W. T. GLOVER & Co.,

SALFORD.
MANCHESTER

Electric Wires & Cables

39. Victoria Street
Westminster
LONDON. S.W.

AUGUST 1897.

ESTABLISHED 1868.

W. T. GLOVER & CO.

(HENRY EDMUNDS AND GODFREY B. SAMUELSON),

ELECTRICAL WIRE AND CABLE MAKERS,

SALFORD, MANCHESTER.

Awarded Six Gold and Silver Medals.

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ALL PRICES ARE SUBJECT TO ALTERATION WITHOUT NOTICE.

 AUGUST, 1897.

A 1 and A B C Code Used.

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PREFACE.

IN RE-ISSUING OUR PRICE LIST in pocket form we take the opportunity of again calling attention to the extensive tables at the commencement of the book, giving details of Conductors, with their respective areas, weights, resistances, etc. These tables will be found of special value to engineers and others in compiling estimates.

On pages 12 and 13 will be found a table showing the differences between the **various wire gauges** in use.

We would also refer the reader to our Comparative Table of Equivalent Conductors at the end of the book, coupled with some useful formulæ.

ELECTRIC LIGHT CABLES for General use.—All our vulcanized wires and cables are immediately after being vulcanized immersed in water for 24 hours and carefully tested with not less than 400 volts at a temperature of 60° Fahr. Each coil issued from the works is accompanied by a certificate from the Electrical Department, showing the guaranteed insulation resistance.

THE INSULATION RESISTANCE given at the heads of the columns in list is the guaranteed minimum insulation for the largest size conductor.

For internal wiring and general use we recommend our classes 41 to 57, according to the voltage used.

Suitable Flexibles will be found on pages 56 to 59. Pure rubber insulation will be found in our classes 11 to 14.

DIATRINE CABLES.—These Cables are non-rubber, lead covered, either armoured or unarmoured; are suitable for High or Low Pressure Mains, for Town Lighting, and underground work generally.

KOPPERKLAD WIRE.—We are now making a patent concentric wire, which we style "Kopperklad," the outer being a copper tube instead of the usual armour return. Particulars will be found on page 54.

CONCENTRIC CABLES WITH BARE RETURN.—We manufacture conductors for the various systems of "concentric" wiring, the outer conductor being of equal carrying capacity to the inner, and being formed of iron or copper wire, lead, or both; these systems are generally known as the "Andrews" and "C C" systems.

CONCENTRIC CABLES, both conductors insulated, classes 81 to 83, suitable for any voltage up to 2,000 when under B.O.T. rules. Higher voltages may be used for private installations.

CONDUCTIVITY WEDGE ARMOUR for "Bare Returns," Pit Work, &c. Page 31.

ARMATURE MATERIAL.—We make a speciality of this class of work, and are able to supply all kinds of Armature Wire or Strip promptly, even if not in stock. For purposes of reference we have included in this list 260 sizes of solid sectional Copper Strip, which can be supplied promptly, and for which we have tools ; sizes not in this list can be delivered in a few days from receipt of order.

COMPRESSED STRAND, laid up by our special method, can be supplied in continuous lengths, with suitable covering, according to varying requirements.

SOLID-ENDED ARMATURE BARS.—These Bars are supplied to any section at short notice, and on page 70 will be found some of the tools which we have in stock ; additional sizes are added as occasion requires.

By arrangement with Messrs. Crompton and Co. these Bars are supplied royalty paid, the royalty being included in the price of the Bar ; the same applies to Compressed Strand when used for Armature winding.

RESISTANCE WIRES.—We call special attention to our new Resistance Wire, " Reostene," which has, approximately, forty-four times the resistance of copper.

We also supply Manganin as heretofore, the resistance of which is twenty-four times that of copper ; its resistance is practically constant at all times, and it is therefore particularly suitable for Standard and Instrument work. Particulars and prices of both will be found in the list.

WORDINGHAM'S PILLAR DISTRIBUTORS. — By arrangement with Mr. Wordingham, the Electrical Engineer to the Manchester Corporation, we manufacture and supply his Patent Pillar Distributor for Town Mains, and which is now adopted throughout the Manchester lighting system.

AUTOMATIC SWITCH (EDMUNDS PATENT).—We manufacture and supply these switches. They are in use in several towns, turning out arc lamps at a given time, and automatically switching in incandescent lamps. Full particulars on application.

