70° F., dynes per sq. cm.,
Viscosity at 100° F., dynes per sq. cm.,
Viscosity at 140° F., dynes per sq. cm.,
Viscosity at 140° F., dynes per sq. cm.,
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Viscosity at 140° F., dynes per sq. cm.,
V

and consideration will be given to the results obtained in deciding the oil to be accepted.

In the event of the tender being accepted, the results of the above tests as determined in the

Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall agree therewith.

Information to be supplied by Tenderer.—Items Nos. 1 to 16.—The tenderer shall supply the following information regarding the Oil he tenders to supply:—

Specific Gravity, 15.5° C./15.0° C	The state of the s
Viscosity at 70° F., dynes per square cm.	• •
,, 100° F., ,, ,, ,,	
1409 17	
200° F., ., ,, ,,	
Fire Point, degrees F	
Pour Point, degrees F.	
Volatility, 2 hours at 250° F., per cent.	
Carbon Residue, per cent	A CONTRACTOR OF THE CONTRACTOR
Ash, per cent	
Organic Acidity, per cent	

Sampling and Testing.—A composite sample (at least 2 quarts) shall be taken from each delivery drawn from at least five (5) containers, and in no case from less than ten (10) per cent, of the containers. Such samples shall be accepted as accurately representing the quality of each delivery.

Method of Testing.—The sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating and Fuel Oils, etc."

8. KEROSENE ENGINE OILS.—Specification L4A—Item 17.

Scope.—This Specification covers the grade of petroleum oil required for the lubrication of Kerosene Engine Cylinders.

Manufacture.—The oil shall be a thoroughly refined, filtered petroleum oil with the addition of acidless animal oil.

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#### APPENDIX "A"-continued. Oils Various—continued.

Properties and Tests.—The oil shall be free from mineral acids and alkali, and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder :-

	Viscosit	y at 140°.	Fire Point	Sapon Matter	Pour Point	Carbon Residue	
Grade	Maximum	Minimum	Minimum '	Maximum	Maximum	Maximum	
Medium	0.35	0.28	390	8			

Special Tests.—The oils submitted under this Specification will be submitted to tests to determine the following properties:-

Specific Gravity, 15 5° C./15 0° C., Viscosity at 70° F., dynes per sq. cm., Viscosity at 100° F., dynes per sq. cm., Viscosity at 140° F., dynes per sq. cm., Pour Point,

Volatility. Carbon Residue, Ash, Organic Acidity Saponifiable Matter,

and consideration-will be given to the results obtained in deciding the oil to be accepted. In the event of the tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall agree therewith.

Information to be supplied by Tenderer.-Item No. 17.-The tenderer shall supply the following information regarding the Oil he tenders to supply:-

Specific Gravity, 15.5° C./15.0° C. ... Viscosity at 70° F., dynes per square cm. Fire Point, degrees F. Pour Point, degrees F. Volatility, 2 hours at 200° F., per cent. Carbon Residue, per cent. Ash, per cent. Organic Acidity, per cent. Saponifiable Matter, per cent.

Sampling and Testing.—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of each delivery.

Method of Testing.—The sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating and Fuel Oils, etc."

9. MACHINERY OILS.—Specification L5—Items 18 to 24.

Scope.—This Specification covers the grade of petroleum oil required for the lubrication of Bearings of Machinery. This oil is not to be used for steam cylinder lubrication.

Six grades are specified, known as extra light, light, medium, heavy, extra heavy and extra

heavy special.

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Manufacture.—The oil shall be a refined petroleum oil, without the admixture of fatty oils, resins, soaps or other compounds not derived from crude petroleum, and must be entirely free from fillers.

Properties and Tests.—The oil shall be free from mineral acid and alkali, and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned here-

			Viscosity at 1- per sq.		Fire Point, degrees Fahr.	Pour Point degrees Fahr
		-	Maximum	Minimum *	Minimum	Maximum
Extra Light Light Medium Heavy Extra Heavy Special	 		0·15 0·25 0·35 0·50 0·80	0·12 0·18 0·28 0·38 0·55 0·85	370 380 390 400 410 450	30 30 30 30 40 40

### APPENDIX "A"-continued

			,	
	Oils, Various	continued.		
Special Tests determine the following	.—The oils submitted under properties:—	er this Specific	ation will be su	bjected to tests to.
Specific Gravity Viscosity at 70° Viscosity at 100 Viscosity at 140	at 15.5° C./15.0° C., F., dynes per sq. cm., P. F., dynes per sq. cm., P. F., dynes per sq. cm., P. F., dynes per sq. cm.,	Fire Point Pour Point		
and consideration will b	e given to the results obtain	ed in deciding	the oil to be acc	cepted
In the event of	the tender being accepted, y shall be incorporated in the	the results of th	he above tests as	determined in the
Information supply the following in	to be supplied by Tende formation regarding the Oil	rer.—Items N he tenders to	os. 18 to 24.—	The tenderer shall
Specific Gravi	ty, 15 <sup>5</sup> ° C./15 <sup>0</sup> ° C			
Viscosity at 7	70° F., dynes per square cr	m. ·	***	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	00° F., ,, ,, ,, ,,	•	*** ***********************************	•
	0° F		• •••	4
	10° F		•	• • • •
	·	•••	* * * * **	
Fire Point, de		,		
Pour Point, de	9		11.1	
containers. Such sampl  Method of Te	d Testing.—A composite saleast five (5) containers, and les shall be accepted as accurating.—The sample shall hian Railways: Testing of Lu	in no case from rately represent ne tested accor.	n less than ten (la ting the quality of ding to the met	0) per cent, of the of each delivery.
	CATION L5A.—Items No.		innating, and Ft	iei Olis, etc.
Scope.—This of marine steam engine	Oil covers the grade of petro	s. 25 and 26. oleum oil requi	red for the lubri	cation of bearings
•	own as light is specified.			
the amount of saponina	The Oil shall be a refine ble matter which it contain	s. ·		
Properties an tarry or suspended matt under:—	d Tests.—The Oil shall be er, and in other respects sh	free from mine all comply wit	eral acids and all h the conditions	kali and asphaltic, mentioned here-
· · · · · · · · · · · · · · · · · · ·	Viscosity in dynes per sq. Minimum 24. Maximum 33.	cm. at 140 deg	Fah.	
Special Tests. determine the following	—The Oils submitted under properties:—	er this specifica	ıtion will be sub	ojected to tests to
	Specific Gravity 15.5 deg. Viscosity at 70 deg. Fah.	Cent./15 deg. dynes per sq.	Cent.	• • • •
•	100 deg. Fah.	11	,,	
	140 deg. Fah. 210 deg. Fah.	***	"	• ,•
	Pour Point,	. ,,	<b>"</b> :	
	Saponifiable matter, Emulsification,			
and consideration	on will be given to the resul	ts obtained in	deciding the oil	to be accepted
Information to	o be supplied by Tendere ties of the Oil he tenders to	rThe tende	rer shall supply	the values of the
Sampling and lelivery drawn from at le	Testing.—A composite sar ast five (5) containers, and in a shall be accepted as accura	nple (at least 2	less than ton (10	)) C -1
Method of Te	sting.—The sample shall bian Railways": Testing of	e tested accord	dina to the	1 1 1 1
	E AND COMPRESSOR C			
Scope.—This S of Turbines, Air Compre	Specification covers the grad essors and Machinery on wh	le of netroloum	رع لاستنسمت الم	_ 41
loved.				D

Manufacture.—The oil shall be a thoroughly refined filtered petroleum oil, without the admixture of fatty oils, resins, soaps and other compounds.

The Tenderer shall state what compounding matter has been used.

#### APPENDIX "A"-continued.

#### OILS, VARIOUS-continued.

Properties and Tests.—The oil shall be free from mineral acid and alkali, and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

	Viscosity at 1 per sq		Fire Point, degrees Fahr.	Pour Point, degrees Fahr.	Carbon Residue per cent.	
. <del>3</del>	Maximum	Minimum	Minimum	Maximum	Maximum	
Medium	0.30	0.22	430	25	*80 .	

Special Tests.—Oils submitted under this Specification will be subjected to tests to determine the following properties:—

Specific Gravity, 15.5° C./15.0° C., Viscosity at 100° F., dynes per sq. cm., Viscosity at 140° F., dynes per sq. cm., Viscosity at 212° F., dynes per sq. om., Pour Point, Volatility, Ash, Organic Acidity, Demulsibility,

and consideration will be given to the results obtained in deciding the oil to be accepted.

In the event of the tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall agree therewith.

Information to be supplied by Tenderer.—Items Nos. 27 to 30.—The tenderer shall supply the following information regarding the Oil he tenders to supply:—

 Specific Gravity, 15.5° C./15.0° C.
 ...

 Viscosity at 100° F., dynes per square cm.
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Sampling and Testing.—A composite sample (at least 2 quarts) shall be taken from each delivery drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such samples shall be accepted as accurately representing the quality of the delivery.

Method of Testing.—The sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating and Fuel Oils, etc.," but in the case of Turbine Oils the Demulsibility Test shall be done in accordance with the Methods formulated by the "American Society for Testing Materials." Specification Serial Designation D. 157/28. If on Test the sample shows a Max. S.E. Number in excess of 175 then the whole of the delivery under consideration shall be liable to rejection.

### 12. TRANSFORMER AND SWITCH OILS.—Specification L7-Item 31.

Scope.—This Specification covers the grades of petroleum oil required for use in Transformers and Oil Switches.

Two grades are specified, the one for use in Transformers, the other for use in Oil Switches.

Manufacture.—The oil shall be a thoroughly refined, filtered petroleum oil, without the admixture of fatty oils, resins, soaps or other compounds. It shall be light in color.

Properties and Tests.—The oil shall be free from mineral acids and alkali, asphaltic, tarry, or suspended matter, and moisture or corrosive sulphur compounds, and in other respects shall comply with the conditions mentioned hereunder:—

• • • • • • • • • • • • • • • • • • • •	 Transfor	rmer Oil	Switch	Oil
	 Maximum	Minimum	Maximum	Minimum
Viscosity at 100° F., dynes per sq. o.m. Fire Point, degrees Fahr Pour Point, degrees Fahr Volatility 8 hours at 212° F., per cent.	   0·18  25 2·0	360 	0·20  25 . 	370 

#### APPENDIX "A"-continued.

Oils, Various—continued.

			tted under	this Speci	fication wil	l be,sı	ibjected to tests t	o deter-
	Specific Gravi	roperties:— ty, 15:5° C./15:0° ( '0° F., dynes per s '00° F., dynes per	C., q. cm.,	Pour Point Volatility,			Saponification Value Ageing and Sludging	and the second
ul '.	Viscosity at 1 Viscosity at 1 Fire Point,	40° F., dynes per	sq. cm.,	Carbon Re Ash, Organic Ac	,		Corrosion Dielectric Strength,	
and cons	T	be given to the	results obta			oil to l	oe accepted.	
	Corrosion	-A copper strip	shall not a	ppear disc	oloured.wl	nen he	ated in the oil to	150° F.
of air and	Ageing and d copper for 4	Sludging.—Tl tõ hours shall no	ne oil when	heated to re than 0.1	and maint	ained; of sluc	at 300° F, in the	presence er Oil.
apart, th		Strength.—Who thstand a pressu					0.5 in. diameter,	0.15 in.
Departm	In the event ental Laborat	of the tender be ory shall be inco	ing accepte rporated in	ed, the resi	ults of the a	above delive	tests as determine ries shall agree th	d in the erewith.
supply t	Information the following	n to be suppinformation reg	olied by arding the	Tenderer Oil he ter	— Item nders to su	No. :	31.—The tender	er shall
	Specific Gra	vity, 15·5° C./1	5.0° C.	·••		<i></i> '	U / · · · ;	. t.
ing the second	Viscosity at	70° F., dynes	per square	e cm.				ii ot.
	. ,	100° F., "	,, ,,	"	··· .			(**.
•		140° F,, ,,	,, ,,	,,	'	٠,		, . ,
***		200° F., ,,	11 . 27	<b>33</b>		, •••		
	Fire Point,	degrees F.			***			••••
	Pour Point,	_		·;; ,.		,:• <b>;</b>		
		hours 212 F., p	ar cent		*1 '6			
		due, per cent.		' <b>::</b> ,		.:"		
	Ash, per cen		•••	••••				•••
•	· · · ·		•••	•••	•••	· *** ·	,	***
	•	dity, per cent.	·· '	···	•••	•••	• t f	
	•	n Value, per ce		···.	,··· ·	•••	***************************************	***
		Sludging, per o	eņţ	••••	•••	•••	······································	•••
·	Corrosion	٠	•	· · ·		•••		••••
, in		trength, volts	• • •		•••	,		
							shall be taken fr n ten (10) per cer uality of the deli	
1		ing, scrupulous o					ntainers, etc., and	
accordin Illumina	Method of g to the method ting and Fue	ods described in	the excep " Circular	tion of the of the Au	volatility stralian Ra	test; t ilways	he sample shall he: Testing of Lub	e tested ricating,
	13. CAST	OR OIL -SPE	CIFICATION	L8—Item	s <b>32</b> and 32	PA:	• • • •	
							a lubricant.	attinuation
by an ap	Manufactus pproved proce	re.—The oil sha	ll be a pur	e oil extra	cted from c	aștor	seed, refined and	clarified
	shall comply	and Tests.—The with the conditacidity, per cen	ion mentio	ned hereu	nder :	sedim 3·0	ent and foots, and	in other
	drawn from a	at least five (5) c	ontainers, a	ind in no d	ase from le	ss tha	shall be taken fr n ten (10) per cen	it, of the
	Method of	Testing.—The	sample sha	all be teste	ed accordin	- ig to 1	quality of the de he methods desc	ribed in
" Circula	ir of the Aust	tralian Railways	: Testing	of Lubric	ating, Illur	ninatii	ng and Fuel Oils	, etc."
	,		1.		. , ,			
ii o	1	r eX						
•••	1	····	**		•• ••			The second second

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#### "APPENDIX "B". "!/

#### WIRE (IRON AND STEEL).

#### BLACK STEEL WIRE .-- Item No. 470.

7. The Mild Steel Wire under Item 470 shall be of the best quality mild steel, and shall be free from rust and injurious defects of any kind.

A test piece of the Wire must withstand, without fracture, being doubled over, cold, until the internal radius is not greater than 11 times the thickness of the test piece and the sides are parallel.

The Wire shall be supplied in coils.

The Wire shall be not more than 0.003 inches under, nor more than 0.003 inches over the specified diameter.

### SPECIFICATION FOR GALVANIZED STEEL STRANDED WIRE.—Item No. 471.

- 8. General Particulars.—The stranded Wire shall be made up of (7) seven steel wires each of 0.144 inch diameter. Each length of wire shall be free from splices, and should it be necessary to weld joints in individual wires, the welded joints shall be as strong as the rest of the wire, each wire shall be free from scale, inequalities, spills, splits and other defects. Each wire shall be smoothly galvanized and the mechanical properties of the steel shall not be adversely affected by this process. The outer layer shall be wound in the direction as shown on Drawing No. F. 1586.
- 9. Tests after Delivery.—A sample piece of wire may be taken from each drum at the option of the receiving Officer and subjected to the undermentioned tests (a), (b), (c) and (d). In the event of a sample of the wire from any drum not passing these tests, a second and a third sample shall be taken from the same drum, and if one of these also fail under test the drum from which it is taken shall be rejected:—
  - (a) Tensile.—The wires shall have a tensile breaking strength of not less than 45 tons per square inch and not more than 55 tons per square inch with an elongation of not less than 3 per cent. in a length of 10 inches.
  - (b) Galvanizing.—The quality of the galvanizing after stranding will be tested by immersing sample pieces of the wire in a freshly made neutral solution of sulphate of copper saturated at 60 degrees F., and allowing them to remain in the solution for one minute, after which they will be withdrawn, plunged into clean water, and wiped clean. The galvanizing shall admit to this process being performed with each sample not less than three times without there being any signs of a reddish deposit of metallic copper on the wires. Not more than three pieces of wire are to be immersed in the solution at one and the same time.
  - (c) Sample pieces of the galvanized wire shall bear winding round a bar 13 inches in diameter without the galvanized surface showing signs of cracking.
  - (d) Any individual wire of the galvanized steel strand shall bear winding round a rod of \( \frac{1}{2} \) inch diameter without the steel wire showing signs of fracture.
- 10. Contractor to be Given Notice of Tests.—Any tests necessary to ascertain whether the wire supplied complies with this specification, will be carried out by the Receiving Officer. The Contractor will be notified at his Melbourne address of the intention to carry out such tests, and at what place they will be carried out, 24 hours previously, but should the Contractor or his representative fail to be present, the tests may be carried out in his absence at his risk.
- 11. How Delivered.—The stranded Wire shall be delivered on drums. The dimensions of the drums shall not exceed the figures given on Drawing No. "F." 678. An iron plate  $15" \times 15" \times 15"$  thick is required to reinforce each side of the drum, and to which it must be bolted. A 3-inch clearance hole is to be made in both the drum and the plate to take a 3-inch square spindle. The gross and nett weights also number of feet on drum, are to be stencilled on the drum in figures which should not be less than 11" high.
- 12. Delivery.—The delivery of the galvanized steel stranded Wire shall be given as directed, at the Corporation's Overhead Construction Storehouse, Batman Avenue.
- 13. Information to be Supplied by Tenderer.—The Tenderer shall state, where provided for below, the quality of galvanizing he will guarantee on the wire after stranding when subjected to the tests as detailed in clause 9 (b) of this specification.
  - (a). Number of 1 (one) minute dips guaranteed is ............No.