JUNCTION BOXES, ROTATING SWITCHES, JOINTING MATERIALS, TOOLS, &c., supplied promptly.

WE ALSO MAKE A SPECIALITY OF Non-Ignitable Fuse Wire ; Dry Core Cables for Telephony ; H. C. Copper Castings ; Rail Bonds for Tramway Work ; Trolley Wire ; Bus Bars for Central Station Work ; Resin Cored Solder ; Apparatus for Heating by Electricity. Full particulars and prices on application.

DETAILS OF CONDUCTORS.

Showing Dimensions, Capacity, Resistance, and Weight.

S.W.G.	At 1000 per Sq. In., Loss = 2½ Volts per 100 Yards.	Diameter of each Wire.		Diameter of the Strand.		Area.		Resistance at 60° Fahr.			Weight.			S.W.G.
	Ampères.	Inch.	M/M.	Inch.	M/M.	Square Inches.	Square M/M.	Per 1,000 Yds.	Per Mile.	Per Kilo-metre.	Per 1,000 Yards.	Per Mile.	Per Kilo-metre.	
								Ohms.	Ohms.	Ohms.	Lbs.	Lbs.	Kilegrs.	
7/0	196·34	·500	12·700	...	...	·196349	126·672	·1246	·219301	·1363	2270	3995	1126	7/0
6/0	169·09	·464	11·786	...	...	·169093	109·090	·1446	·254651	·1581	1955	3441	969	6/0
5/0	146·57	·432	10·972	...	...	·146574	94·560	·1669	·293774	·1825	1694	2982	840	5/0
4/0	125·66	·400	10·160	...	...	·125663	81·070	·1946	·342658	·2128	1454	2557	721	4/0
3/0	108·68	·372	9·449	...	...	·108686	70·117	·2251	·396183	·2462	1256	2211	623	3/0
2/0	95·11	·348	8·839	...	...	·095114	61·362	·2572	·452713	·2813	1099	1935	545	2/0
1/0	82·44	·324	8·229	...	...	·082447	53·190	·2967	·522266	·3245	953	1677	472	1/0
1	70·685	·300	7·620	...	...	·070685	45·603	·3461	·609171	·3786	817	1439	405	1
2	59·828	·276	7·010	...	...	·05982	38·597	·4089	·719719	·4473	691	1218	343	2
3	49·875	·252	6·400	...	...	·04987	32·176	·4905	·863337	·5366	576	1015	286	3
4	42·273	·232	5·893	...	...	·04227	27·272	·5787	1·01860	·6330	488	860	242	4
5	35·298	·212	5·285	...	...	·03529	22·772	·6931	1·21986	·7582	405	718	201	5
6	28·95	·192	4·877	...	...	·0289	18·678	·8450	1·48723	·9244	334	589	165	6
7	24·32	·176	4·470	...	...	·0243	15·659	1·0056	1·76993	1·1001	281	495	139	7
8	20·106	·160	4·064	...	...	·0201	13·035	1·2168	2·14161	1·3311	232	409	115	8
9	16·28	·144	3·658	...	...	·0163	10·507	1·5022	2·64397	1·6434	188	331	93	9
10	12·86	·128	3·251	...	...	·0128	8·301	1·9012	3·34626	2·0799	148	261	73	10
11	10·56	·116	2·946	...	...	·0105	6·818	2·3150	4·07442	2·5326	122	215	60	11
12	8·49	·104	2·642	...	...	·0085	5·480	2·8800	5·0688	3·1507	98	173	48	12
13	6·64	·092	2·337	...	...	·0066	4·288	3·6803	6·4744	4·0262	76	135	37	13
14	5·02	·080	2·032	...	...	·0050	3·243	4·8673	8·5665	5·3248	58	102	28	14
15	4·07	·072	1·829	...	...	·0040	2·627	6·0089	10·5758	6·5737	47	83	23	15
16	3·21	·064	1·626	...	...	·0032	2·075	7·6049	13·3847	8·3197	37	65	18·3	46
17	2·46	·056	1·422	...	...	·0024	1·254	9·9332	17·4826	10·867	28	50	13·5	17
18	1·80	·048	1·219	...	...	·0018	1·167	13·5198	23·7951	14·790	21	36·8	10·4	18
19	1·25	·040	1·016	...	...	·0012	0·8107	19·4697	34·2668	21·299	14·5	25·5	7·1	19
20	1·01	·036	0·914	...	...	·0010	0·6567	24·0354	42·3025	26·294	11·7	20·7	5·8	20
21	0·804	·032	0·813	..	...	·0008	0·5189	30·422	53·5426	33·281	9·3	16·3	4·6	21
22	0·615	·028	0·711	...	...	·0006	0·3972	39·729	69·9249	43·463	7·1	12·5	3·5	22
3/25	0·9614	·020	0·508	·042	1·018	·00096	0·619	25·955	45·671	28·395	11	19	5	3/25
3/24	1·1631	·022	0·559	·047	1·120	·00116	0·748	21·454	37·761	23·472	13·5	23	6	3/24
3/23	1·3843	·024	0·610	·051	1·222	·00138	0·890	18·026	31·726	19·720	16	28	8	3/23
3/22	1·8843	028	0·711	·059	1·425	·00188	1·212	13·243	23·3080	14·484	22	38	11	3/22
3/21	2·4608	·032	0·813	·068	1·780	·00246	1·586	10·144	17·853	11·097	28	49	13·9	3/21
3/20	3·1147	·036	0·914	·077	1·830	·00311	2·000	8·0118	14·100	8·764	36	63	17·8	3/20
3/19	3·845	·040	1·016	·082	2·035	·00384	2·476	6·4899	11·420	7·099	44	77	21·8	3/19
3/18	5·5373	·048	1·219	·102	2·440	·0055	3·547	4·5066	7·931	4·930	64	112	31·7	3/18

DETAILS OF CONDUCTORS.

Showing Dimensions, Capacity, Resistance, and Weight.

S.W.G.	At 1,000 per Sq. In., Loss = 2½ volts per 100 yards.	Diameter of each Wire.		Diameter of the Strand.		Area.		Resistance at 60° Fahr.			Weight.			S.W.G.
	Ampères.	Inch.	M/M	Inch.	M/M	Square Inches.	Square M/M	Per 1,000 yards.	Per Mile.	Per Kilometre.	Per 1,000 Yards.	Per Mile.	Per Kilometre.	
								Ohms.	Ohms.	Ohms.	Lbs.	Lbs.	Kilogrs.	
7/25	2·200	·020	0·508	·060	1·54	·0022	1·419	11·124	19·578	12·44	25·5	45	13·0	7/25
7/24	2·7139	·022	0·559	·066	1·677	·0027	1·741	9·1952	16·183	10·059	31·5	55	15·6	7/24
7/23	3·2301	·024	0·610	·072	1·83	·0032	2·064	7·7256	13·597	8·451	37	65	18·3	7/23
7/22	4·3968	·028	0·711	·084	2·13	·0043	2·773	5·6757	9·989	6·209	51	89	25·2	7/22
7/21½	5·0469	·030	0·762	·090	2·28	·0050	3·225	4·9445	8·702	5·409	58	102	28·7	7/21½
7/21	5·7419	·032	0·813	·096	2·439	·0057	3·676	4·3460	7·648	4·754	66	116	32·7	7/21
7/20½	6·504	·033	0·838	·099	2·51	·0064	4·100	4·0864	7·164	4·450	75	132	37·0	7/20½
7/20	7·2678	·036	0 914	·108	2·74	·0072	4·644	3·4336	6·043	3·756	84	147	41·6	7/20
7/19	8·972	·040	1·016	·120	3·04	·0089	5·740	2·7813	4·895	3·042	104	183	51·5	7/19
7/18	12·9207	·048	1·219	·144	3·66	·0129	8·320	1·9314	3·399	2·112	149	263	74·0	7/18
7/17	17·5858	·056	1·422	·168	4·27	·0175	11·287	1·4190	2·497	1·552	203	357	100·6	7/17
7/16	22·989	·064	1·626	·192	4·88	·0229	14·77	1·0864	1·912	1·188	266	468	131·8	7/16
7/15	29·0705	·072	1·829	·216	5·49	·0290	18·705	·8584	1·510	·938	336	591	166·6	7/15
7/14	35·889	·080	2·032	·240	6·10	·0358	23·091	·6953	1·224	·760	415	730	205·8	7/14
7/13	47·4638	·092	2·337	·276	7·111	·0474	30·573	·5257	·925	·575	549	967	272·3	7/13
7/12	60·6535	·104	2·642	·312	7·926	·0606	39·087	·4114	·724	·450	701	1233	347·6	7/12
7/11	75·4576	·116	2·946	·348	8·838	·0754	48·633	·3307	·5820	·361	872	1533	432	7/11
7/10	91·897	·128	3·251	·384	9·753	·0918	59·211	·2716	·4780	·297	1062	1869	527	7/10