#### SPECIFICATION FOR GALVANIZED PLAIN FENCING WIRE.—Item No. 472.

- 14. The wire used in the manufacture of the whole of the above shall be of high grade steel, uniformly galvanized, free from inequalities, flaws, splints and other defects, uniformly true to gauge.
- 15. How Delivered.—The galvanized steel fencing wire shall be delivered in coils. Each coil of wire shall be provided with a suitable label on which shall be clearly stamped the nett weight of wire in the coil.
- 16. Delivery.—The galvanized plain steel fencing wire shall be delivered where and as directed at either the General Storehouse, Spotswood, or the Metropolitan Receiving Depot, Spencer-street, Melbourne.

# APPENDIX, "B"—continued. Wire (Iron and Steel)—continued.

	- 110, 201111011 1111	,	d .Wire Ga	age (I.S.W.C	G.) of each	wire tende	ered.
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	· · · · · · · · · · · · · · · · · · ·	1			, ,	,	
						١. :	,,,
41.7.1	771 · 11 ·		•				٠, ،
(6)	The tensile bre	aking strength	in pounds	of each wir	e tendered.		
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		•	•		.,		. ,
						···········	
		- ···· ···· ····	,	······			
	OPPOINT CAME			•			
	SPECIFICATI						
n graue sie gauge. Th	neral Particul cel, uniformly g he Barbs shall b lar pitches of 3	gaivanized, free	a trom House	a contito cond			r '1 .
A toleran	nce of $rac{1}{4}$ in. un	der and 🕹 in.	over in 3½	inches is p	ermissible.		
19. <b>Hov</b> shall be on the r	w Delivered provided with reel.	-The galvanize a suitable lab	ed barbed vel on which	vire shall be n shall be cl	delivered in early stampe	reels. E	ach reel of t weight of
20. <b>Del</b> General Ibourne.	ivery.—The gastorehouse,	alvanized Barb Spotswood, o	ed Wire sha r the Met	ll be delivere ropolitan R	ed where and ecciving D	d as direct epot, Spe	ed at either ncer-street
21. Spe	cification—			• • •		•	
	The British In	perial Standa	rd Wire G	auge (I.S.W	.G.) of each	wire ten	dered is-
	The British Im	perial Standar e various Barl	d Wire Gau bed Wires	ige (I.S.W.G tendered is—	.) of the wi	re used for	r the Barbs
(b) 7				•	. •		
10 · · · · · · · · · · · · · · · · · · ·	. 14 Gaug	•			. •		
, (с) Т	14 Gaug The tensile bre	aking strength	in pounds ed'is—	of each sing	le wire use	d in the n	nanufacture
() (a) (ii) (iii) (iii) (iii)	The tensile bre of each Barbed Approx.	aking strength I Wire tendere 660 lbs.	ed is—		·· • ·		
(c) T	The tensile breed of each Barbed Approx.	aking strength I Wire tendere 660 lbs. aking strength	ed is—		·· • ·		
(c) T	The tensile bre of each Barbed Approx.	aking strength Wire tendere 660 lbs. aking strength sition is—	ed is—		·· • ·		
(c) T	The tensile bree of each Barbed Approx.  The tensile bree are fixed in pour Approx.  The number of	aking strength I Wire tendere 660 lbs. aking strength ssition is— 1140 lbs.	in pounds	of each grad	of Barbed	Wire after	r the Barbs
(c) T	The tensile bree of each Barbed Approx. The tensile bree are fixed in portant Approx. The number of the number of	aking strength I Wire tendere 660 lbs. aking strength osition is— 1140 lbs. Barb points in wires around v	in pounds	of each grad Barbs on each	of Barbed	Wire after	r the Barbs
(c) T	The tensile bree of each Barbed Approx.  The tensile breare fixed in portain Approx.  The number of A	aking strength I Wire tendere 660 lbs. aking strength osition is— 1140 lbs. Barb points in wires around v	in pounds	of each grad Barbs on each	of Barbed	Wire after	r the Barbs

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#### APPENDIX "C"

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7. SPECIFICATION FOR COPPER TAPES AND BINDERS.—Items Nos. 1070 1071.

The tapes and binders shall be made of pure soft electrolytic copper wire of good quality. and 1071.

The tapes and binders shall be of the dimensions given in Tables 1 and 2. The binders shall be flattened uniformly at each end.

After rolling, both tapes and binders shall be re-annealed soft and shall be free from scale. The ends of both tapes and binders shall be smooth and free from burrs.

The elongation test will be made by gripping a sample in an elongation machine and steadily elongating the sample until it breaks. The duration of the test shall be approximately 30 seconds. The elongation shall be measured after fracture, and shall comply with the figures given in Tables

The tapes and binders shall be supplied in separate bundles of 100 each. TABLE 1.

# TABLE 1. TAPES.—Item No. 1070.

1 2	2	3	4	5	6	7
Designation	Approximate Weight per mile of wire used for Manufacture	Length	Width	Thickness	Minimum Elongation per cent. on 5 inches	Approximate Number to the pound (lb.)
Tapes, Copper, No. 3	lb. 150	inch 9	inch	inch 0 026	225	53

# TABLE 2. BINDERS.—Item No. 1071.

1, 1,	2	3	4	5	6	7.	81.51
Designation	Q Length	Length of middle portion	Diameter of middle por- tion variation not to exceed 0 0002 inch	Width of Flats	Thickness of Flats	Minimum Elongation per cent. on the middle 10 in.	Approximate Number to the pound (lb.)
Binder, Copper, No. 3	inches 20‡	inches '	inch 1 0 112	inch 3/16	inch 0 056	20	10 11 115 1 11 17 17
<u> </u>	2 t 4 to 2	276 T. 116	1. 1. 17	f.h. i	1 10000	" C neil .	1

8. SPECIFICATION FOR STRANDED COPPER CABLE, DROPPER WIRE, AND CONTACT WIRE.—Items Nos. 1051 to 1064. At 15 to 1, or time of the later to the later and the later to the later and the later to the later and the later to the later and the later to the later and t

A. Dropper Wire and Stranded Cables:—Specifications of British Engineering Standards Association and Australian Commonwealth Engineering Standards Association apply except in regard to the dimensions of 7/036 (Item 1051) and 19/072 (Item 1057), and except in such other details as are definitely stated to the contrary. The A.C.E.S.A. Specification No. C. 41, 1927, shall apply to the copper dropper wire and stranded copper cables in this Contract as detailed in Items 1051 to 1062 and 1064, and the B.E.S.A. Specification No. 125, 1930, shall apply to Item 1063.

B.' Inspecting, Testing and Weighing at Works.—All Cables and Wires will be weighed and lengths checked as set out in clauses K and L and the Contact Wire shall also be inspected for defects as per clause D (2) by the Comptroller of Stores or his representative at the works of the Contractor.

The Stranded Copper Cable shall be tested before stranding in accordance with clause A by the Comptroller of Stores or his representative at the Works of the Contractor. In the case of 37/093 (Item 1060) and 37/116 (Item 1061), the outer layer of the Wires of the Stranded Cable shall have a right-hand lay:

For these purposes the Contractor shall give appropriate notice in writing of the readiness of the Cables or Wires for inspection, measurement, weighing or tests at the works.

with clause A and the Contact Wire in accordance with clauses E. G. H. and I. by the Comptroller of Stores or his representative on delivery of the wire. The Contractor will be notified at his Melbourne address of the intention to carry out such tests and at what place they will be carried out, 24 hours previously, but should he or his representative fail to be present the tests may be carried out at his risk in his absence.

#### APPENDIX "C"-continued.

#### ELECTRIC CABLES AND WIRES-continued.

- p. Contact Wire General.—(1) The Hard Drawn Copper Contact Wire shall have a resistance of not more than 1570 ohm. per metregram at 20 deg. C. (2). The Wire shall be clean and smooth from the die, without roughness, seams, spills, scales, or scabs, and shall be delivered tightly wound on drums. (3) The section of the Wire shall be in accordance with Drawing F. 1460.
- E. Contact Wire Joints.—The joints in the Wire shall be carefully made with silver before the wire is drawn.
- Elongation.—The elongation at breaking load shall not be less than 4 per cent. on a test length of 10 inches.

Elastic Limit.—The Elastic limit, as determined by stress and strain diagram, shall not be less than 60 per cent. of the breaking load.

- G. Contact Wire Bending Test.—The wire shall be fixed in a vice between clamps bellmouthed to a radius equal to the thickness of the wire where gripped, in such a way that the side touched by the pantograph and the side opposite are held in the clamps—90 degrees will be considered as a single bend. The first bend will be from a vertical position to the right, the second back to the original position, the third from the vertical to the left, and the fourth back into the original position. The Wire shall be capable of standing as a minimum four bends without showing signs of fracture.
- H. Contact Wire Torsion Test.—The Wire shall be capable of standing a single twist in a length of 10 inches without showing signs of fracture. One complete turn of 360 degrees from the axis shall be considered a single twist.
- Samples for Test.-A sample from each drum or coil may be taken of Contact, Dropper or Stranded Wire for testing in accordance with clauses C and D.

In the event of a sample of any drum or coil not passing these tests, a second or third sample from the same drum or coil shall be tested, and the average of these tests shall determine the acceptance or rejection of the drum or coil.

J. Weights.—The method of weighing by the Comptroller of Stores or his representative at the works of the Contractor will be as follows:—The empty drum will be weighed and the result noted. The cable or wire will then be wound on the drum for the specified length, the full drum will then be weighed and the result noted. The weight of the cable or wire to be supplied under this Contract will then be ascertained by subtracting the weight of the empty drum from the weight of the drum when filled. Each drum when packed and totally enclosed shall be stencilled with the gross, tare and net weights in the presence of the Comptroller of Stores or his representative.

All such weights so ascertained by the Comptroller of Stores or his representative will for all purposes be accepted by the parties to this Contract as correct and final and binding.

- K. Measurements.—The Comptroller of Stores or his representative shall measure the length of Wire or Cable on each drum at the works of the Contractor and the Contractor shall have such lengths stencilled on the respective drums. These lengths will for all purposes be accepted by the parties to this Contract as final and binding.
- L. How Delivered.—The Cable and Wire shall be delivered on drums (the number which may be specified in the order). The dimensions of the drums shall not exceed the figures given on Drawing No. 4051—F. 678. An iron plate 15 in. x 15 in. x  $\frac{1}{2}$  in. thick is required to reinforce each side of the drum, to which it shall be bolted. A 3 in. clearance square hole shall be made in both the drum and the plate to take a 3 in. square spindle. The gross, tare and net weight, also number of feet on the drum, shall be stencilled on the drum in figures which should not be less than  $1\frac{1}{2}$  in.
- M. Delivery.—The Cable and Wire shall be provisionally delivered, deposited where and as directed at the Corporation's Overhead Maintenance Storehouse (Bulk Store), Batman-avenue, Melbourne, or at the Electric Light Storehouse at Spencer-street, as may be ordered, and delivery shall be deemed to be provisional until such time as the Comptroller of Stores shall certify that the whole of the service complies with this Specification and is in every respect to his satisfaction, and no such provisional acceptance shall, prevent the operation of the "Rejection" clause of the annexed conditions of Contract.
  - 9. SPECIFICATION FOR COPPER CABLE.—Item No. 1065.

Method of Stranding.—Concentric lay cables shall be formed as follows:—

All wires in the cable must be stranded in the same direction, i.e., the lay of all strands must be the same throughout each cable.

Electrical Resistance.—Pure electrolytic copper shall be used; resistance shall not exceed 10 565 ohms per mil. foot at 20 deg. C.

Actual capacity of the cable shall not vary from nominal capacity by more than plus or minus 2 per cent.

The length of the lay shall not exceed ten times the diameter of the cable.

Elongation shall not be less than 25 per cent., nor the tensile strength more than 38,500 lb. per sq. in.

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## 609 APPENDIX " C" continued.

#### ELECTRIC CABLES AND WIRES-continued.

SPECIFICATION FOR HARD DRAWN COPPER WIRE FOR TELEGRAPH AND TELEPHONE PURPOSES.—Items Nos. 1066 and 1067.

The Wire shall be Hard-drawn Copper Wire-weight, 150 and 200 lb per mile respectively. The Wire shall be in accordance with the Australian! Commonwealth Engineering' Standards! Association Specification No. C. 3, and the Wire shall be packed in coils of 75 to 140/lb. felical add

11. SPECIFICATION FOR COPPER JOINTING SLEEVES. #Items Nos:/ 1068' and March 19 Day of Hirar Top & Both 1069.

The sleeves shall be made of pure soft electrolytic copper.

The sleeves shall conform to the particulars given in the Table. "

The sleeves shall be solid drawn, annealed, clean and bright inside, and the ends shall be free from burrs.

Two copper wires of the maximum size shown in Column 2 of the Table will be inserted through the whole length of the sleeve. The sleeve and wire will then be fixed in two close-fitting joining clamps 3 inch wide, the outer edges of which shall be flush with the ends of the sleeve. These clamps will be revolved in opposite directions, and the sleeves shall withstand without cracking or breaking the specified number of twists shown in Column 6 of the Table.

The Contractor, if required, shall submit not less than ten sleeves of each size for approval The rate of the a the Confidence other in before the bulk of the order is proceeded with.

The sleeves shall be supplied neatly packed in boxes, each containing 100 sleeves. Each box shall be labelled to show the quantity and description of the contents.

TABLE. The contents of the contents.

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1		, · . 2	3/7	4		<sup>1</sup> վա՛ .	6
1 1 2 2		of Wire for			Minimum		-
Designation	which sleev	e is required	Length of Sleeve	Thickness of Metal	l	sions,;,;[/.	No. of Twists
	Minimum	Maximum	, ,	er, d., .	Major Axis	Minor Axis	
******* * * * * * * * * * * * * * * *	inch	inch	inch	inch	inch i <sup>fri</sup>	्।। <sup>गर्</sup> ! inch	
Sleeves, Copper— No. 5 (long) for 200 lb. Wire	111 🗥	113	5	026	234	116	6
No. 6 (long) 150 lb. Wire	-096	.098	41	022	·204 ·	.101	6

The tests set out in the Australian Commonwealth Engineering Standards Association Specification Nos. C.3-11, 1925, will be carried out by the Corporation at its Testing Laboratory in Melbourne, and the Contractor will be notified in sufficient time of the intention to carry out such test to enable him or his representative to be present if he so desire.

"SPECIFICATIONS FOR RESISTANCE WIRES, or product to

- 12. Nickel Copper Alloys.—Items Nos. 1072 to 1077.
- 1 120 C year of think it and be (1) Trade name of product ....
- (2) Specific Resistance.....
- microhms per Cm3. (3) Temperature Co-efficient.....
- in secretary of my like the of the oracle but the 13. Nickel Chromium Alloys.—Items Nos. 1078 to 1094.

- All Nickel Chromium Wire shall be suitable for continuous service at 1100 degrees C.
- 1078\_1078\_1088\_10 (1) Trade name of product 1078-1087 and 1088-1094
  - microhms per Cm3 103 (2) Specific Resistance.\_\_

#### APPENDIX "D"

#### A. A. A. A. A. A. A. A. VARNISHES.

- 7. CARRIAGE VARNISH—SPECIFICATION D. 1.—Items Nos. 1358 to 1359a.

  1. The Varnish shall conform to the Tentative Australian Standards Specification for No. 1
  Hard Drying Carriage Varnish No. K. 14-1927 T., and No. 2 Durable Body Varnish No.
  K. 15-1927 T. 11
- 8. COPAL VARNISH.—Specification D. 2.—Item No. 1360.

  The Varnish shall conform to the Tentative Australian Standards Specification for No. 2 Hard Copal Varnish No. K. 14-1927 T.
- 9. OAK VARNISH.—Specification D. 3.—Item No. 1361.

  The Varnish shall conform to the Tentative Australian Standards Specification for No. 3 Oak Varnish, No. K. 14-1927 T.
- LIQUID JAPAN DRIER.—Specification D. 6.—Item No. 1364 and 1364a.

  I.—Scope.

This Specification covers the Liquid Japan Drier (containing gums) known as Terebine.

II.—Manupacture.

The drier shall be composed of lead, manganese or cobalt, or a mixture of any of these elements combined with a suitable fatty oil, varnish gums, and mineral spirits or turpentine or a mixture of these solvents.

III.—Properties and Tests.

The drier shall be clear and free from suspended matter and sediment. It shall conform to the following requirements:—

Color.—When mixed with eight parts by volume of raw linseed oil the resulting mixture shall be no darker than a solution of 6 grm. potassium dichromate in 100 cc. of pure sulphuric acid of specific gravity 1.84.

The volatile thinner shall consist of Genuine Turpentine or Mineral Turpentine, or a mixture of both.

Mixing with Linseed Oil.—It shall mix with pure raw linseed oil in the proportion of 1 volume of drier to 19 volumes of oil without curdling.

Drying.—When mixed with 19 parts of raw linseed oil and flowed on glass, the film shall dry hard in not more than 18 hours, when maintained at 70 deg. F. in dust-free atmosphere.

Baking.—When flowed on metal and baked for two hours at 100 deg. C. (212 deg. F.) the drier shall leave an elastic film.

#### . IV .- Sampling and Testing.

One unopened package shall be taken at random from each delivery.

The drier shall be tested according to the methods described in i Circular of the Australian Railways—Testing of Paint Materials."

#### 11. PAPER VARNISH.—Specification D. 7.—Item No. 1365.

#### I.-Scope.

This Specification covers the spirit varnish known as Paper Varnish, used for varnishing maps and similar purposes.

### II.—MANUFACTURE.

The varnish shall be made from the best quality Damar or other gums, digested cold in a suitable solvent. It shall be thoroughly settled.

III.—PROPERTIES AND TESTS.

The varnish shall be clear and free from suspended matter, and shall contain no rosin mineral matter or other adulterants.