7/9	116·282	·144	3·658	·432	10·974	·1162	74·94	·2146	·3776	·234	1343	2363	666	7/9
7/8	143·55	·160	4·064	·480	12·192	·1435	92·55	·1752	·3083	·191	1660	2921	823	7/8
7/6	206·72	·192	4·877	·576	14·631	·2067	133·32	·1207	·2124	·132	2390	4206	1185	7/6
19/24	7·3807	·022	·559	·110	2·795	·0073	4·708	3·3877	5·9623	3 706	85	149	42	19/24
19/23	8·7847	·024	·610	·120	3·050	·0087	5·611	2·8463	5·0094	3 113	101·5	178	50	19/23
19/22	11·9576	·028	·711	·140	3·555	·0119	7·67	2·0910	3·6801	2·287	138	242	68	19/22
19/21	15·6159	·032	·813	·160	4·065	·0156	10·06	1·6011	2·8179	1·752	180	316	89	19/21
19/20	19·765	·036	·914	·180	4·57	·0197	12·70	1·2650	2·2264	1·384	228	401	113	19/20
19/19	24·400	·040	1·016	·200	5·08	·0244	15·73	1·0247	1·8034	1·121	282	496	139·8	19/19
19/18	35·138	·048	1·219	·240	6·10	·0351	22·63	·7115	1·2522	·778	406	714	201	19/18
19/17	47·826	·056	1·422	·280	7·10	·0478	30·83	·5228	·9261	·572	553	973	274	19/17
19/16	62·467	·064	1·626	·320	8·12	·0624	40·24	·4002	·7043	·438	722	1270	358	19/16
19/15	79·060	·072	1·829	·360	9·14	·0790	50·95	·3162	·5565	·346	914	1608	453	19/15
19/14	97·604	·080	2·032	·400	10·1	·0976	62·95	·2561	·4507	·280	1128	1985	559	19/14
19/13	129·083	·092	2·337	·460	11·6	·1290	83·20	·1937	·3409	·212	1491	2624	739·5	19/13
19/12	164·953	·104	2·642	·520	13·2	·1649	106·36	·1515	·2666	·166	1906	3354	945	19/12
19/11	205·215	·116	2·946	·580	14·73	·2052	132·35	·1218	·2142	·133	2372	4174	1176	19/11
19/10	249·870	·128	3·251	·640	16·25	·2498	161·12	·1000	·1760	·109	2888	5082	1432	19/10
19/9	316·241	·144	3·658	·720	18·2	·3162	203·94	·07906	·1391	·0865	3655	6432	1812	19/9
19/8	390·422	·160	4·064	·800	20·3	·3904	251·80	·06406	·1127	·0700	4513	7942	2238	19/8
19/7	472·410	·176	4·470	·880	22·3	·4724	304·69	·05292	·09313	·0579	5461	9611	2708	19/7

DETAILS OF CONDUCTORS.

Showing Dimensions, Capacity, Resistance, and Weight.