It shall conform to the following requirements:-

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Color.—Water white a large of the large of t

Drying.—Shall set to touch in not more than 30 minutes, and shall dry hard and elastic when maintained at 70 deg. F. in dust-free atmosphere.

Toughness.—Film on metal must stand rapid bending over a rod 3 mm. (\* inch) in diameter.

Working Properties:—Varnish must have good brushing flowing covering and levelling

Working Properties:—Varnish must have good brushing, flowing, covering and levelling properties.

IV.—SAMPLING-AND-TESTING: — 186. 2.1 (1)

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#### APPENDIX""D"-continued.

#### VARNISHES—continued.

SPIRIT VARNISH.—Specification D. 8.—Item No. 1366.

#### I.—Scope.

This Specification covers varnishes known as Spirit Varnishes, both brown and white. II.—MANUFACTURE.

Spirit Varnish shall be made from hard varnish gums, digested cold in methylated spirits.

The order shall state whether White or Brown Varnish is required.

## III.—PROPERTIES AND TESTS.

The varnish shall be clear and of satisfactory color. It shall be free from suspended matter or sediment, and shall contain no resin or other adulterants.

The varnish shall conform to the following requirements:-

Methylated Spirits.—Shall be at least 64 overproof.

Drying Test.—Shall set to touch in not more than 30 minutes, when maintained at 70 deg. F. in a dust-free atmosphere.

#### IV.—TESTING AND SAMPLING.

One unopened package shall be taken at random from each delivery.

The varnish shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Paint Materials."

13. KNOTTING VARNISH.—Specification D. 9.—Item No. 1367 and 1367A.

This Specification covers the Spirit Varnish known as Knotting Varnish.

#### II.—MANUFACTURE.

Knotting Varnish shall be made of pure shellac, digested cold in methylated spirits.

#### III.—PROPERTIES AND TESTS.

The varnish shall be clear and free from suspended matter and sediment. It shall contain no added resin or other adulterants.

The varnish shall conform to the following requirements:

Methylated Spirits.—Shall be at least 64 overproof.

Drying Test.—Shall dry to touch in not more than 20 minutes when maintained at 70 deg. IV.—Sampling and Testing. F. in dust-free atmosphere.

One unopened package shall be taken at random from each delivery. The varnish shall be tested according to the methods described in "Circular of the Australian Railways-Testing of Paint Materials."

FRENCH POLISH.—Item No. 1368.

To consist of pure orange shellac and 64 O.P. methylated spirits...

FRENCH POLISH, WHITE.—Item No. 1369.

To consist of finest bleached shellac and 64 O.P methylated spirits.

#### 16. SPECIFICATION FOR BLACK AIRDRYING VARNISH .-- Item No. 1370.

General Particulars.-The varnish will be used for general work during the manufacture and repair of electrical machines and for the treatment of coils on parts too large to be baked.

Quality.--It shall be of the highest quality and manufactured from the best grades of varnish gums or ashphaltum, pure linseed or tung oil, incorporated with suitable driers and thinners.

Properties and Tests.—It shall possess high penetrative power and yield a good body when applied with a brush or with a spray. The dried varnish should have a good mechanical strength and long life under unfavorable atmospheric conditions.

Drying Time and Flexibility.—A film of varnish on Japanese Paper of 1 mil thickness; shall set to touch in from 3 to 6 hours at a temperature of 20 deg. C. When dry the film shall remain flexible and may be bent back on itself without cracking.

Dielectic Strength.—A film of varnish covering Japanese Paper 1 mil to a thickness of 4 to 5 mils shall have when dry a dielectric strength of not less than 1000 vols. per mil.

Resistivity.—The varnish applied shall have a high resistance to the effects of water, oil, acids, and alkalies; and shall contain no free acids.

The Tenderer shall supply the following information:—

Specific Gravity.

Recommended Thinning Medium.

Percentage of Thinning Medium.

Dielectric Strength.

Drying Period at 20 degrees C? 14 5 69.1. 911...

#### APPENDIX "D"-continued.

#### VARNISHES-continued.

Size of Containers.—Delivery shall be made in either four (4) or one (1) gallon containers as required.

Samples.—The Tenderer shall submit a sample of not less than ½-gallon of the varnish which he proposes to supply.' The Corporation may test sample selected at random to ascertain to what extent the material supplied complies with this Specification or with the Tenderer's Specification.

General Particulars.—The varnish shall be suitable for the treatment of coils of oil immersed transformers and other electric apparatus which are not capable of being baked.

Quality:—It shall be of the highest quality and be manufactured from the best varnish gums and pure linseed oil together with suitable driers and thinners.

Properties and Tests.—It shall possess high penetrative power and yield a good body when applied with a brush or spray.

Drying, Time and Flexibility.—A film of varnish on Japanese Paper 1 mil in thickness shall set to the touch in from 4 to 8 hours at a temperature of 20 deg. C. When dry the film shall remain flexible and may be bent back on itself without cracking.

Dielectric Strength.—A film of varnish covering Japanese Paper 1 mil in thickness to a total thickness of 4 to 5 mils shall have, when dry, a dielectric strength of not less than 1000 volts per mil.

Resistivity.—The varnish shall have a high resistance to the effects of water, oil, acids, and alkalies and shall contain no free acid. Its resistance to the effect of hot transformer oil shall be determined by the length of time required for a film of varnish on a treated coil immersed in transformer oil at a temperature of 115 to 120 deg. C. to show signs of sludging and disintegrating.

#### INFORMATION TO BE SUPPLIED.

The Tenderer shall supply the following information:-

Specific Gravity.
Recommended Thinning Medium.
Percentage of Thinning Medium.
Dielectric Strength.
Drying time at 20 degrees C.

Size of Container.—The delivery shall be made in one (1) gallon containers.

Samples.—The Tenderer shall submit a sample not less than ½-gallon of the varnish which he proposes to supply. The Corporation may test samples selected at random to ascertain to what extent the material complies with this Specification or with the Tenderer's Specification.

18. Insulating Stoving Black.—(In 4 gal. tins).—Item No 1372. .

General Particulars.—The varnish must be entirely suitable for the impregnation and insulation of armature and field coils of all types of motors including traction motors with operating voltages up to 1500 volts.

Quality.—It shall be of the highest baking quality and manufactured from the best grades of varnish gums or asphaltum, pure linseed oil or tung oil incorporated with suitable driers and thinners.

Properties.—It shall possess penetrative power when applied with a brush or in conjunction with a vacuum impregnating plant. The varnish shall have a long life when maintained at an operating temperature of 90 deg. C. and shall exhibit no sign of softening at temperatures under 110 deg. C.

Drying Time.—A film of varnish on Japanese Paper of 1 mil. thickness shall set to the touch in from 6 to 15 hours when stoved at a temperature of 90 to 95 deg. C. When dry the film shall remain flexible and may be bent back on itself without cracking.

Dielectric Strength.—A film of varnish when covering Japanese Paper 1 mil. thick to a thickness of 4 to 5, mils. shall have when dry, a dielectric strength of not less than 1000 volts per mil.

Resistivity.—The varnish supplied shall have a high resistance to the effects of water, oils, acid and alkalies, and shall contain no free acid.

The Tenderer shall furnish the following information:—

e Teno	ierer shall furnish the following information:—	•	
• 1	Specific Gravity		
ω. σ.	Percentage of Thinning Medium	, , · ·	
	Recommended Thinning Medium	,	
	Dielectric Strength	•	
	Baking Period at 90 degrees C.		
	Life when baked continuously, at 90 degrees C.		

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### APPENDIX "D"-continued.

#### VARNISHES—continued.

Size of Containers.—Delivery shall be made in four (4) gallon containers.

Samples.—The Tenderer shall submit a sample of not less than ½ gallon of the varnish which he proposes to supply. The Corporation may test samples selected at random to ascertain to what extent the material supplied complies with this Specification or with the Tenderer's Specification.

# 19. VARNISH; CORE-PLATE, QUICK DRYING IN AIR.—Item No. 1374. SPECIFICATION...

- (A) General Particulars.—The Varnish will be used for treatment of core-plates prior to assembly of same in Transformers, the cores of which may be oil-immersed.
- (B) Quality.—The quality of the Varnish shall be of the best, and suitable for use under the conditions of clause A.
- (c) Drying Time and Flexibility.—A film of Varnish on Japanese paper 1 mil in thickness, shall set to the touch within 30 minutes of application at a temp. of 20°C. When applied to the coreplate the film, when dry, shall be flexible enough to permit of the bending common to the general handling received during treatment and assembly of the Plates. The film shall not crack or flake during this bending.
- (D) The Properties.—The Varnish shall be suitable for application with a Brush and shall dry with a good film and surface.
- (E) Tests.—Tests shall be made on samples from each delivery to ascertain whether the Varnish complies with this Specification.

#### INFORMATION TO BE SUPPLIED BY THE TENDERER.

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Specific gravity	**************			, ,		•
11/20 11/20		10.14	-	, d , w	42 44 4 5	:
Recommended thinning medium					•	
• •				11 C	5.5	
Percentage of thinning medium.	•			,	4: 1	
· · · · · · · · · · · · · · · · · · ·	•		. ,			
Drying time in Air at 20°C	٠, .			1 1	*	1 37 10
· · ·		<i>3</i> '			• , ,	
Size of Container.—The delive	ry shall	be made	in one g	allon con	tainers.	<i>'</i> :
<u>.</u>		<u></u>		4		. : '

- 20. Samples.—The Tenderer shall submit a sample of not less than ½-gallon of the varnish which he proposes to supply.
- 21. The Corporation may test samples selected at random to ascertain to what extent the material supplied complies with this Specification or with the Contractor's Specification and samples.

### · APPENDIX "E"

#### COPPER PRODUCTS.

#### SPECIFICATION FOR COPPER TUBING—Items Nos. 1459-1486.

7. Particulars.—The Copper Tubing as set opposite Items 1459 to 1486 shall be in accordance with Australian Standard Specification No. E-12-1925T. (except where shown otherwise in this specification).

Inspection and Tests.—All inspections and tests will be conducted by and at the cost of the Corporation at the Rolling Stock Workshops, Newport. (Hydraulic test excepted, which shall be conducted by and at the cost of the manufacturer at his works). Each Tube shall be subjected to an hydraulic internal test pressure of not less than 500 lb. per square inch, and the Contractor shall supply (with each delivery of the tubes) documentary evidence of such hydraulic test having taken place on each tube.

Rejection.—Should any Copper Tube or test piece taken from any Tube in a delivery fail to comply in any particular with this specification, the whole of the lot represented by the tube or test piece shall be liable to rejection.

Defects Showing During Fabrication.—Should any portion of a Copper Tube show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified and provided the Copper Tube has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective Copper Tube

Packing.—The Copper Tubes shall be delivered packed in cases, crates or other suitable means to prevent them from being damaged in transit.

# SPECIFICATION FOR PHOSPHOR COPPER-Item No. 1487.

8. Particulars.—The Phosphor Copper shall be suitable for use for the production of Phosphor Bronze. It shall be supplied in the form of notched slabs weighing from 15 lb. to 20 lb. each. It shall be brittle and show on fracture a silvery white color.

Freedom from Defects.—The Phosphor Copper shall be clean, uniform in quality, and free from all injurious defects.

Chemical Analysis.—The Phosphor Copper shall show on analysis:—

Phosphorous ... ... Minimum 15 00 per cent.
Phosphorous and copper combined ... Minimum 99 85 per cent.
Impurities ... Maximum 0 15 per cent.

Branding.—The manufacturer's name or trade mark and the cast number shall be cast or otherwise legibly and durably marked on each slab.

Inspections and Tests.—All inspections and tests will be conducted by and at the cost of the Corporation at its premises. One slab of each cast in each delivery will be selected for testing and shall be taken as representing the lot from which it was selected. Should any slab fail to comply in any particular with this specification the whole of the lot which it represents shall be liable to rejection.

SPECIFICATION FOR COPPER ROD (ELECTROLYTIC)—Items 1488-1493; and COPPER SHEET—Items 1502 and 1503.

9. Particulars.—The COPPER ROD shall be clean and smooth, free from piping, surface and all other defects.

The COPPER SHEET shall be clean and smooth, uniform in thickness and free from all surface and injurious defects.

Limits of Tolerance.—No Copper Rod shall be more than 0.005'' under nor more than 0.010'' over the ordered diameter.

No Copper Sheet shall be more than  $\frac{1}{2}$  a Birmingham Sheet Gauge over or under the ordered thickness.

Inspection and Tests.—All inspections and tests will be conducted by and at the cost of the Corporation at its premises.

Defects Showing During Fabrication.—Should any portion of a Copper Rod or Sheet show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified and provided the Copper Rod or Sheet has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective Copper Rod or Sheet.

### SPECIFICATION FOR COPPER ROD-Items Nos. 1494-1501.

10. Particulars.—The Copper Rod shall be in accordance with Australian Standard Specification, No. E. 9-1925 T. (except where shown otherwise in this Specification.)

Chemical Analysis.—The Copper Rod shall contain not less than 0.3 per cent. nor more than 0.50 per cent. of arsenic and not more than 0.03 per cent. of oxygen and the balance shall be copper. The Contractor shall supply an analysis with each delivery of the Copper Rod. The Corporation shall have the right to make a check analysis if it so desires, and the result shall conform to that shown above.

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#### APPENDIX "E"-continued.

#### COPPER PRODUCTS-continued.

Limits of Tolerance.—No Copper Rod shall be more than 0.005 in. under nor more than 0.010 in. over the specified diameter and not more than 0.010 in. out of round.

Inspection and Tests.—All inspection and tests will be conducted by and at the cost of the Corporation at its premises.

Rejection.—Should a Copper Rod or test piece taken from any Rod fail to comply in any particular with this specification, the whole of the lot represented by the Rod or test piece shall be liable to rejection.

Defects Showing During Fabrication.—Should any portion of a Copper Rod show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified and provided the Copper Rod has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores, replace or make good the defective Copper Rod.

#### SPECIFICATION FOR HARD DRAWN COPPER STRIP—(Items Nos. 1505 and 1506).

11. Particulars.— The copper strip shall be commercially pure hard drawn, and shall be clean and smooth from die, without roughness, seams or scales.

Tests.—The copper strip shall have a Brinell Hardness of not less than 75.

The copper strip shall withstand bending through an angle of 180 degrees over a bar & diameter without showing signs of cracks or flaws of any description.

Testing.—The Corporation may carry out any tests to determine whether the service complies with this Specification. The successful tenderer will be notified at his Melbourne address of the intention to carry out such tests at least 24 hours previously, but should he or his representative fail to be present, the tests may be carried out in his or his representative's absence and at his risk.

#### HARD DRAWN COPPER STRIP HALF MOON SECTION).-Item No. 1507.

12. Particulars.—The copper strip shall be made from best quality commercial copper to Drawing No. F. 1131, and to be to the satisfaction of the Comptroller of Stores. It shall be hard drawn, clean and smooth from the die, without roughness, seams or scales.

Tests.—The copper strip shall withstand bending through an angle of 180 degrees over a bar  $\frac{5}{8}$  in diameter, without showing any signs of cracks or flaws of any description.

The successful Tenderer will be notified at his Melbourne address of the intention to carry out tests as laid down in this Specification at least 24 hours previously, but should he or his representative fail to be present, the tests may be carried out in his or his representative's absence, and at his risk.

#### 13. SEAMLESS COPPER TUBE.—Item No. 1509.

General.—The tubes shall be of seamless copper, and in all respects shall be to the A.C.E.S.A. No. e12-1925T Specification.

Dimensions.—The tubes shall have an internal diameter of 1.143 inch and a thickness of wall of No. 13 S.W.G. Tubes shall be supplied in 15 ft. lengths.

Standard Specifications.—The S.A.A. Specification No. E12-1925T shall apply to all tubing supplied. (Note.—Clause 9, of S.A.A. No. E12-1925T, "Hydraulic Test," will not be applied).

Tests.—Any tests to ascertain whether the delivered tubing agrees with this Specification may be applied by the Corporation on delivery.

Delivery.—The delivery shall be made at the Corporation's Electrical Depot Storehouse, Spencer-street, Melbourne.

#### COPPER STRIP FOR PANTOGRAPHS.-Items Nos. 1508 and 1508A.

14. Particulars.—The strip shall be of hard drawn or hard rolled electrolytic copper, of straight, smooth finished and free from any defects such as flaws, cracks, etc. It shall be cut true to the length and angle, and bent as shown in Drawing No. F. 690D, and shall be free from burrs.

Hardness.—The copper strip shall have a hardness of between 90 and 100 as measured by the Brinell Hardness Test.

Tests.—The Corporation will carry out any tests necessary to ascertain whether the copper strips delivered comply with this Specification. Should more than 10 per cent. of any lot or package fail to comply with the Specification, the whole of the copper strip in such lot or package will be liable to rejection.

Weights.—All weights shall be ascertained by weighing the copper strip on the weighing machines of the Corporation, at the Jolimont Workshops, and all such weights so ascertained by the Comptroller of Stores shall for all purposes be accepted by the parties as correct and final and binding.

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#### APPENDIX "F"

#### METALS-ALUMINIUM, ANTIMONY, BRASS, LEAD AND ZINC.

SPECIFICATION FOR ALUMINIUM INGOTS (Item No. 1513), ANTIMONY INGOTS (Item No. 1514).

- 7. Particulars.—(a) Aluminium. The Aluminium Ingots shall contain not less than 98 per cent. of virgin aluminium.
- (b) Antimony. The Regulus of Antimony Ingots shall contain not less than 99.5 per cent. of antimony.

The materials shall be free from all injurious defects and shall be of uniform quality.