S.W.G.	At 1,000 per Sq. In., Loss = 2½ Volts per 100 yards.	Diameter of each Wire.		Diameter of the Strand.		Area.		Resistance at 60° Fahr.			Weight.			S.W.G.
	Ampères.	Inch.	M/M.	Inch.	M/M.	Square Inches.	Square M/M.	Per 1,000 Yds.	Per Mile.	Per Kilo-metre.	Per 1,000 Yards.	Per Mile.	Per Kilo-metre.	
								Ohms.	Ohms.	Ohms.	Lbs.	Lbs.	Kilogrs.	
37/24	14·344	·022	·559	·154	3·9	·0143	9·22	1·7396	3·0616	1·903	165	290	81·8	37/24
37/23	17·157	·024	·610	·168	4·2	·0171	11·02	1·4647	2·5724	1·599	198	348	98	37/23
37/22	23·354	·028	·711	·196	4·97	·0233	15·02	1·0737	1·8897	1·175	270	475	134	37/22
37/21	30·499	·032	·813	·224	5·69	·0304	19·60	·8222	1·4470	·8994	352	619	174·5	37/21
37/20	38·603	·036	·914	·252	6·4	·0386	24·89	·6496	1·1432	·7106	446	784	221	37/20
37/19	47·656	·040	1·016	·280	7·1	·0476	30·70	·5262	·9261	·5756	550	968	272·8	37/19
37/18	68·629	·048	1·219	·336	8·5	·0686	44·24	·3654	·6431	·3997	793	1395	393	37/18
37/17	93·409	·056	1·422	·392	9·9	·0934	60·24	·2684	·4723	·2936	1080	1900	535	37/17
37/16	122·004	·064	1·626	·448	11·3	·1220	78·69	·2055	·3616	·2248	1410	2481	699	37/16
37/15	154·411	·072	1·829	·504	12·8	·1544	99·58	·1624	·2858	·1776	1785	3141	885	37/15
37/14	190·630	·080	2·032	·560	14·2	·1906	122·93	·1315	·2314	·1438	2203	3877	1093	37/14
37/13	252·110	·092	2·337	·644	16·3	·2521	162·60	·09947	·17506	·1088	2914	5128	1445	37/13
37/12	322·169	·104	2·642	·728	18·4	·3221	207·75	·07783	·13698	·0851	3723	6552	1847	37/12
37/11	400·802	·116	2·946	·812	20·6	·4008	258·51	·06265	·11026	·0685	4633	8154	2298	37/11
37/10	488·018	·128	3·251	·896	22·77	·4880	314·76	·05138	·09042	·0562	5641	9928	2798	37/10
37/9	617·646	·144	3·658	1·008	25·6	·6176	398·3	·04060	·07145	·0444	7140	12566	3541	37/9
37/8	762·520	·160	4·064	1·120	28·4	·7625	491·8	·03288	·05786	·0360	8815	15514	4372	37/8
61/24	23·788	·022	·559	·198	5·031	·02378	15·3	1·0551	1·8569	1·154	275	484	136	61/24
61/23	28·3139	·024	·610	·216	5·490	·02831	18·2	·8865	1·5602	·970	327	575	162	61/23
61/22	38·540	·028	·711	·252	6·399	·03854	24·8	·6513	1·1462	·7125	446	784	221	61/22
61/21	50·3316	·032	·813	·288	7·317	·0503	32·4	·4987	·8777	·5455	572	1006	284	61/21
61/20	63·706	·036	·914	·324	8·226	·0637	41·0	·3940	·6934	·4310	736	1295	365	61/20
61/19	78·645	·040	1·016	·360	9·144	·0786	50·6	·3191	·5616	·3490	909	1599	451	61/19
61/18	113·255	·048	1·219	·432	10·971	·1132	73·0	·2216	·3900	·2424	1309	2303	649	61/18
61/17	154·149	·056	1·422	·504	12·798	·1541	99·3	·1628	·2865	·1781	1781	3134	883	61/17
61/16	201·339	·064	1·626	·576	14·634	·2013	129·8	·1246	·2192	·1363	2327	4095	1154	61/16
61/15	254·818	·072	1·829	·648	15·461	·2548	164·3	·09850	·17336	·1077	2945	5183	1460	61/15
61/14	314·588	·080	2·032	·720	18·288	·3145	202·8	·07979	·14043	·0872	3636	6399	1803	61/14
61/13	416·046	·092	2·337	·828	21·033	·4160	268·3	·06033	·10618	·0660	4809	8463	2385	61/13
61/12	531·661	·104	2·642	·936	23·778	·5316	342·8	·04721	·08308	·0516	6145	10815	3047	61/12
61/11	661·427	·116	2·946	1·044	26·514	·6614	426·6	·03795	·06679	·0415	7646	13456	3792	61/11
61/10	805·356	·128	3·251	1·152	29·259	·8053	519·4	·03116	·05484	·0340	9309	16383	4617	61/10
91/18	169·202	·048	1·219	·528	13·409	·1692	109·1	·14857	·02615	·1625	1956	3442	970	91/18
91/17	230·296	·056	1·422	·616	15·642	·2302	148·4	·10915	·1921	·1194	2661	4683	1319	91/17
91/16	300·797	·064	1·626	·704	17·886	·3007	193·9	·08357	·1471	·0914	3476	6117	1724	91/16
91/15	380·695	·072	1·829	·792	20·119	·3806	245·4	·06603	·1162	·0722	4400	7744	2182	91/15
91/14	469·990	·080	2·032	·880	22·352	·4699	303·0	·05348	·0941	·0585	5432	9560	2694	91/14
91/13	621·567	·092	2·337	1·012	25·707	·6215	400·8	·04044	·0711	·0442	7185	12645	3563	91/13
91/12	794·294	·104	2·642	1·144	29·062	·7942	512·2	·03164	·0556	·0346	9181	16158	4553	91/12
91/11	988·162	·116	2·946	1·276	32·406	·9881	637·3	·02543	·0447	·0278	11422	20102	5665	91/11