Branding.—The manufacturer's name or trade mark and a brand indicating that the materials are of the quality specified shall be cast, stamped or otherwise durably and legibly marked on each ingot of Aluminium and Antimony

Samples.—The tenderer shall submit with his tender a sample ingot of the Aluminium and Antimony he tenders to supply, such samples shall be tested by the Corporation and all deliveries of Aluminium and Antimony under this contract shall show no appreciable variation from such sample.

Inspection and Tests.-All inspections and tests will be conducted by and at the cost of the Corporation at its premises. At least one ingot from each delivery of Aluminium and Antimony will be tested and held as representing the lot from which it was taken.

Rejection.—In the event of the material failing to comply in any particular with his Specification it shall be liable to rejection.

#### SPECIFICATION FOR BRASS ROD-Items Nos. 1515-1568.

8. Particulars.-The Brass Rods shall be in accordance with specification No. 218-1925 of the British Engineering Standards Association (except where shown otherwise in this Specification).

Chemical Analysis.—The Brass Rods stall show on analysis—

... Min. 58 per cent. Max. 63 per cent. ... Min. 1.5 per cent. Max. 2 per cent. Copper

Lead

Zinc The remainder

Total impurities ... Not more than 0.75 per cent.

#### Limits of Tolerance-

The Brass Rod shall be true to the ordered dimensions within the following limits of tolerance:-

(a) Round or Square Rods (Items 1539 to 1568).

Diameter or '	ER7: 4.1.		Flata	Rolled Rod			Extruded or Drawn Rod		
i)		Across	riats —	Plus	Minus	Plus	Minus		
Under 1 inch 1" to 16" 1" to 11" 18" to 12" 18" to 13" 11" to 13"				Nil ,,	0·010" 0·010" 0·015" 0·020" 0·020"	0·002" 0·002" 0·003" 0·004" 0·004" 0·005" 0·006"	0·002" 0·002" 0·003" 0·004" 0·004" 0·005"		

(b) Hexagon Rod (Items 1515 to 1538), shall be within the limits of tolerance shown opposite the various items in the schedule.

Inspection and Tests.—All inspection and tests will be conducted by and at the cost of the Corporation, at its premises.

Rejection.—Should the Brass Rod fail to comply in any particular with this Specification it shall be liable to rejection.

Defects Showing During Fabrication.—Should any portion of a Brass Rod show injurious defects in course of fabrication by the Corporation the Contractor shall be notified and provided the Brass Rod has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective Brass Rod.

#### SPECIFICATION FOR BRASS SHEET-Items 1569 to 1603.

9. Particulars.—The Brass Sheet shall be in accordance with British Standard Specification No. 266-1928, for 65/35 Brass Sheet, except where shown otherwise in this Specification.

Inspection and Tests.—All inspections and tests will be conducted by and at the cost of the Corporation at its premises.

#### APPENDIX "F"-continued.

METALS-ALUMINIUM, ANTIMONY, BRASS, LEAD AND ZINE-continued.

Rejection.—Should the Brass Sheet fail to comply in any particular with this Specification it shall be liable to rejection.

Defects Showing During Fabrication.—Should any portion of a Brass Sheet show injurious defects in course of fabrication by the Corporation the Contractor shall be notified and provided the Brass Sheet has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective Brass Sheet.

#### SPECIFICATION BRASS TUBING-Items Nos. 1604-1617.

10. Chemical Analysis.—The tubes shall consist of an alloy of copper and zinc and shall contain not less than 60 per cent. of metallic copper and not more than a total of 0.75 per cent. of materials other than copper and zinc.

Freedom from Defects.—The tubes shall be clean, smooth and free from surface defects or longitudinal grooving both internally and externally, and the ends shall be clean and square.

Limits of Tolerance.—The tubes shall be of the dimensions specified in the order subject to the working margins given below. They shall be straight and cylindrical, of uniform thickness, concentric, and of uniform external diameter throughout.

The working margins shall be as follows:—

#### On Length-

Tubes 10 feet in length and under, plus or minus 1/16 in. Tubes over 10 feet in length, plus or minus 1/8 in.

#### On External Diameter-

-Tubes 2 in. diameter and under, plus or minus 008 in.

#### On Thickness-

Plus or minus half a standard wire gauge.

The thickness of each tube shall at all points be as close as possible to that ordered. Local variations from this thickness shall be limited in number and extent, and in no such case shall the thickness be more than '008 in. below that ordered.

Flattening and Doubling Over Test.—All test material shall be annealed before testing and shall comply with the following mechanical test without further annealing.

The test piece shall stand the following test when cold without showing either crack or flaw. The test piece shall be flattened out until the interior surfaces of the tube meet and then be doubled over on itself, i.e., bent through an angle of 180 degrees, the bend being at right angles to the direction of the length of the tube.

Inspection and Tests.—All inspections and tests will be conducted by and at the cost of the Corporation at its premises.

Rejection.—Should the material fail to comply in any particular with the Specification it will be liable to rejection.

Defects Showing During Fabrication.—Should any portion of Brass Tube show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified and provided the Brass Tube has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective Brass Tube.

SPECIFICATION FOR PIG LEAD—Items Nos. 1618 and 1619, and LEAD SHEET—Item No. 1620.

#### 11. Particulars .-

1

(a) Pig Lead (remelted)—Item 1618.

The Pig Lead as set opposite Item No. 1618 shall be manufactured from reworked lead and shall be free from injurious defects and shall be of uniform quality.

(b) Pig Lead (produced from raw material)—Item 1619.

The Pig Lead as set opposite Item 1619, shall be manufactured from ore or similar raw materials, by processes of reduction and refining, and shall not be produced from reworked material. It shall be free from injurious defects and shall be of uniform quality.

#### (c) Lead Sheet—Item 1620.

The Lead Sheet shall be manufactured from pig produced from raw materials, it shall be of even thickness throughout, smooth and free from all injurious defects.

Samples.—The tenderer shall submit with his tender a sample of the pig lead (remelted), pig lead (produced from raw material), and the sheet lead he tenders to supply. Such samples shall be tested by the Corporation and all deliveries of lead under this contract shall show no appreciable variation from such sample.

Branding.-The manufacturer's name or trade mark and a brand indicating that the material is of the quality specified shall be cast or otherwise durably and legibly marked on each pig and marked on each sheet.

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#### APPENDIX "F"-continued.

METALS-ALUMINIUM, ANTIMONY, BRASS, LEAD AND ZINC-continued.

Inspection and Tests.—All inspections and tests will be conducted by and at the cost of the Corporation at its premises. One pig and one sheet shall be taken from each ton in each delivery of the lead, and shall be tested and held as representing the lot from which it was taken.

Rejection.—In the event of the material failing to comply in any particular with this Specification, it shall be liable to rejection.

12. SPECIFICATION FOR ANTIMONIAL LEAD STRIP .-- Items Nos. 1621-1623.

Particulars.—The antimonial lead strip shall be extruded, and shall be clean and smooth from the die, without roughness, seams or scales.

Chemical Analysis.—The material used in the manufacture of the strip shall consist of 98.9 to 99 per cent. commercially pure lead, and 1 to 1.1 per cent. antimony.

Tests.—A sample of the strip may be analysed by the Corporation after delivery. Failure to comply with the Specification will render the strip liable to rejection.

How Delivered.—The strip shall be delivered in rolls of about 56 lb. weight.

## SPECIFICATION FOR ELECTROLYTIC ZINC INGOTS—Item No. 1624, and ZINC SHEET—Items Nos. 1625 and 1626.

- 13. Particulars.—(a) Electrolytic Zinc Ingots shall contain not less than 99.9 per cent. of Zinc. They shall be free from all injurious defects and of a uniform quality.
- (b) Zinc Sheets. The zinc sheets shall be of the best quality and of even thickness, smooth and free from all injurious defects.

Samples.—The tenderer shall submit with his tender a sample of the Zinc Ingots and Sheets he tenders to supply, such samples shall be tested, and all deliveries of Zinc under this contract shall show no variation from such sample.

Branding.—The manufacturer's name or trade mark shall be cast, or otherwise durably and legibly marked on each ingot and marked on each sheet.

Inspection and Tests.—All inspections and tests will be conducted by and at the cost of the Corporation on its premises. At least one ingot and one sheet from each delivery will be tested and held as representing the lot from which it was taken.

Defects Showing During Fabrication.—Should any portion of a Zinc Sheet show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified, and provided the zinc sheet has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores, replace or make good the defective Zinc Sheet.

14. Delivery.—All materials specified in this schedule shall be delivered to the Metropolitan Receiving Depot, and the weights as ascertained at the time of delivery at that depot shall be accepted.



#### APPENDIX "G"

#### SERGE AND TWILL, ETC.

7. SPECIFICATION FOR TASMANIAN BLUEY CLOTH .-- Item No. 1953.

The material required under this specification is the woollen cloth known as "Tasmanian Bluey," and is to be used for the manufacture of overalls supplied to employes who handle battery (Sulphuric) acid.

The cloth shall weigh not less than 27 oz. per lineal yard and shall be supplied in rolls not less than 56 inches wide and containing not less than 50 yards.

Not less than six (6) test pieces shall be cut in each direction from the cloth, and these test pieces when tested in a Goodbrand cloth testing machine shall have an average tensile strength of not less than 36 lb. per inch width, the test pieces being two inches wide and exposed nine inches between the grips.

Samples of the cloth shall be completely immersed at room temperature for 24 hours in sulphuric acid of 13 sp. gr., then washed in running water until free from acid, and after wringing out surplus water shall be hung up for 24 hours to dry.

The cloth so treated shall not be visibly affected by the acid, and test pieces cut from it, when subjected to the tensile test described above, shall give results not less than 10% lower than those obtained on the untreated cloth.

#### SPECIFICATION FOR SERGE AND TWILL.—Items Nos. 1954 to 1957.

- 8. Quality.—Only new, good, sound wool shall be used.
- 9. Finish.—All materials shall be of good appearance, durable and free from faults, and shall correspond to the contract sample in thickness, color, weight, nature and closeness of the texture of the fabric, raising and shearing on both sides. All material shall be delivered thoroughly dried and clean, scoured free from grease, soap, or other admixture which may be used to give fictitious weight or substance to the goods, and thoroughly shrunk. It shall be free from grass seeds, burrs, and all other imperfections.
- 10. Dyeing and Color.—All material shall be dyed dark blue with indigo dye. The color shall correspond with that of the contract sample, and shall be thoroughly fast and not liable to rub off freely. A portion of the material may be tested by lengthened exposure to the weather or otherwise to determine whether the color is fast.
  - 11. The material shall be all Wool, Dark Blue, 58 inches wide, exclusive of selvedges.
- 12. Selvedges and Identification Threads.—Every piece of material shall have two selvedges of not less than three-eighths of an inch in width. There shall be woven into the selvedges and also in the full width of the heading and end of each piece of material one thread of pale blue.
- 13. Threads per Inch.—The number of warp and weft threads per square inch shall not be less than that set out under clause 22 of this specification.
- 14. Width and Folding.—All material shall be 58 in. wide without selvedges, and shall be correctly folded down the middle with the selvedges straight and even. For the purpose of this specification the width shall be measured exclusive of selvedges; a variation of one quarter of an inch either way will be accepted.
- 15. Weight.—The weight per yard shall not be less than specified in the schedule. The weight shall be determined by dividing the total weight of each or any piece by the full length of the piece.
- 16. Marking.—Each and every piece of material shall bear the mill number stencilled or marked into the end, and in addition shall have a ticket attached showing the class of cloth, weight, length and piece number.
- 17. Inspection during Manufacture.—The Comptroller of Stores or the Receiving Officer, shall have free access to the works of the manufacturer at all reasonable times. He shall be at liberty to inspect the manufacture at any stage, and to reject any material that does not conform to the terms of this Specification.
- 18. Tests.—The material shall be subjected to such tests as may be deemed necessary to ascertain whether it complies with this Specification. For the purpose of such tests the Comptroller of Stores shall be entitled to cut off and destroy a portion not exceeding eighteen inches in length from the end of as many pieces as may be considered necessary, and shall be further entitled to wash and dry any piece of material supplied under this Specification. In the event of rejection as the results of such tests, the manufacturer shall not be entitled to any payment or compensation for material destroyed or damaged in making the tests. Tensile tests shall be carried out as described in clause 19.
- 19. Tensile Strength and Stretch.—Four specimens shall be cut from each portion of material reserved for test as described in clause 18. Two specimens shall be cut in the direction of the warp, and two in the direction of the weft, in such a manner that no two specimens cut in the same direction shall contain the same longitudinal threads.

The test specimens shall be  $6\frac{1}{2}$  inches wide and the threads shall be frayed out from each side so as to reduce the test width to 6 inches. They shall then be placed evenly in the jaws of a suitable testing machine so that the unstretched length of the fabric between the jaws is 7 inches, and shall be broken without delay. The load shall be applied at the rate of 150 lbs. per inch width per minute. If a specimen breaks in the jaws at a load much lower than that required, a duplicate test shall be made on another test piece, including the same threads.

#### APPENDIX "G"-continued.

#### SERGE AND TWILL, ETC .- continued.

- 20. Flaws and Deductions.—All damage or flaws must be clearly marked on each piece of material, and for each and every damage or flaw a deduction of not less than one quarter yard shall be made by the Comptroller of Stores, and the ticket attached in accordance with clause 16 shall be clearly marked with the total amount deducted and the yardage to be paid for. The number of faults in any one piece of material shall not exceed one in every ten yards.
- 21. Rejection.—Should any portion of a delivery fail to satisfy the requirements of this Specification, the whole or portion of the delivery may be rejected. Each and every piece of material so rejected shall have the heading removed, and no piece of material from which the heading has been removed will be accepted.
- 22. The tenderer shall insert hereunder the following additional particulars of the Cloth tendered:—

		Item No. 1953	Item No. 1954	Item No. 1955	Item No. 1956	Item No. 1957
Strength, lb. per inch width, warp	lbs	225				390
Strength, lb. per inch width, weft	lbs	205	***************************************	*******************		370
Stretch, inches, warp	inches	2 -	***************************************	***************************************		$3\frac{1}{2}$
Stretch, inches, weft	inches	2		***************************************	***************************************	$2\frac{1}{2}$
Warp threads, per square inch	No	34			***************************************	76
Weft, threads, per square inch	No	34	***********	`		72

23. Samples.—Samples are exhibited at the Office of the Comptroller of Stores, which will indicate generally the quality of Cloth required. The tenderer shall submit a sample of at least one yard of each of the materials which he tenders to supply, and in the event of the tender being accepted, such sample shall become the Contract sample, and all deliveries shall conform thereto in every respect.

The samples submitted will be tested to confirm the information inserted above, and if the tender be accepted, all deliveries shall be in accordance therewith.



#### APPENDIX "H"

### ACCUMULATOR CELLS AND SPARE PARTS.

7. Manufacturer's specification and drawings or illustrations of the Accumulator Cells and Spare Parts shall accompany the tender.

### SPECIFICATION FOR ACCUMULATOR CELLS AND SPARE PARTS.

- 8. Materials and Workmanship.—All the materials and workmanship required in this contract shall be of the very best quality of their respective kinds.
- 9. Particulars.—The Accumulator Cells and Spare Parts are for use in connection with J. Stone & Co., Train Lighting Sets for electric lighting of railway cars and vans.

The Accumulator Cells and Spare Parts shall be interchangeable with and suitable for use with Standard Tonum, or Demi-plante Cells.

- 10. Capacity.—The capacity of all Accumulator Cells, Positive Sections and Positive Plates shall be such that when discharged at the rate of three amperes per positive plate for eight (8) hours the potential difference at the terminals of the cells shall not be less than 1'8 volts, the pressure being taken whilst the current is still flowing. They shall respond to small charging rates and shall not be injured by overcharging usually met with in Train Lighting.
- 11. Accumulator Cells.—The Accumulator Cells referred to in Items 1960 and 1961 of this schedule shall comprise the following:-
  - (a) Cell Box and Lid.
  - (b) Positive and Negative Plate Sections.
  - (c) Bottom Block.

  - (d) Plate Separators.
    (e) Side and Bottom Sheets.
  - (f) Cell Connector.

  - (g) Float Indicator. (h) Cell Testing Tube.

They shall be supplied without electrolyte and shall have approximately the following overall dimensions:

Item 1960 ... 19" high ...  $7\frac{3}{8}$ " wide ...  $9\frac{1}{2}$ " long. Item 1961 ... 19" high ... 71" wide ... 71" long.

12. Cell Box.—The cell box shall be constructed from well-seasoned Tasmanian Oak or other approved timber. The box shall be specially treated in paraffin wax and insulating compound, in order to resist action by the electrolyte. The box shall be marked on the outside at one end with a heavy line showing the normal acid level, and the normal specific gravity of the electrolyte shall also be marked in ½" figures. The top edges of the cell box shall be chamfered off and the top immersed in boiling compound to a depth of at least 2 inches, in order to preserve it and to enable the lead lining to be sealed off at the top to prevent liquid getting between the box and the lining to be sealed off at the top to prevent liquid getting between the box and the lining.

The cell box shall be lined with sheet lead of high-grade quality and approved thickness and provided with ample lap at the joints, which shall be burnt together. The lead lining shall be specially created externally with paraffin wax of a high melting point, and when fitted in the box the bottom of the lining shall be securely bedded in compound at the bottom of the box. At the top the lead lining shall be bevelled over and neatly finished, then heated with a suitable flame and sealed to the compound in the box.

The cell lid shall be of the block type without bolts or securing metal clips of any kind, so as to The cell lid shall be of the block type without bons of securing metal cips of any kind, so as to prevent short circuits between adjacent cells. The lid shall be constructed from well-seasoned Tasmanian Oak, or other approved timber not less than 1½ in depth and fitting the lead lining neatly, and shall be provided with anti-splashing channels. The lid shall be treated with boiling paraffin wax and have a second dipping at a lower temperature, so as to have a heavy coating of wax. The cell lid shall be insulated from the positive and negative lugs by means of approved split porcelain gaskets. The lid shall be provided with suitable porcelain bushed holes for venting the cell, for testing the cell and for taking a float electrolyte level indicator.