TABLE—Showing the differences between the various Wire Gauges in use.

Standard Wire Gauge Diameter.			Birmingham Wire Gauge Diameter.			Brown and Sharpe Wire Gauge Diameter.		
No. of Wire.	Inches.	Millimètres.	No. of Wire.	Inches.	Millimètres.	No. of Wire.	Inches.	Millimètres.
7/0	·500	12·700	7/0			7/0		
6/0	·464	11·786	6/0			6/0		
5/0	·432	10·973	5/0			5/0		
4/0	·400	10·160	4/0	·454	11·531	4/0	·460	11·684
3/0	·372	9·449	3/0	·425	10·795	3/0	·409	10·404
2/0	·348	8·839	2/0	·380	9·651	2/0	·3648	9·266
0	·324	8·229	0	·340	8·635	0	·3249	8·252
1	·300	7·620	1	·300	7·620	1	·2893	7·348
2	·276	7·010	2	·284	7·213	2	·2576	6·543
3	·252	6·400	3	·259	6·578	3	·2294	5·827
4	·232	5·893	4	·238	6·045	4	·2043	5·189
5	·212	5·385	5	·220	5·588	5	·1819	4·620
6	·192	4·877	6	·203	5·156	6	·1620	4·115
7	·176	4·470	7	·180	4·5719	7	·1443	3·665
8	·160	4·064	8	·165	4·1909	8	·1285	3·264
9	·144	3·658	9	·148	3·7591	9	·1144	2·906
10	·128	3·251	10	·134	3·4035	10	·1019	2·588
11	·116	2·946	11	·120	3·0479	11	·0907	2·304
12	·104	2·642	12	·109	2·7701	12	·0808	2·052
13	·092	2·337	13	·095	2·4129	13	·0720	1·829
14	·080	2·032	14	·083	2·1082	14	·0641	1·628
15	·072	1·829	15	·072	1·8288	15	·0571	1·450
16	·064	1·626	16	·065	1·6510	16	·0508	1·290
17	·056	1·422	17	·058	1·4732	17	·0452	1·150
18	·048	1·219	18	·049	1·2446	18	·0403	1·024
19	·040	1·016	19	·042	1·0668	19	·0354	·900
20	·036	·914	20	·035	·8890	20	·0320	·813
21	·032	·813	21	·032	·8128	21	·0285	·724
22	·028	·711	22	·028	·7112	22	·0253	·643
23	·024	·610	23	·025	·6350	23	·0226	·574
24	·022	·559	24	·022	·5588	24	·0201	·511
25	·020	·508	25	·020	·5080	25	·0179	·455
26	·018	·457	26	·018	·4571	26	·0159	·404
27	·0164	·417	27	·016	·4064	27	·0142	·361
28	·0148	·376	28	·014	·3556	28	·0126	·320
29	·0136	·345	29	·013	·3302	29	·0112	·284
30	·0124	·315	30	·012	·3048	30	·0100	·254
31	·0116	·295	31	·0115	·2920	31	·0089	·2261
32	·0108	·274	32	·0110	·2793	32	·0079	·2007
33	·0100	·254	33	·0100	·2539	33	·0071	·1803
34	·0092	·2337	34	·0095	·2412	34	·0063	·1600
35	·0084	·2134	35	·0087	·2209	35	·0056	·1422
36	·0076	·1930	36	·0079	·2006	36	·0050	·1270
37	·0068	·1727	37	·0073	·1854	37	·0044	·1117
38	·0060	·1524	38	·0068	·1727	38	·0039	·0990
39	·0052	·1321	39	·0063	·1600	39	·0035	·0888
40	·0048	·1219	40	·0058	·1473	40	·0031	·0787
41	·0044	·1118	41	·0050	·1269	41		
42	·0040	·1016	42	·0040	·1015	42		
43	·0036	·0914	43	·0030	·0760	43		
44	·0032	·0813	44	·0020	·0508	44		
45	·0028	·0711	45			45		
46	·0024	·0610	46			46		
47	·0020	·0508	47			47		
48	·0016	·0406	48			48		
49	·0012	·0305	49			49		
50	·0010	·0254	50			50		

CONDUCTORS.			CLASS No. 41. BRAIDED. Insulated pure and Vulcanizing Rubber, then braided, the whole thoroughly vulcanized together and served with special compound.			
			300 Megohm Grade.			
Legal Standard Gauge. S.W.G.	Dielectric Classes 41, 42, 43, 51, 52, 53, and 55.	Finished Diameter Classes 41, 42, and 43.	Approx. Weight per Mile.	Guaranteed Insulation.	Reference No.	Price per Mile.
			lbs.	Mgms.		
1/22	·030	·110	49	1200	12241	£7 0
1/21	·030	·118	60	,,	12141	8 10
1/20	·032	·125	72	,,	12041	9 15
1/19	·033	·140	84	,,	11941	10 5
1/18	·034	·155	101	,,	11841	11 15
1/17	·036	·165	114	,,	11741	13 10
1/16	·036	·173	129	1000	11641	14 15
1/15	·036	·186	152	,,	11541	16 15
1/14	·038	·190	184	,,	11441	19 0
1/13	·039	·210	229	,,	11341	22 0
1/12	·040	·213	270	750	11241	25 15
1/11	·042	·225	325	,,	11141	30 5
1/10	·043	·246	397	,,	11041	34 15
1/9	·044	·260	483	,,	10941	41 15
1/8	·046	·280	580	,,	10841	49 0
3/25	·032	·136	70	1000	32541	11 0
3/23	·034	·154	91	,,	32341	13 0
3/22	·036	·163	100	,,	32241	14 5
3/20	·038	·180	136	,,	32041	18 0
3/18	·040	·206	192	,,	31841	24 10
7/25	·035	·168	106	1000	72541	15 0
7/24	·035	·173	115	,,	72441	16 0
7/23	·036	·178	133	750	72341	17 10
7/22	·039	·193	170	,,	72241	19 10
7/21½	·040	·200	187	,,	721½41	21 15
7/21	·040	·203	204	,,	72141	23 0
7/20½	·040	·208	226	,,	720½41	24 5

If taped instead of braided, 10s. per mile less than the above prices.

Goods packed and delivered f.o.b. 2½ per cent extra.

Legal Standard Gauge. S.W.G.	CLASS No. 42. BRAIDED. Braided externally, same as Class 41, but insulation of superior quality. 600 Megohm Grade.				CLASS No. 43. BRAIDED. Braided externally, same as Class 42, but insulation of superior quality. 1,000 Megohm Grade.			
	Approx. Weight per Mile.	Guaranteed Insulation.	Reference No.	Price per Mile.	Approx. Weight per Mile.	Guaranteed Insulation.	Reference No.	Price per Mile.
	lbs.	Mgms.			lbs.	Mgms.		
1/22	48	2200	12242	£7 17	48	3000	12243	£8 5
1/21	59	,,	12142	9 0	59	,,	12143	9 10
1/20	71	,,	12042	10 5	70	,,	12043	10 15
1/19	83	,,	11942	10 15	82	,,	11943	11 5
1/18	100	,,	11842	12 10	99	,,	11843	13 0
1/17	113	,,	11742	14 5	112	,,	11743	14 15
1/16	128	1500	11642	15 10	126	2500	11643	16 10
1/15	150	,,	11542	17 15	148	,,	11543	18 10
1/14	182	,,	11442	20 0	180	,,	11443	21 0
1/13	227	,,	11342	23 5	224	,,	11343	24 10
1/12	274	1000	11242	27 10	270	2000	11243	28 10
1/11	323	,,	11142	32 0	318	,,	11143	33 10
1/10	395	,,	11042	37 0	390	,,	11043	39 0
1/9	481	,,	10942	44 0	476	,,	10943	46 0
1/8	578	,,	10842	51 0	572	,,	10843	53 0
3/25	69	1500	32542	11 12	69	2500	32543	12 5
3/23	90	,,	32342	13 15	89	,,	32343	14 10
3/22	99	,,	32242	15 0	98	,,	32243	15 15
3/20	135	,,	32042	18 15	133	,,	32043	19 15
3/18	191	,,	31842	25 0	189	,,	31843	26 5
7/25	106	1500	72542	15 10	106	2500	72543	16 10
7/24	114	,,	72442	17 0	113	,,	72443	18 0
7/23	132	1000	72342	18 5	131	1500	72343	19 0
7/22	169	,,	72242	21 0	167	,,	72243	22 5
7/21½	186	,,	721½42	23 0	184	,,	721½43	24 0
7/21	203	,,	72142	24 0	200	,,	72143	25 15
7/20½	225	,,	720½42	25 10	222	,,	720½43	27 0