13. Plate Sections.—The Plates shall be cast from chemically pure lead each in one piece, and shall be provided with suitable strengthening ribs. To form sections they shall be burnt to the busbars, and shall be fully formed and ready for immediate use when delivered.

The positive plates shall be of the demi-plante type and so constructed that there is sufficient lead at both top corners to enable new lugs to be burnt on when required. The grid shall be so sectioned as to enable strengthening ribs of ample section to be provided. The positive plates shall rest on a bottom block quite separate from the negative plates.

The negative plates shall be of the pasted type of modern design and high conductivity, and the grid so constructed that the active material is dovetailed inwards, so as to minimize the possibilities of the active material falling away from the grid. The grid shall be divided into small areas, so that any active material which may break away from the grid will not be large enough to reach the positive plates. The grid shall be provided with strengthening ribs, and sufficient lead shall be provided at the top corners to enable new lugs to be burnt on when required.



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#### APPENDIX "H"-continued.

#### ACCUMULATOR CELLS AND SPARE PARTS—continued.

The connecting lugs shall be of rectangular section, shall be burnt to the busbars, and each lug shall be reinforced in an approved manner at its joint with the busbars. The busbars shall be of heavy section. The positive busbars shall be provided with ebonite wedges to securely locate the section.

- 14. Bottom Blocks.—The bottom blocks shall consist of thick glass strips set on edge and supported by approved supports. They shall be constructed to enable the positive and negative plates to rest on separate strips. The bottom block shall be a neat fit in the cell box, and so arranged that the outside negative plates do not overhang the edges. The underside corners of the block shall be rounded so as to prevent the weight of the plate sections from resting on the corners of the lead lining. Ample clearance shall be provided between the bottom of the cell and plates.
- 15. Separators.—The separators shall be interchangeable and of uniform dimensions, S.T. Tonum \(\frac{1}{4}\)", and nibs shall be cast on the plates in suitable positions to keep the separators in position. The D.P. Tonum \(\frac{3}{8}\)" spacing between the plates shall be not less than \(\frac{3}{8}\)".
- 16. Side and Bottom Sheets.—Ebonite side sheets shall prevent the plates from coming into contact with the lead lining. They shall extend from the top of the plates to the bottom of the box and from end to end of the box. The bottom ebonite sheet shall cover the whole of the area of the bottom of the cell box.
- 17. The Ebonite Separators and the Side and Bottom Sheets shall comply with the British Standard Specification for Train Lighting Accumulators.
- 18. Cell Connectors.—The Cell Connectors shall consist of flexible copper of approved length, with lead terminals and two lead-covered bolts of sufficient length and sectional area for the efficient connection of adjacent cells.
- 19. Float Indicator.—The float indicator shall work through a hole in the cell lid and shall be suitable for indicating the height of the electrolyte. It shall have a red band showing the minimum height painted on the stem.
- 20. Cell-testing Tube.—The cell-testing tube shall be suitable for drawing electrolyte for gravity testing. It shall be suitably bent and fitted in a hole in the cell lid. The tube shall be of sufficient length to reach the electrolyte when at its minimum height in the cell.
- 21. Spare Parts.—The Cell Boxes referred to in Items 1962, 1963, 1964 and 1965 of this schedule shall comply with clause 12 hereof.

The Positive Sections referred to in Items 1974, 1974a and 1974c of this Schedule shall be suitable for use with Stones Standard 21 Plate, 15 plate, and 11 plate negetive sections of Tonum Cells respectively.

The Positive Sections referred to in Items 1974 to 1974c of this Schedule shall comply with clause 10 hereof and with that part of clause 13 hereof relating to Positive Sections.

· The Bottom Blocks referred to in Items 1970 and 1971 of this Schedule shall comply with clause 14 hereof.

The Cell Lids referred to in Items 1966 to 1969 of this Schedule shall be supplied without porcelain gaskets and shall comply with that part of clause 12 hereof relating to Cell Lids.

The Positive Plates referred to in Item 1972 of this schedule shall comply with clause 10 hereofand with that part of clause 13 hereof relating to Positive Plates.

22. Tests.—Any tests necessary to determine if the Accumulator Cells and Spare Parts are in accordance with the specification will be carried out after provisional delivery.

The Accumulator Cells and Spare Parts shall be in accordance with the following information:—

(a) Nett weight of Accumulator Cell with electrolyte-

Item 1960-110 lbs.

Item 1961-78 lbs

(b) Dimensions of Accumulator Cell:-

Item 1960—19" high x  $7\frac{3}{8}$ " wide x  $9\frac{15}{16}$ " long

Item 1961-19" high x 71" wide x 71" long

- (c) Dimensions and weight of positive plate— $8\frac{13}{16}$  x  $5\frac{1}{3}\frac{1}{2}$  x  $\frac{23}{64}$  5 lbs. 13 oz.
- (d) Manufacturer's Specification No.-See original Contract
- (e) Manufacturer's Drawing No.-See original Contract.
- 23. Specification for Ebonite Accumulator Accessories.—Items Nos. 1975 to 1982a.

The Ebonite Accumulator Accessories shall be in accordance with British Standard Specification, No. 454-1932, for train lighting Accumulators.

This Specification shall apply to the Ebonite portion of the Accumulator Floats-Item No. 1978.

A.

#### APPENDIX "I"

#### KEROSENE, MOTOR SPIRIT AND FUEL OILS.

7. KEROSENE—ILLUMINATING AND POWER FUEL.—Specification N.1.—Items 2349 and 2353.

Scope.—This Specification covers the grade of kerosene required for ordinary Illuminating Purposes and also as a Fuel for Kerosene Engines.

Manufacture.—The kerosene shall be a pure petroleum product. ,

Properties and Tests.—The kerosene shall be free from mineral acid or alkali, water and suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

Flash Point (Closed Test).-Shall not be less than 105 deg. F.

Color.-Shall be water white.

Fractional Distillations.—The residue at 300 deg. C. shall not be more than 6 per cent. by vol.

Cloud Test.—The kerosene shall not show a cloud at 5 deg. F.

Flock Test.—The kerosene shall show no sediment when heated at 250 deg. F. for six hours.

Specific Gravity.—The Tenderer shall submit with his tender a statement showing the Specific Gravity (at 15.5 deg. C./15.5 deg. C.) of the oil offered, and the sample and future deliveries (in the event of the tender being accepted) shall agree therewith within the limits of 10.5 per cent.

Burning Test.—The kerosene shall burn freely and steadily in a lamp for a period of eighteen hours without marked diminution of intensity, and without smoking or forming "ears" or "toadstools" on the wick. The chimney must be only slightly clouded or stained at the end of the test.

Special Test.—The kerosene submitted under this Specification will be subjected to tests to determine its Sulphur Content, and consideration will be given to the results obtained in deciding the oil to be accepted.

Sampling and Testing.—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than one (1) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

Method of Testing.—The sample shall be tested according to the methods described in the "Circular of the Australian Railways—Testing of Lubricating, Illuminating, and Fuel Oils. etc."

8. KEROSENE 300 deg. HIGH TEST.—Specification N.3.—Item 2350.

Scope.—This Specification covers the grade of kerosene required for Illuminating Purposes, where a high-flash illuminant is required.

Manufacture.—The kerosene shall be a pure petroleum product.

Properties and Tests.—The kerosene shall be free from mineral acid or alkali, water or uspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

Flash Point (Closed Test).-Shall not be less than 250 deg. F.

Color.—Shall be water white.

Cloud Test.-The kerosene shall show no cloud at 32 deg. F.

Flock Test. — The kerosene shall show no sediment when heated at 450 deg. F. for fifteen minutes.

Specific Gravity.—The Tenderer shall submit with his tender a statement showing the Specific Gravity (at 15.5 deg. C./15.5 deg. C.) of the oil offered, and the sample and future deliveries (in the event of the tender being accepted) must agree therewith within the limits of 1 0.5 per cent.

Burning Test.—The kerosene shall burn continuously, without readjustment of the wick, till all the oil is consumed. The flame shall remain symmetrical and free from smoke throughout, and there shall be no appreciable hard incrustation on the wick, nor any marked diminution of intensity.

Special Test.—The kerosene submitted under this Specification will be subjected to tests to determine the Sulphur Content, and consideration will be given to the results obtained in deciding the oil to be accepted.

Sampling and Testing.—A composite sample (at least 2 quarts) shall be taken from each delivery drawn from at least five (5) containers, and in no case from less than one (1) per cent of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

Method of Testing.—The sample shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Lubricating, Illuminating, and Fuel Oils, etc."

9. MOTOR SPIRIT.—Specification N.4.—Items 2354 to 2363.

Scope.—This Specification covers the grade of motor spirit required for use in Internal Combustion Engines.

Manufacture.—The motor spirit shall be a pure petroleum or other approved product.

Properties and Tests.—The motor spirit shall be free from mineral acid or alkali, water and suspended matter, and in other respects shall comply with the conditions mentioned hereunder:

Color.-Shall be water white.

#### APPENDIX "I"-continued.

KEROSENE, MOTOR SPIRIT AND FUEL OILS-continued.

Detonation.—The Motor Spirit shall be tested to determine its tendency to detonate, and its non-detonating value will be considered the most important factor in deciding its suitability.

•			Not less than
Fractional Distillation—			per cent.
Up to 75 deg. Cent.	•••	•••	5.0
Up to 115 deg. Cent.	•••	•••	50.0
Not higher than 200 deg. Co	nt		End point
Residue Shall not show acid re	action.		

Doctor Test.—The Doctor test shall be negative.

Corrosion .- A copper strip shall not appear discolored when heated in the spirit to 150 deg. F.

Gumming Residue.-When evaporated to dryness in a porcelain dish there shall be no weighable amount of gummy matter.

Acid Heat Test .- The motor spirit will be tested for rise of temperature when mixed with sulphuric acid.

Sampling and Testing.—A composite sample (at least 2 quarts) shall be taken from each delivery drawn from at least five (5) containers, and in no case from less than one (1) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

Methods of Testing.—The sample shall be tested according to the methods described in "Circular of the Australian Railways-Testing of Lubricating, Illuminating, and Fuel Oils, etc."

10. FUEL OIL.—Specification O.1.—Items 2366 to 2369.

Scope.—This Specification covers the grade of petroleum product used for Fuel Purposes and also coal tar oil and mixtures of coal tar oil and coal tar.

Properties and Tests.—The oil shall be free from grit, acid, fibrous or other matter, and in other respects shall comply with the conditions mentioned hereunder :-

> Flash Point (Closed Test).—Shall not be less than 150 deg. F. Calorific Value, Gross B.T.U. per lb. Petroleum Oil.—Not less than 18,000. Coal Tar Oil or Mixtures.—Not less than 16,000. Water and Sediment.—Not greater than 1 per cent.

Sulphur.—When tested in the bomb calorimeter the oil must be reasonably low in sulphur. The oil must flow freely from the containers or receptacles at 60 deg. F.

Other things being satisfactory, the choice of oil will be largely determined by low sulphur content and high calorific value.

Excess of water and sediment over the 1.0 per cent. specified may either be subtracted from the gross volume of oil to be paid for, or may be regarded as a contributory reason for rejection.

Sampling and Testing.—A composite sample (at least 2 quarts) shall be taken from each

delivery, drawn from at least ten (10) per cent. of the containers.

If Fuel Oil be delivered to the Corporation in bulk each delivery will be sampled on the following basis: -A composite sample made up of samples drawn from every 1;000 gallons or part

thereof of each delivery shall be accepted as accurately representing the quality of the delivery.

A second sample shall be taken from the bottom of the container or containers with a "thief" having a valve in the lower end. The thief, with valve open, shall be lowered gradually into the container, and the valve closed at the instant of touching the bottom. The sample thus obtained shall be tested for water and sediment.

Method of Testing.—The samples shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Lubricating, Illuminating, and Fuel Oils, etc."

"11. OIL FOR THE MANUFACTURE OF PINTSCH GAS.—Specification O.1.— Item 2370.

Scope.—This Specification covers the grade of petroleum product used for the manufacture of Pintsch Gas.

Properties and Tests.—This oil shall be free from grit, acid, water, and fibrous or other deleterious matter and in other respects shall comply with the conditions mentioned hereunder :-

		Maximum	Minimum
	•••	895	910
	, .·	174 0	220.0
	1	230.0	250 0
•••		400.0	450.0
		<del></del> ' ·	1.200
. at—			
•••	•••	.580	725
•••		.210	300
		103	120
•••		As low as po	ossible ' '''
			shall distil over
	,	below 720	deg. Fahr.
	  . at—		895 174-0 230-0 400-0 400-0 580 210 103 As low as points of the control of the con

#### APPENDIX "J"

#### MINERAL LUBRICATING OILS.

- 7. As regards Items Nos. 2760 to 2763, delivery may be made in—A Steel Drums, with side bungs (approx. 45 gals.) or—B Wooden Barrels (45 gals.), and it shall be indicated in the Schedule the type of containers to be used.
  - 8. LOCOMOTIVE CYLINDER OIL.—Specification L1.—Items 2760 and 2761.

Scope.—This Specification covers the grade of petroleum oil required for the lubrication of the Cylinders and Valves of Superheater and Saturated Locomotive Steam-engines, using either mechanical lubricators or those operating in the hydrostatic principle.

Manufacture.—The oil shall be a refined petroleum product, with the addition of acidless animal oil.

Properties and Tests.—The oil shall be free from mineral acids and alkali, and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

Constants.	Superheate	ed Steam.	Saturated Steam.		
Constants.	Maximum.	Minimum.	Maximum.	Minimum	
Viscosity at 212° F., dynes per sq. cm	0.40	0.25	0.32	0.24	
Fire Point, degrees Fahr Pour Point, degrees Fahr	 50	580 	 50	580	
Saponifiable Matter, per cent Carbon Residue	6 3		8		

Oils submitted under this Specification will be subjected to tests to determine the following properties:—

Specific Gravity, 15.5° C./15.0° C. Viscosity at 70° F., dynes per sq. cm. Viscosity at 100° F., dynes per sq. cm. Viscosity at 140° F., dynes per sq. cm. Viscosity at 212° F., dynes per sq. cm. Fire Point.

Four Point.

Volatility\* at 400° F. Volatility\* at 500° F. Volatility\* at 600° F. Precipitation Number or Gasolene Test

after heating one hour at 600° F. Carbon Residue.

and consideration will be given to the results obtained in deciding the oil to be accepted. It is desirable that the volatility loss and precipitation number shall be as low as possible.

Constants Obtained on Tests.—In the event of the Tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall reasonably agree therewith.

Information to be Supplied by Tenderer.—The tenderer shall supply the following information regarding the oils he tenders to supply:—

Viscosity at 100° F., dynes per square cm.

Viscosity at 140° F., dynes per square cm.

Viscosity at 1212° F., dynes per square cm.

Viscosity at 212° F., dynes per square cm.

Fire Point, degrees Fah.

Saponifiable Matter, per cent.

Carbon residue

Sampling and Testing.—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of each delivery.

Testing.—With the exception of the Volatility Tests, the sample shall be tested according to methods set out in "Circular of the Australian Railways: Testing of Lubricating, Illuminating, and Fuel Oils, etc."

\* The volatility loss, after heating the oil for one hour at the temperature given, will be determined in the V.R. Laboratory Apparatus, designed generally on the lines of Conradson's Apparatus. See 1. Ind. Eng. Chem. 4 (1912); also Hamor and Pagett, The Examination of Petroleum (1922).

9. LOCOMOTIVE BEARING OIL.—Specification L2—Items 2762 and 2763.

Scope.—This Specification covers the grade of Petroleum Oil required for use on the Bearings and Motions of Steam Locomotives. Two grades are specified—the one for summer, the other for winter use.

Manufacture.—The oil shall be a refined petroleum product. The Tenderer shall state whether a straight Mineral or Compounded Oil is offered; if the latter, he shall indicate the nature and percentage of the compound used in the manufacture of the Bearing Oil.

# APPENDIX "J"—continued. MINERAL LUBRICATING OILS—continued.

Properties and Tests.—The oil shall be free from mineral acid or alkali, and from asphaltic, or tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

	Summer.		Winter.		
	Maximum.	Minimum.	Maximum.	Minimum.	
Viscosity at 140° F., dynes per sq. cm	1.0	0.80	0.80,	0.65	
Fire Point, degrees Fahr		400 ·	• • • •	375	
Pour Point, degrees Fahr	. 40		25	•••	
Syphon Test, cubic centimetres at 140° F.		3.0	•	4.0	
Saponifiable Matter, per cent	. 20	·	20		



. Oils submitted under this Specification will be subjected to tests to determine the following properties:—

is:—
Specific Gravity, 15.5° C/15.0° C.
Viscosity at 70° F., dynes per sq. cm.
Viscosity at 100° F., dynes per sq. cm.
Viscosity at 140° F., dynes per sq. cm.
Viscosity at 212° F., dynes per sq. cm.

Fire Point.
Pour Point.
Syphon Test.
Saponifiable Matter.

and consideration will be given to the results obtained in deciding the oil to be accepted.

Constants Obtained on Tests.—In the event of the Tender being accepted, the results of the above tests as determined in the Departmental Laboratory, shall be incorporated in the Contract, and all deliveries shall reasonably agree therewith.

Information to be Supplied by Tenderer.—The tenderer shall supply the following information regarding the oils he tenders to supply:—

0 0 11	•		
Specific Gravity 15.5° C./15.0° C.			***************************************
Viscosity at 70° F., dynes per square cm			
Viscosity at 100° F., dynes per square c	m	• • •	
Viscosity at 140° F., dynes per square c	m	•••	***************************************
Viscosity at 212° F., dynes per square c	m	• • •	
Fire Point, degrees Fah.	•••	• • •	***************************************
Pour Point, degrees Fah.	•••		
Syphon Test	•••	•••	***************************************
Saponifiable Matter per cent			

Sampling.—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

Testing.—The sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating and Fuel Oils, etc."

10. CAR AND WAGON OIL (BLACK OIL).—Specification L3—Item 2764.

Scope.—This Specification covers the grade of Petroleum Oil required for the lubrication of the Axle Journals of Railway Carriages and Wagons.

Manufacture.—The oil shall be a refined petroleum product, free from admixture with any compounding material whatsoever.

Properties and Tests.—The oil shall be free from mineral acid and alkali, and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

>		Maximum.	Minimum.
		 10 5	8.3
		 0.52	0.48
•••		 •••	400
•••	• •••	 25	·
•••		 •••	5.0
	•••	 	10·5 0·52 25

Oils submitted under this Specification will be subjected to tests to determine the following properties:—

Specific Gravity, 15.5° C./15.0° C. Viscosity at 70° F., dynes per sq. cm. Viscosity at 100° F., dynes per sq. cm. Viscosity at 140° F., dynes per sq. cm.,

Fire Point.
Pour Point.
Syphon Test.
Saponifiable Matter,

and consideration will be given to the results obtained in deciding the oil to be accepted

# APPENDIX "J"-continued.

#### MINERAL LUBRICATING OILS—continued.

Constants Obtained on Tests.—In the event of the Tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall reasonably agree therewith.

Information to be Supplied by Tenderer.—The tenderer shall supply the following information regarding the oils he tenders to supply:—

Specific Gravity 15.5° C./15.0° C.			
Viscosity at 70° F., dynes per square cm.	•••		
Viscosity at 100° F., dynes per square cm.	<i></i>	•••	***************************************
Viscosity at 140° F., dynes per square cm.			***************************************
Fire Point, degrees Fah.			***************************************
Pour Point, degrees Fah.			***************************************
Syphon Test			

Sampling.—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

Testing.—The sample shall be tested according to the methods set out in "Circular of the Australian Railways: Testing of Lubricating, Illuminating and Fuel Oils, etc."

11. CAR OIL (RED OIL).—Specification L3a-Item 2765.

Scope.—This Specification covers the grade of petroleum oil required for the lubrication of the Axle Journals of Railway Carriages.

Manufacture.—The oil shall be a refined filtered petroleum oil, free from admixture with any compounding material whatsoever.

Properties and Tests.—The oil shall be free from mineral acid and alkali, and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

					Maximum.	Minimum.
Viscosity at 70° F.		•••		,	3.50	2.90
Viscosity at 140° F., dynes per squa	ire cm.		•••		0.32	0.25
Fire point, degrees Fahr			•••,		•••	370
Pour Point, degrees Fahr		•••	•••		5	_
Syphon Test, cubic centimetres at 1	40° F.	• • • •	***		•••	7.0

Oils submitted under this Specification will be subjected to tests to determine the following properties:—

Specific Gravity, 15.5° C./15.0 C.
Viscosity at 70° F., dynes per sq. cm.
Viscosity at 100° F., dynes per sq. cm.
Viscosity at 140° F., dynes per sq. cm.
Viscosity at 140° F., dynes per sq. cm.
Viscosity at 140° F., dynes per sq. cm.
Carbon Residue.

and consideration will be given to the results obtained in deciding the oil to be accepted.

Constants Obtained on Tests.—In the event of the Tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall reasonably agree therewith.

Information to be Supplied by Tenderer.—The tenderer shall supply the following information regarding the oils he tenders to supply:—

Specific Gravity 15.5° C. 15.0° C.		•	
	•••	* * *	
Viscosity at 70° F. dynes per square cm.	•••		
Viscosity at 100° F. dynes per square cm.			
Viscosity at 140° F. dynes per square cm.		• • • • • • • • • • • • • • • • • • • •	
Fire Point, degrees Fah.		• • • • • • • • • • • • • • • • • • • •	
Pour Point, degrees Fah.	•••	• • •	
Syphon Test			

Sampling.—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

Testing.—The sample shall be tested according to the methods set out in "Circular of the Australian Railways: Testing of Lubricating, Illuminating and Fuel Oils, etc."

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#### APPENDIX "K"

# GREASE AND PARAFFIN WAX.

7. GEAR GREASE.—Specification M1—Item No. 2771.

Scope.—This Specification covers the grade of grease required for the lubrication of Gears and Conveyors.

Manufacture.—The grease shall be a well-manufactured product, composed of a lime-soap made from high-grade animal or vegetable oils, or fatty acids, and a highly-refined mineral oil or a mineral oil compounded with high-grade animal fat.

Properties and Tests.—The grease shall comply with the conditions mentioned here-under:—

	Soap Content, per cent.	Ash, per cent.	Melting Point	
	approximate		Soft	Drop
•		Maximum	Minimum	Minimum
Dark Gear Grease	. 18	7.0	148°	. 163°

Mineral Oil.—When mineral oil alone is used for dissolving the soap, it shall be a well-refined mineral oil.

Saponifiable Matter.—When a compounded oil is used for dissolving the soap, it shall contain about 20 per cent. Saponifiable Matter.

Free Alkali.-The grease shall contain not more than 10 per cent. of free alkali.

Moisture.—The moisture present shall not be greater in quantity than one-half the dry soap content.

Corrosion.—A clean copper plate shall not be discoloured when submerged in the grease for 24 hours at room temperature.

Special Tests.—Greases submitted under this Specification will be subjected to tests to determine the following properties:—

Consistency, Melting and Dropping Points.

Sampling and Testing.—A composite sample shall be taken from each delivery. It shall be at least one (1) lb. in weight, and shall be drawn from at least five (5) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

. Method of Testing.—The sample shall be tested according to the methods described in "Circular of the Australian Railways, Testing of Lubricating, Illuminating and Fuel Oils, etc."

8. GREASE.—Specification M2—Items Nos. 2772 to 2778.

Scope.—This Specification covers the grade of grease required for the lubrication of Road and Rail Motor Chassis Parts, Gears, and of such parts of Motor Equipment and other Machinery as are lubricated by means of compression Cups. Grease, Cup, No. 2, is suitable for Ball Bearings, grease packed or lubricated with Grease Gun. Grease, Cup, No. 3, is suitable for Ball Bearings lubricated with compression Cups. Grade No 4 to be used for Pantograph Collectors.

Four grades are specified, and the order shall state which grade is required and the purpose for which it is to be used.

Manufacture.—The grease shall be a well-manufactured product, composed of a calcium soap made from high-grade animal or vegetable oils, or fatty acids, and a highly-refined mineral oil.

Properties and Tests.—The grease shall be smooth and uniform, and, in other respects, shall comply with the conditions mentioned hereunder:—

		Soap Content,	Ash percent	Melting Point.		
		per cent. Ash, per cent approximate.		Soft.	Drop.	
No. 2 Cup Grease No. 3 Cup Grease No. 4 Cup Grease No. 5 Cup Grease		15 18 23 30	Maximum. 2·5 3·0 3·5 3·5	· Minimum.  146° 170°	Minimum.  165° 188° 195° F.	

Mineral Oil.—The mineral oil used in reducing the soaps shall be a straight, well-refined mineral oil.

Consistency.—The greases shall be similar in consistency to the approved trade standards for Nos. 2, 3, 4 and 5 grease.

Moisture.—The grease shall be a boiled grease, and shall contain a minimum of water when finished.

Corrosion.—A clean copper plate shall not be discoloured when submerged in the grease for 24 hours at room temperature.



# APPENDIX "K"-continued.

# Grease and Paraffin Wax-continued.

Fillers.—The grease shall contain no fillers, such as resin, resinous oils, soapstone, wax, talc, powdered mica or graphite, sulphur, clay, asbestos or the like.

Special Tests.—Greases submitted under this Specification will be subjected to tests to determine the Melting and Dropping Points.

Sampling and Testing.—A composite sample shall be taken from each delivery. It shall be at least one (1) lb. in weight, and shall be drawn from at least five (5) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

Method of Testing.—The sample shall be tested according to the methods described in "Circular of the Australian Railways, Testing of Lubricating, Illuminating and Fuel Oils, etc."

# 9. ANTI-FRICTION GREASE.—Specification M3-Item No. 2779.

Scope.—This Specification covers the grade of grease required for the lubrication of Rough Machinery, of Rails at Switches and Curves, and for other similar purposes.

Manufacture.—The grease shall be a well-manufactured product, composed of a calcium soap made from rosin oil, and mineral oil, or other oils.

Properties and Tests.—The grease shall be smooth and uniform, and, in other respects, shall comply with the conditions mentioned hereunder:—

 Water
 ...
 ...
 ...
 6.5 per cent.

 Ash
 ...
 ...
 ...
 8.0 per cent.

Consistency.—The grease shall be of such a consistency as to be suitable for the purpose for which it is required.

Sampling and Testing.—A composite sample shall be taken from each delivery. It shall be at least one (1) lb. in weight, and shall be drawn from at least five (5) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

Method of Testing.—The sample shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Lubricating, Illuminating and Fuel Oils, etc."

#### 10. SPECIFICATION FOR ITEM No. 2780.

Specification.—The Grease shall be suitable for the lubrication of Westinghouse Brake Cylinders and Triple Valves.

The Grease shall be a refined petroleum cylinder oil free from admixture with any compounding material whatever.

The Grease shall be free from mineral acid, alkali, and asphaltic tarry or suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

		Min.	Max.
Viscosity at 212° F.	= Dynes per sq. cm.		·28
Flash Point (open test)	= Dgrs. Fahr	470° F.	
Fire Point	= ¯,, ,,	536° F.	
Melting Point (soft)	= ,, ,,	60° F.	
Melting Point (drop)	= ,, ,,	—	88° F.
Ash		Nil.	

The Tenderer shall supply with his tender a sample of the lubricating grease he offers to supply. The sample shall be subject to tests to determine the following properties:—Volatility, Ash, cold pour point, Organic Acidity, Saponifiable matter. Consideration will be given to the results obtained in deciding the grease to be accepted.

A composite sample shall be taken from each delivery and shall be drawn from at least 5 per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

The sample shall be tested according to the methods described in "Circular of Australian Railways—Testing of Lubricating, fuel, oils, etc."

The grease shall be supplied in Drums with the contents plainly marked on the outside. Payment will be made on the Specific gravity as disclosed by the Engineer of Tests.

# 11. SPECIFICATION FOR Items Nos. 2781 and 2782.

The Grease tendered shall be suitable for the lubrication of-

Item No. 2781—Journals on locomotives provided with grease cellars.

Item No. 2782—Crank and Coupling Pins provided with High Pressure Grease Gun attachment.

It shall be of such a nature that it shall lubricate effectively at all loads and speeds, and shall be suitable for use throughout the year.

The Grease shall be a well manufactured product, and it shall be composed of a soda soap made of tallow, combined with a well refined cylinder stock from crude petroleum oil. It shall be smooth and uniform, shall not crumble under pressure, and shall be free from grit.

# APPENDIX "K"-continued.

GREASE AND PARAFFIN WAX-continued.

The soap content shall be-

Item No. 2781.—Not less than 45 per cent.

Item No. 2782.-Not less than 30 per cent.

The Tenderer shall submit with his tender a sample of not less than one (1) lb., also as many possible of the following particulars of the Grease Compound he tenders to supply:—

- (a) Soft temperature.
- (b) Drop temperature.
- (c) Consistency.
- (d) Moisture content.
- (e) Free Alkali content.
- (f) Soap Content.
- (g) Oil content.
- (h) Ash content.
- (i) Grit content.

The sample will be further tested by and at the cost of the Corporation, and all deliveries of Grease under this service shall show no appreciable variation from such sample.

The Grease shall be put up in moisture proof barrels, drums or other approved containers with the nett weight plainly marked on each.

# 12. SPECIFICATION FOR PETROLEUM JELLY.—Items Nos. 2784 and 2785.

The Petroleum Jelly shall be a purified mixture of semi-solid hydrocarbons of the very best quality obtained from petroleum, free from odour, mineral acid, or alkali, fixed oils, fats, resin and other additions. It shall be completely soluble in Heavy Benzine.

The Petroleum Jelly shall have a melting point of not less than 100° F.

On incineration in a porcelain crucible, not more than 0.05 per cent. of mineral matter shall remain in the crucible.

The Tenderer shall indicate the specific gravity at 15.5° C.

13. The Tenderer shall supply a complete chemical and physical analysis of the Grease or Greases tendered for each item.



# APPENDIX "L"

# ROLLED STEEL.

# SPECIFICATION FOR

# MILD STEEL ANGLES, CHANNELS, JOISTS, BARS, FLATS, TYRE RETAINING RINGS, PLATES, SHEETS AND RIVET BARS.

ITEMS 2421, 2442, 2442a-2443a, 2442b-2443b, 2457-2465, 2457a-2465a, 2477-2485, 2487-2491a, 2493, 2493a, 2508-2529a, 2547-2551c, 2558-2560, 2580-2588, 2580a-2588a and 2615-2621.

# 1. Particulars.

The Angles, Channels, Joists, Bars, Flats, Tyre Retaining Rings, Plates, Sheets and Rivet Bars except where shown otherwise in this Specification shall be in accordance with A.S.S. No. A1—1931 for "A" Class Steel.

# 2. Limits of Tolerance.

The Steel shall be true to the ordered dimensions within the following limits of tolerance—

Angles, Channels and Joists.

Section Dimensions and Weight:—As specified in A.S.S. No. A1—1931. Length:—Plus 2 in, minus Nil.

ROUND, SQUARE, RIVET AND FLAT BARS.

-				Minus	Plus
	Up to ½" dia.	thickness o	r width	0.007"	0.007''
	Over ½" to 1" dia.	**	,,	0.010"	0.010*
•	Over 1" to 2" dia.	,,	,,	1 " 64 ."	$\frac{1}{3}\frac{1}{2}$ "
	Over 2" to 3" dia.	**	,,	3 2 "	3 " 64 "
	Over 3" to 5" dia.	11	**	3 g" ·	$\frac{3}{3}\frac{3}{2}''$
	Over 5" to 8" dia.	,,	,,	1 <u> </u>	1."
	Over 8"	,,	**	1 " 8	<u>₹</u> ″
	Length :Plus 2" mi	nus Nil.			

RECTANGULAR BARS FOR NUTS.

(a) Melbourne Iron and Steel Mills.

		Millus	rius
Over ½" up to	1" thickness or width	0.010"	0.010
Over I" up to	2" ,, ,,	0.0156''	0.0156'

(b) McPherson's Pty. Ltd.

	W1DTH.			Тніс	KNESS.	
			Over ½"	up to 1".	Over 1" u	p to 2".
	Plus	Minus	Plus	Minus	Plus	Minus
Up to and including 1" Over 1" up to and including 2"	1 " 32 " 3 " 64 "	64 " 64 " 32 "	0·010" 0·015"	0·010" 0·015"	1 7 7	

PLATES.

Thickness		Up to 48	Up to 48 in. Wide		Over 48 in. Up to 60 in. Wide		Over 60 in. Up to 72 in. Wide	
		Over	Under	Over	Under	Over	Under	
Under 16 in. 16 in 18 in 19 in 19 in 10 in 11 in. and 16 in. 12 in. and 16 in. 13 in. and 16 in. 14 in. and 17 in. 15 in. and 18 in. 16 in. and 18 in. 17 in 18 in 18 in 18 in 18 in		9·0 7·5 6·0 4·0 2·5 2·5 2·5 2·5	0·010" 3·0% 2·5% 2·5% 2·5% 2·5% 2·5% 2·5% 2·5% 2·5	% 10.0 10·0 8·5 7·0 5·5 4·5 3·5 2·5 2·5 2·5 2·5	0·010" 3·0% 2·5% 2·5% 2·5% 2·5% 2·5% 2·5% 2·5% 2·5	% 	%	

PLATES.

APPENDIX "L"-continued.

Thickness	3	Over 72 in. Up to 84 in. Wide		Over 84 in. Up to 96 in. Wide		Over 96 in. Up to 108 in. Wide	
		Over	Under	Over	Under	. Over	Under
75 in 38 in 76 in 10 in. and 10 in 5 in. and 11 in 12 in. and 13 in.		% 12·0 10·0 9·0 7·5 6·0 4·5 3·5 3·0 2·5	% 3.0 3.0 2.5 2.5 2.5 2.5 2.5 2.5 2.5	% 14·0 11·0 10·0 8·5 7·0 5·5 4·0 3·5 3·0	% 3·0 3·0 2·5 2·5 2·5 2·5 2·5 2·5 2·5	7 13·0 11·0 9·5 8·0 6·5 5·0 4·0 3·5	% 3.0 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5
0 1 1		2·5 2·5 2·5 Over 108 120 in.	2.5 2.5	2·5 2·5	2·5 2·5	3·0 2·5	2·5 2·3
Thickness	;	Over	Under	1		•	
15 in. and 16 in		% 15·0 13·0 10·5 9·0 7·5 6·0 5·0 4·5 3·5 2·5	% 3.0 3.0 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	-			

Plates sheared to size shall not be under nor more than  $\slashed{4}''$  over the ordered length or width,

Notwithstanding that plates within the limits of tolerance shown above will be accepted, if otherwise in accordance with this Specification, The WEIGHT TO BE PAID FOR shall not exceed 5 per cent. over the calculated weight of the ordered dimensions of each size in each delivery, for plates  $\frac{1}{16}$  inch thick and under or  $2\frac{1}{2}$  per cent. over the calculated weight of the ordered dimensions of each size in each delivery for plates in excess of  $\frac{1}{16}$  inch thick. (The calculated weight shall be on the basis that 1 cubic inch of Rolled Steel weighs 0.2833 lb.)

Sheets.				
Thickness			Plus	Minus
$\frac{3}{16}$ " to 13 B.G. (inclusive)			0.008"	0.008"
14 and 15 B.G. (inclusive)	•••		0.006"	0.006"
16 and 18 B.G. (inclusive)			0.004''	0.004''
19 to 22 B.G. (inclusive)	•••		0.003"	0.003''
23 B.G. and lighter		•••	0.002''	0.002"
Length	• • •		12"	Nil
Width	•••		3" 8	Nil
Cut to exact dimensions			<u>į</u> "	1."

# 3. Painting.

Each Mild Steel Angle, Flat, Round and Square Bar shall be painted on each end with blue paint, and rivet bars shall be painted with green paint, by and at the cost of the Contractor.

# 4. Inspection and Tests.

The Contractor shall supply a certificate stating the process of manufacture, and a test sheet signed by the Manufacturer, giving the results of each of the specified mechanical tests and the chemical analysis of each cast in each delivery of Steel.

In the event of any material being found after delivery, with injurious defects or not true to the specified dimensions within the specified limits of tolerance, it shall be rejected and shall be replaced by and at the cost of the Contractor, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

APPENDIX "L"—continued.

# 5. Defects Showing During Fabrication.

Should any portion of the material show injurious defects during course of fabrication by the Corporation the Contractor will be notified and, provided it has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective material.

#### 6. Weights.

All weights will be ascertained by weighing the material on the weighbridge scales or other weighing machines of the Corporation at Newport, Victoria, and all such weights so ascertained by the Comptroller of Stores shall for all purposes be accepted by the parties to this Contract as correct, final and binding., always provided that the weight of Mild Steel Plates to be paid for shall not exceed 5 per cent. of the calculated weight as set out in clause 2 above.

# APPENDIX "M"

#### SPECIFICATION FOR

# CARBON STEEL BARS, OR BILLETS FOR LAMINATED SPRINGS, ETC.

ITEMS 2533 to 2533B, 2575 and 2575A

# 1. Particulars.

The Carbon Steel for Laminated Springs, etc., shall be in accordance with Australian Standard Specification No. E3-1930, except where shown therwise in this Specification.

The Carbon Steel shall be commercially straight.

# 2. Chemical Analysis.

The Carbon Steel shall show on analysis-

Carbon ... 0.5 to 0.6% Manganese  $\dots 0.55$  to 0.7%Sulphur ···} 0.05% maximum. Phosphorus

Note.—All analyses shall be carried out in accordance with the requirements of A.S.S. No. K1-1926.

# 3. Freedom from Defects.

For Bars as specified in A.S.S. No. E3-1930.

The Carbon Steel Billets shall be free from cracks, surface flaws, laminations, and any other injurious defects. Sufficient discard shall be cropped to remove all pipe or contraction cavities. The billets shall be cut square on the ends and finished in a workmanlike manner and shall be commercially straight, and shall have rounded corners.

The Billets may be chipped to remove surface defects provided that the depths of chipping does not exceed 16 inch per inch of dimensions concerned up to a maximum depth of 3 inch, and provided also that the width of the chipping is at least four times its greatest depth. Where two chipping grooves run approximately parallel and near together, the narrow tongue between them may be removed at the discretion of the Comptroller of Stores.

# 4. Limits of Tolerance.

The Carbon Steel Bars or Billets shall be true to the ordered dimensions within the following limits of tolerance :-

SECTION DIMENSIONS.

Bars as specified in A.S.S. No. E3-1930: Plus 16" Billets: Under 4"

Over 4" and under 6"

,, 16

LENGTHS.

Bars Plus 1". Minus Nil.

Billets " 2". Nil. ••

# Brinell Test.

The Steel Bars Items 2533-2533B shall as delivered show a Brinell Hardness number of not more than 228.

# 6. Branding.

Each Bar or Billet shall be branded on one end with the cast number and the Manufacturer's name or trade mark, or if delivered in bundles a metal tag shall be securely attached to each bundle durably and legibly marked with the specified information.

Each Bar or Billet shall be painted on each end with Yellow paint by and at the cost of the Contractor.

# 8. Inspection and Tests.

The Contractor shall supply a certificate stating the process of Manufacture, and a test sheet signed by the Manufacturer, giving the results of each of the specified mechanical tests and the chemical analysis of each cast in each delivery of Bars or Billets.

# APPENDIX "M"-continued.

In the event of any Bar or Billet being found, after delivery, with injurious defects, or not true to the specified dimensions within the specified limits of tolerance, it shall be rejected and shall be replaced, by and at the cost of the Contractor, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

The Corporation shall have the right to make a check analysis and mechanical tests if it so desires, and if the results of the check analysis and mechanical tests do not conform to that specified the material will be liable to rejection.

# 9. Weights.

All weights shall be ascertained by weighing the Bars or Billets on the weighbridge scales or other weighing machines of the Corporation at Newport, Victoria, and all such weights so ascertained by the Comptroller of Stores shall, for all purposes, be accepted as correct and final and binding.

# 10. Defects Showing During Fabrication.

Should any Bar or Billet show injurious defects in course of fabrication by the Corporation the Contractor shall be notified, and provided the Bar or Billet has been properly treated by the Corporation, the Contractor shall, at his own expense, and at the discretion of the Comptroller of Stores, replace or make good the defective Bar or Billet, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

# APPENDIX "N."

# SPECIFICATION FOR

# CARBON STEEL FOR VOLUTE AND HELICAL SPRINGS, ETC.

ITEMS 2496-2496B, 2534-2534B AND 2561.

# 1. Particulars.

The Carbon Steel for Volute and Helical Springs, etc., shall be in accordance with Australian Specification No. E5-1930, except where shown otherwise in this Specification.

The Carbon Steel Bars shall be commercially straight.

# 2. Chemical Analysis.

"The Carbon Steel Bars shall show on analysis :--

 Carbon
 ...
 0.85 to 0.95%

 Manganese
 ...
 0.55 to 0.70%

 Sulphur
 ...
 0.05% maximum

 Phosphorus
 ...
 0.05% maximum

# 3. Limits of Tolerance.

The Carbon Steel Bars shall be true to the ordered dimensions within the following limits of tolerance:--

SECTION DIMENSIONS.

As specified in A.S.S. No. E5-1930.

LENGTH.

Plus 1". Minus Nil.

#### 4. Painting.

Each Bar shall be painted on each end with Purple paint by and at the cost of the Contractor.

# 5. Inspection and Tests.

The Contractor shall supply a certificate stating the process of Manufacture, and a test sheet signed by the Manufacturer, giving the chemical analysis of each cast in each delivery of Bars.

In the event of any Bar being found, after delivery, with injurious defects, or not true to the specified dimensions within the specified limits of tolerance, it shall be rejected and shall be replaced, by and at the cost of the Contractor, c.i.f., Melbourne.

The Corporation shall have the right to make a check analysis if it so desires, and if the result of the check analysis does not conform to that specified the material will be liable to rejection.

#### 6. Weight.

All weights shall be ascertained by weighing the Bars on the weighbridge scales or other weighing machines of the Corporation at Newport, Victoria, and all such weights so ascertained by the Comptroller of Stores shall, for all purposes, be accepted as correct and final and binding.

# 7. Defects Showing During Fabrication.

Should any Bar show injurious defects in course of fabrication by the Corporation the Contractor shall be notified, and provided the Bar has been properly treated by the Corporation, the Contractor shall, at his own expense, and at the discretion of the Comptroller of Stores, replace or make good the defective Bar, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.



# ROLLED STEEL—continued. APPENDIX "O."

# SPECIFICATION FOR

# CARBON STEEL FOR SPRING WASHERS.

ITEM 2562 and 2562A.

The Carbon Steel Bars shall have a carbon content of from  $\cdot 70\%$  to  $\cdot 80\%$  and shall be suitable for the manufacture of Spring Washers in accordance with Australian Standard Specification No. 27-1928.

No Carbon Steel Bar shall be more than  $\frac{1}{64}''$  over or  $\frac{1}{64}''$  under the ordered sectional dimensions.

In all other respects Specification Appendix "N" shall apply to these Carbon Steel Bars.



# APPENDIX "P."

# SPECIFICATION FOR

# BOILER QUALITY ANGLES OR BARS.

ITEMS 2428, 2444, 2444A, 2444B, 2494-2494A, 2535.

# 1. Quality.

The Boiler Quality Angles or Bars shall be manufactured from Steel made from selected material by the Open Hearth process.

#### 2. Particulars.

The Angles and Bars shall be in accordance with Australian Standard Specification No. E6-1925. T. except where shown otherwise in this Specification. The Angles and Bars shall be commercially straight.

# 3. Limits of Tolerance.

The Steel Angles and Bars shall be true to the ordered dimensions within the following limits of tolerance:—

SECTION DIMENSIONS AND WEIGHT.

Angles as specified in A.S.S. No. A1-1931.

Bars.			
		Minus.	Plus.
Up to 3" dia.	thickness or width	0.007"	0.007"
Over $\frac{1}{2}$ to 1" dia.	. ,, ,,	0.010"	0.010"
Over I" to 2" dia.	,, ,,	<del>1</del> "	3 2 "
Over 2" to 3" dia.	,, ,,	3 <sup>1</sup> 2″	64 " 3 2 "
Over 2" to 5" dia.	,, , ,,	1 . " 3 2 "	32"
Over 5" to 8" dia.	,, . ,,	16	₹ <b>″</b>
Over 8"	,, ,,	<del>1</del> "	<del>1</del> 8″

#### 4. Painting.

Each Angle and Bar shall be painted on each end with GREY paint by and at the cost of the Contractor.

# 5. Inspection and Tests.

The Contractor shall supply a certificate stating the process of manufacture, and a test sheet signed by the Manufacturer, giving the results of each of the specified mechanical tests and the chemical analysis of each cast in each delivery of Steel.

In the event of any material being found after delivery, with injurious defects or not true to the spepified dimensions within the specified limits of tolerance, it shall be rejected and shall be replaced by and at the cost of the Contractor, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

# 6. Defects Showing During Fabrication.

Should any portion of the material show injurious defects during course of fabrication by the Corporation the Contractor will be notified and, provided it has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective material.

# 7. Weights.

All weights will be ascertained by weighing the material on the weighbridge scales or other weighing machines of the Corporation at Newport, Victoria, and all such weights so ascertained by the Comptroller of Stores shall for all purposes be accepted by the parties to this Contract as correct, final and binding.

# ROLLED STEEL—continued. APPENDIX "Q."

# SPECIFICATION FOR

# INGOT IRON (LOW CARBON STEEL) BARS, FLATS, BILLETS, BLOOMS AND SLABS.

ITEMS 2492, 2531, 2563-2573.-

#### 1. Chemical Analysis.

The Ingot Iron Bars, Flats, Billets, Blooms or Slabs shall show on analysis :-

		Minimum.	Maximum
	•••	%	%
Carbon		<del></del>	0.10
Manganese		0.40	0.60
Silicon		0.12	0.30
Sulphur		_	0.07
Phosphorus		<del>-</del> .	0.07

All analyses shall be carried out in accordance with the requirements of Australian Standard Specification No. K1-1926.

# 2. Freedom from Defects.

The Ingots shall be free from cracks, surface flaws, laminations or any other injurious defects. Sufficient discard shall be cropped to remove all pipe or contraction cavities. The Billets, Blooms or Slabs may be chipped to remove surface defects provided that the depth of chipping does not exceed \( \frac{1}{16} \) per inch of dimensions concerned up to a maximum depth of \( \frac{2}{1} \), and provided also that the width of the chipping is at least four times its greatest depth. Where two chipping grooves run approximately parallel and near together, the narrow tongue between them may be removed at the discretion of the Comptroller of Stores.

The Bars, Flats and Billets shall be cut square on the ends, finished in a workmanlike manner and shall be commercially straight. The Billets, Blooms and Slabs shall have rounded corners.

#### 3. Limits of Tolerance.

The Ingot Iron Bars, Flats, Blooms, Billets and Slabs shall be true to the ordered dimensions within the following limits of tolerance:—

BARS OR FLATS.			Minus.	Plus.
Up to ½" dia.	thickness of	or width	0.007"	0.007''
Over $\frac{1}{2}$ " to 1" dia.	"	,,	0.010"	0.010"
Over 1" to 2",	**	**	1 " 64 "	1,"
Over 2" to 3" ,,	,,	,,	32"	3.7
Over 3" to 5" "	,,	,,	1 " 3 2	37
Over 5" to 8" ,,	,,	,,	1 "	<u>i</u> ″
Over 8" dia.	,,	**	1 *	1"

Length.-Plus 2". Minus Nil.

BILLETS, BLOOM AND SLABS.

Section Dimensions :-

# 4. Impact Test.

A Standard three notch impact test piece machined cold from the material in the case of Bars and Flats as received, and in the case of Billets, Blooms and Slabs after normalising by heating to 920°C. and cooling freely in the air, and to the form and dimensions shown in British Standard Specification No. 131–1933, shall, on being tested, average not less than 60 ft. lb. At the time of testing the "IZOD" test bar shall be at a temperature of between 65°F. and 75°F.

# 5. Number of Tests.

One impact test shall be taken from each cast in each delivery of Bars and Flats and from each batch of Billets, Blooms and Slabs heat treated together, or if there is more than one cast represented in such batch then one impact test shall be taken from each cast in the batch. If any test piece shows defective machining or discloses flaws, it may be discarded, in which case another specimen from the same cast shall be substituted.

# 6. Additional Tests before Rejection.

Should a test piece first selected by the Receiving Officer not fulfil the test requirements two additional tests shall be taken from the same batch or cast. Should one of the additional test pieces fail to fulfil the specified test requirements, the lot represented by such test pieces shall be rejected.

#### 7. Brinell Tests.

The Ingot Iron shall show a hardness number of not less than 100 when measured by the Brinell Test.



# APPENDIX "Q"-continued.

#### 8. Branding.

Each Bar, Flat, Billet, Bloom or Slab shall be branded on the end with the cast number and the manufacturer's name or trade mark, and a brand indicating that it is Ingot Iron. Small section bars delivered in bundles shall have a metal tag securely attached durably and legibly marked with the specified information.

#### 9. Painting.

The ends of each Bar, Flat, Billet, Bloom and Slab shall be painted White with a Black band by and at the cost of the Contractor.

#### 10. Inspection and Tests.

All mechanical tests will be conducted by and at the cost of the Corporation on its premises.

The Contractor shall supply a certificate stating the process of Manufacture, and a test sheet signed by the Manufacture, giving the results of the chemical analysis of each cast in each delivery of Ingot Iron.

In the event of any Ingot Iron material being found, after delivery, with injurious defects, or not true to the specified dimensions within the specified limits of tolerance, it shall be rejected and shall be replaced, by and at the cost of the Contractor, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

#### 11. Weights.

All weights shall be ascertained by weighing the Ingot Iron on the weighbridge scales or other weighing machines of the Corporation at Newport, Victoria, and all such weights so ascertained by the Comptroller of Stores shall, for all purposes, be accepted as correct and final and binding.

#### 12. Defects Showing During Fabrication.

Should any portion of the Ingot Iron show injurious defects in course of fabrication by the Corporation the Contractor shall be notified, and provided the material has been properly treated by the Corporation, the Contractor shall, at his own expense, and at the discretion of the Comptroller of Stores, replace or make good the defective material, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

#### APPENDIX "R"

# SPECIFICATION FOR

# BESCOM STEEL GRADE "A" (LOW CARBON) AND GRADE "B" (HIGH CARBON) BARS, FLATS, BILLETS, BLOOMS AND SLABS.

ITEMS 2495, 2532, 2552, 2552A, 2574 AND 2574A.

#### 1. Chemical Analysis.

The Bescom Steel Bars, Flats, Billets, Blooms and Slabs shall show on analysis:-

				Grade "A"	' Low Carbon	Grade	"B" High Carbon
				Min.	Max.	Min.	Max.
				%	%	%	%
Carbon	٠			0.25	0.30	0.35	0.40
Manganese		•••		1.40	1.70	1.40	1.7
Silicon		•••	•••	0.10	0.30	0.10	0.30
Sulphur				_	0.05	_	0.05
Phosphorus		•••	•••		0.05		0.05

All analyses shall be carried out in accordance with requirements of Australian Standard Specification No. K. 1-1926.

# 2. Check Analysis.

A check analysis may be made by the Corporation from a Bar, Flat, Billet, Bloom or Slab representing each cast. The Chemical composition thus determined shall conform to the require ments specified in clause 1.

Drillings for check analysis shall be taken with a drill from the end at any point midway between the centre and the surface of the Bloom.

# 3. Freedom from Defects.

The Bescom Steel shall be free from cracks, surface flaws, laminations or any other injurious defects. Sufficient discard shall be cropped to remove all pipe or contraction cavities. The Billets, Blooms or Slabs may be chipped to remove surface defects provided that the depth of chipping does not exceed 16 inch per inch of dimensions concerned up to a maximum depth of inch, and provided also that the width of the chipping is at least four times its greatest depth. Where two chipping grooves run approximately parallel and near together, the narrow tongue between them may be removed at the descretion of the Comptroller of Stores. The Bars, Flats and Billets shall be cut square on the ends, finished in a workmanlike manner and shall be commercially straight The Billets, Blooms and Slabs shall have rounded corners.



#### · APPENDIX "R"-continued.

#### 4. Limits of Tolerance.

The Bescom Steel Bars, Flats, Blooms, Billets and Slabs shall be true to the ordered dimensions within the following limits of tolerance:—

Bars or Flats. Up to ‡"	diameter,	thicknes	s or width	Minus 0.007".	Plus 0.007"
Over $\frac{1}{2}''$ to $1''$	,,	,,	,,	0.010"	0.010"
Over I' to 2"	"	**	,,	1 " 64 "	3 <sub>2</sub> "
Over 2" to 3"	,,	,,	,,	3,2,	64
Over 3" to 5" .Over 5" to 8"	**	11	* **	3,2,	3 7
Over 8"	**	17	**	ាថិ 1"	1.7 3.2 " 64 " 3.7 1.8 "
Length.	,,	?; Plus	2" minus	Nil.	8

Item No. 2552 Flats for 1" Superheater Element Nuts :-

(a) Melbourne Iron and Steel Mills-

Width and Thickness ... Plus or Minus \( \frac{1}{64} \)"

(b) McPherson's Pty. Ltd.

Width ... Plus \( \frac{3}{4} \)" Minus \( \frac{1}{12} \)

Thickness ... ... \( \frac{1}{12} \)" \( \frac{1}{12} \)" \( \frac{1}{12} \)"

BILLETS, BLOOMS AND SLABS.

Section Dimensions:

# 5. Branding.

Each Bar, Flat, Billet, Bloom or Slab shall be branded on the end with the cast number and the Manufacturer's name or trade mark, and a brand indicating that it is Bescom Steel. Small section bars delivered in bundles shall have a metal tag securely attached durably and legibly marked with the specified information.

#### 6. Painting.

The ends of each Bar, Flat and Billet of Grade "B" (High Carbon) Bescom Steel shall be painted with Orange paint by and at the cost of the Contractor.

Grade "A" not to be painted.

# 7. Inspection and Tests.

The Contractor shall supply a certificate stating the process of manufacture, and a test sheet signed by the manufacturer, giving the results of the chemical analysis of each cast in each delivery of Bars, Flats, Billets, Blooms or Slabs, under the Contract.

In the event of any Bar, Flat, Billet, Bloom or Slab being found after delivery, with injurious defects or not true to the specified dimensions within the specified limits of tolerance, it shall be rejected and shall be replaced by and at the cost of the Contractor, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

# 8. Weights.

All weights shall be ascertained by weighing the Bescom Steel on the weighbridge scales or other weighing machines of the Corporation at Newport, Victoria, and all such weights so ascertained by the Comptroller of Stores shall, for all purposes, be accepted as correct and final and binding.

# 9. Defects Showing During Fabrication.

Should any portion of the Bescom Steel show injurious defects in course of fabrication by the Corporation the Contractor shall be notified, and provided the material has been properly treated by the Corporation, the Contractor shall, at his own expense, and at the discretion of the Comptroller of Stores, replace or make good the defective material, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

APPENDIX "S."

SPECIFICATION FOR

NUT STEEL BARS.

Ітемя 2547-2551с.

# 1. Particulars.

The Nut Steel Bars shall be suitable for the manufacture of Nuts and shall possess good screwing qualities.

#### Limits of Tolerance.

The Nut Steel Bars shall be commercially straight and true to the ordered dimensions within the following limits of tolerance:—

(a) Melbourne Iron and Steel Mills—
For ½" to 1"
Over 1" to 2"
Thickness or Width
Minus ½", Plus or Minus 0.010"
Minus ½", Plus ½"

. APPENDIX "S"-continued.

# (b) McPherson's Pty. Ltd.-

	Wідтн.			`		
	. , ***11	ЭТΗ	Over ½"	up to I"	Over 1"	up to 2"
	Plus.	Minus.	Plus.	Minus.	Plus.	Minus.
Up to and including 1" Over 1" up to and including 2"	32 32 64	1 " 64" 1 " 32"	0.010″ 0.015″	0·010" 0·015"	1 " 32 "	1 "

#### 3. Branding

The Nut Steel Bars shall be bundled and securely tagged with a metal tag, stamped with the cast number and Manufacturer's name or trade mark and the words "Nut Steel."

#### 4. Inspection and Tests.

The Contractor shall supply a test sheet signed by the Manufacturer giving the results of each of the specified mechanical tests and chemical analysis of each cast in each delivery. In the event of any Nut Steel Bar being found after delivery with injurious defects or not true to the specified dimensions within the specified limits of tolerance it shall be rejected and shall be replaced by and at the cost of the Contractor.

# 5. Weights.

All weights shall be ascertained by weighing the Nut Steel Bars on the weighbridge scales or other weighing machines of the Corporation at Newport, Victoria, and all such weights so ascertained by the Comptroller of Stores shall, for all purposes, be accepted as correct and final and binding.

# 6. Defects Showing During Fabrication.

M

Should any portion of the Nut Steel show injurious defects in course of fabrication by the Corporation the Contractor shall be notified, and provided the Nut Steel has been properly treated by the Corporation the Contractor shall at his own expense and the discretion of the Comptroller of Stores replace or make good the defective Nut Steel.

The Nut Steel shall show on analysis:-

(a) Melbour	rne Iron and Steel Mills.	(b) McPherson's Pty. Ltd.
Carbon	·1% maximum	. 1% to 15%
Manganese	·5% to ·7%	5% to 7%
Phosphorus	08% maximum	09% maximum
Sulphur	.12% ,,	·1% to ·15%
Silicon '	· —	·1% maximum

The physical properties of the Nut Steel shall be: -

proportion of the first cites of the	• :
lelbourne Iron and Steel Mills.	McPherson's Pty. Ltd.
Ultimate Tensile Strength about 28-32 tons	Ultimate Tensile Strength 27 tons Elongation 25%

# APPENDIX "T."

# SPECIFICATION FOR

# MILD STEEL TYRE RETAINING RING SECTION.

ITEMS 2553-2557.

# 1. Particulars.

The Mild Steel Section shall be in accordance with Australian Standard Specification No. A1-1931 as applied to Mild Steel Bars for "A" class steel, and with the particulars shown on V.R. Drawings shown opposite the particular item in the Schedule.

The Mild Steel Sections shall be cut square on the ends and shall be commercially straight.

# 2. Limits of Tolerance.

The Section shall be rolled within the limits of tolerance shown on the specified V.R. Drawings. No length shall be under, nor more than 1' over that ordered.

APPENDIX "T"-continued.

# 3. Inspection and Tests.

All inspection and tests will be conducted by and at the cost of the Department at the Newport Rolling Stock Workshops.

#### 4. Weights.

All weights shall be ascertained by weighing the Mild Steel Sections on the weighbridge scales or other weighing machines of the Department at Newport, Victoria, and all such weights so ascertained by the Comptroller of Stores shall, for all purposes, be accepted as correct, and final and binding.

# 5. Defects Showing During Fabrication.

Should any portion of a Mild Steel Section show injurious defects in course of fabrication by the Department, the Contractor shall be notified, and provided the Mild Steel Section has been properly treated by the Department, the Contractor shall, at his own expense, and at the discretion of the Comptroller of Stores, replace or make good the defective section.

# APPENDIX "U."

# SPECIFICATION FOR

# STEEL BILLETS, BLOOMS AND SLABS FOR FORGINGS AND AXLES.

ITEMS 2563-2573, 2563A-2573A.

#### 1. Particulars.

Class J, K, L, M, P and Mild Steel, Billets, Blooms and Slabs for Forgings shall, except where shown otherwise in this Specification, be in accordance with Australian Standard Specification No. E16-1927T.

Class S, T and U Billets, Blooms and Slabs for Axles, etc., shall, except where shown otherwise in this Specification, be in accordance with Australian Standard Specification No. E18-1927T.

All Billets, Blooms and Slabs shall be cut square on the ends and shall be commercially straight.

All Billets, Blooms and Slabs, other than Round Blooms, shall have rounded corners. Particulars of the various classes of Steel for Billets, Blooms and Slabs are as follows:—

			·		
Class	Description of Forgings	Process of Manufacture	Percentage of Sulphur or of Phosphorus	Tensile Break- ing Strength Tons per sq. in.	Minimum Elongation. Per cent.
J.	Special Forgings which will be case . hardened	Acid or Basic Open Hearth or Electric	0.05	Up to 27	25
K.	Ordinary Forgings	·Acid or Basic Open Hearth or Electric	0.06	25 with to 32 with	
L	Special Forgings without wearing surfaces	Acid Open Hearth Basic Open Hearth Electric	0·05 0·04 0·04	32 with to 38 with	
M	Special Forgings with wearing sur- faces	Acid Open Hearth Basic Open Hearth Electric	0·05 0·04 0·04	40 with to 45 with	
P	Boiler Forgings	Acid Open Hearth Basic Open Hearth Electric	0·05 0·04 0·04	26 with to 32 with	
Mild Steel	Ordinary Forgings	Acid or Basic Open Hearth or Electric	0.06	28 with to 33	20% Test Piece "B"

<u>7≙5</u> 300

APPENDIX "U"-continued.

Particulars of the various classes of Steel for Billets, Blooms and Slabs-continued.

CI	Description	Process	Perc	ENTAGE .	Tensile Breaking	Minimum
Class	ot Forgings	of Manufacture	Sul- phụr	Phos- phorus	Strength Tons per sq. in.	Elongation Per cent.
s	Crank Axle	Acid Open Hearth	·04	∙05	min.	
		Basic Open Hearth Electric	·04 ·04	·04 ·04	32	22
		Electric	104	-04		<u> </u>
Т	Straight Loco. Axles	Acid Open Hearth	.05	∙05	35 wit	h 25
		Basic Open Hearth	-04	.04	to	
		Electric	∙04	•04	40 wit	h 20
U	Tender, Car and	Acid Open Hearth	h		35 wit	h 25
	Wagon Axles	Basic Open Hearth	} ∙05	∙05	to	
		Electric	IJ	l .	40 wit	h 20



#### 2. Test Pieces.

The test pieces from other than Round Blooms shall be taken from a section drawn down to not less than 80% of the original section of the Billet, Bloom or Slab. The section drawn down for test shall receive the same treatment as is to be applied to the finished forgings and may be normalised before the test pieces are cut therefrom. The test pieces from Round Blooms shall be cut from pieces of the Round Bloom as rolled. The Round Bloom selected for test may be normalised (at the option of the Manufacturer) before the test pieces are cut from it.

The Bend test piece from all Billets, Blooms or Slabs shall be bent until the sides are parallel

only, without fracture.

# 3. Chipping for Surface Defects.

BILLETS, BLOOMS AND SLABS (ROUND EXCEPTED).

As specified in A.S.S. No. E16 and 18-1927T.

ROUND BLOOMS.

The maximum depth of chippings shall be as stated on each order.

#### 4. Rolling Margin.

The Billets, Blooms and Slabs shall be true to the ordered dimensions within the following limits of tolerance:—

BILLETS, BLOOMS AND SLABS (ROUND EXCEPTED).

Section Dimensions:-

WEIGHT.—No Billet, Bloom or Slab shall be under nor more than 5% over the ordered weight. When ordered to length—Plus 2". Minus Nil.

Round Blooms.

Diameter Plus 3" Minus Nil. Length Plus 2" Minus Nil.

The Round Blooms shall be not more than 1" out of straight in eight feet of length.

# 5. Branding.

Each Billet, Bloom and Slab shall be branded on each end with the cast number, the Manufacturer's name or trade mark, and the class letter. The letters "M.S." shall be taken as the class letter for Mild Steel Billets, Blooms or Slabs.

# 6. Painting.

The ends of each M.S. Bloom shall be painted with blue paint by and at the cost of the Contractor.

# 7. Inspection and Tests.

The Contractor shall supply a certificate stating the process of manufacture, and a test sheet signed by the Manufacturer, giving the results of each of the specified mechanical tests and the chemical analysis of each cast in each delivery of Billets, Blooms and Slabs under the Contract.

In the event of any Billet, Bloom or Slab being found after delivery, with injurious defects or not true to the specified dimensions and weights within the specified limits of tolerance, it shall be rejected and shall be replaced by and at the cost of the Contractor, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

#### 8. Weights.

All weights shall be ascertained by weighing the Steel Billets, Blooms and Slabs on the weighbridge scales or other weighing machines of the Corporation, and all such weights so ascertained by the Comptroller of Stores shall for all purposes be accepted by the parties to this Contract as correct and final and binding.

APPENDIX "U"-continued.

#### 9. Defects Showing During Fabrication.

Should any Billet, Bloom or Slab show injurious defects in course of fabrication by the Corporation the Contractor shall be notified and provided the Billet, Bloom or Slab has been properly treated by the Corporation, shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective Billet, Bloom or Slab.

# APPENDIX "V".

# SPECIFICATION FOR

# FISHBOLT STEEL BARS.

ITEM 2486, 2486A

#### 1. Particulars.

The Fishbolt Steel Bars shall be in accordance with Australian Standard Specification No. E. 25-1928 (except where shown otherwise in this Specification). The Bars shall be commercially straight.

# 2. Limits of Tolerance.

The Bars shall be true to the ordered dimensions within the following limits of tolerance :-Over ½" dia. up to 1" dia. ... Plus 0.010" Minus 0.010" Length. Plus 2" Minus Nil.

# Painting.

The ends of each bar shall be painted Blue with a White band by and at the cost of the Contractor.

# 4. Inspection and Tests.

The Contractor shall supply a certificate stating the process of manufacture, and test sheet signed by the Manufacturer, giving the results of each of the specified mechanical tests and the chemical analysis of each cast in each delivery of Steel.

In the event of any material being found after delivery, with injurious defects or not true to the specified dimensions within the specified limits of tolerance, it shall be rejected and shall be replaced by and at the cost of the Contractor, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

All weights will be ascertained by weighing the material on the weighbridge scales or other weighing machines of the Corporation at Newport, Victoria, and all such weights so ascertained by Comptroller of Stores shall for all purposes be accepted by the parties to this Contract as correct, final and binding.

# 6. Defects Showing During Fabrication.

Should any portion of the material show injurious defects during course of fabrication by the Corporation the Contractor will be notified and, provided it has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective material.

# APPENDIX "W"

# SPECIFICATION FOR

# ROUND EDGE STEEL FLAT FOR DRAFT KEYS.

ITEM 2546,

# 1. Particulars.

The Steel Flat shall be in accordance with the particulars shown on V.R. Drawing No. 7645. It shall be manufactured by an approved process and shall show on analysis not more than 0.04 per centum of Sulphur or of Phosphorous and a standard test piece "C" shall show a tensile breaking strength of 32 tons per square inch with an elongation of not less than 25 per cent. to 38 tons per square inch with an elongation of not less than 20 per cent. In all other respects it shall be in accordance with Australian Standard Specification No. A1-1931.

The Bars shall be commercially straight.

# 2. Inspection and Tests.

All inspections and tests will be conducted by and at the cost of the Corporation on its premises.

# 3. Weights.

All weights will be ascertained by weighing the material on the weighbridge scales or other weighing machines of the Corporation at Newport, Victoria, and all such weights so ascertained by the Comptroller of Stores shall, for all purposes, be accepted by the parties to this Contract as correct, final and binding.

# 4. Defects Showing During Fabrication.

Should any portion of the material show injurious defects during course of fabrication by the Corporation the Contractor will be notified, and provided it has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective material.



#### APPENDIX "X."

#### SPECIFICATION FOR

# SILICON CHROME STEEL FOR VOLUTE SPRINGS.

Ітем 2534с.

# 1. Quality of Material.

The Steel Bars shall be manufactured from the highest quality steel made from selected . material by an approved process.

#### 2. Chemical Analysis.

The Steel Bars shall show on analysis :-

		Minimum.	Maximum
Carbon		0.47%	0.56%
Manganese		0.55	0.70
Chrome	• • • •	0.60	0.80
Silicon		$1 \cdot 20$	1.60
Phosphorus \ Sulphur	•		0.05

All analyses shall be carried out in accordance with Australian Standard Specification No. K. 1-1926.

#### 3. Check Analysis.

A check analysis may be made by the Corporation from a Bar representing each cast. The chemical composition thus determined shall comform to the requirements specified in Clause 2.

#### 4. Freedom from Defects.

The Steel Bars shall be smooth on their surfaces and free from all defects of any kind. They shall be commercially straight and cut square on the ends.

#### 5. Limits of Tolerance.

The Steel Bars shall be true to ordered dimensions within the following limits of tolerance:—

			Permissible Inc	
		-	Over	Under
hickness—Up to 3" inclusive	•••		0.012	0.005
Ower 3" to 3" inclusive	•••		0.015	0.010
Width—1" to 2" inclusive	•••		0.012	0.012
Owen 9" to 4" inclusive	•••		0.025	0.025
Over 4" to 6" inclusive	• • •		0.035	0.025

Length Plus 1", Minus Nil.

#### 6. Branding.

Each Steel Bar shall be marked in a durable and legible manner with the Manufacturer's name or trade mark, cast number and a brand indicating that it is Silicon Chrome quality Spring Steel.

#### 7. Painting.

Each Steel Bar shall be painted on each end, Purple with Red band.

#### 8. Inspection and Tests.

The Contractor shall supply a certificate stating the process of manufacture, and a test sheet signed by the Manufacturer giving the chemical analysis of each cast in each delivery of Bars.

In the event of any Steel Bar being found, after delivery, with injurious defects, or not true to the specified dimensions within the specified limits of tolerance, it shall be rejected and shall be replaced by and at the cost of the Contractor, c.i.f., Melbourne, or if of Victorian manufacture, in trucks at place of delivery.

#### 9 Weight

All weights shall be ascertained by weighing the Steel Bars on the weighbridge scales or other weighing machines of the Corporation of Newport, Victoria, and all such weights so ascertained by the Comptroller of Stores shall for all purposes be accepted as correct, final and binding.

# 10. Defects Showing During Fabrication.

Should any portion of a Steel Bar show injurious defects in course of fabrication by the Corporation the Contractor shall be notified, and provided the Steel Bar has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Proper Chief Officer replace or make good the defective Steel Bar.

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