Goods packed and delivered f.o.b. 2½ per cent extra.

VULCANIZED INSULATION.—

Legal Standard Gauge. S.W.G.	Finished Diameters—Classes 51, 52, 53, and 55.	CLASS No. 51. TAPED & BRAIDED. Insulated pure and vulcanizing Rubber and proofed tape, all thoroughly vulcanized together, then braided and served with special compound. — 300 Megohm Grade.				CLASS No. 52. TAPED & BRAIDED. Taped and Braided externally, same as Class 51, but insulation of superior quality. — 600 Megohm Grade.			
		Approx. Weight per Mile.	Guaranteed Insulation.	Reference No.	Price per Mile.	Approx. Weight per Mile.	Guaranteed Insulation.	Reference No.	Price per Mile.
		lbs.	Mgms.			lbs.	Mgms.		
1/22	·155	71	1200	12251	£8 5	67	2200	12252	£9 0
1/21	·163	77	,,	12151	10 0	74	,,	12152	10 0
1/20	·170	84	,,	12051	11 0	81	,,	12052	11 10
1/19	·185	91	,,	11951	11 15	89	,,	11952	12 0
1/18	·200	113	,,	11851	13 5	109	,,	11852	13 10
1/17	·210	131	,,	11751	15 0	130	,,	11752	15 5
1/16	·218	154	1000	11651	16 5	153	1500	11652	16 15
1/15	·231	182	,,	11551	18 0	180	,,	11552	19 0
1/14	·235	208	,,	11451	21 0	206	,,	11452	21 10
1/13	·255	254	,,	11351	23 10	252	,,	11352	24 0
1/12	·258	312	750	11251	28 0	309	1000	11252	28 10
1/11	·270	365	,,	11151	32 10	362	,,	11152	33 10
1/10	·291	436	,,	11051	37 0	432	,,	11052	39 0
1/9	·305	537	,,	10951	43 0	522	,,	10952	45 0
1/8	·325	625	,,	10851	50 0	620	,,	10852	53 0
3/25	·181	92	1000	32551	12 10	91	1500	32552	13 0
3/23	·200	109	,,	32351	14 10	108	,,	32352	15 0
3/22	·210	128	,,	32251	15 15	126	,,	32252	16 0
3/20	·225	174	,,	32051	19 10	171	,,	32052	20 0
3/18	·251	255	,,	31851	26 0	253	,,	31852	27 0
7/25	·204	140	1000	72551	16 15	138	1500	72552	17 0
7/24	·220	151	,,	72451	18 0	149	,,	72452	18 10
7/23	·225	170	750	72351	19 0	168	1000	72352	19 5
7/22	·240	208	,,	72251	22 0	206	,,	72252	22 10
7/21½	·245	220	,,	721½51	23 10	218	,,	721½52	24 0
7/21	·249	250	,,	72151	25 5	248	,,	72152	26 5
7/20½	·255	255	,,	720½51	26 10	252	,,	720½52	27 10

Goods packed and delivered f.o.b. 2½ per cent extra.

ELECTRIC LIGHT WIRES AND SMALL STRAND.

Legal Standard Gauge. S.W.G.	CLASS No. 53. TAPED & BRAIDED. Taped and Braided externally, same as Class 52, but insulation of superior quality. — 1,000 Megohm Grade.				CLASS No. 55. TAPED & BRAIDED. Taped and Braided externally, same as Class 53, but insulation of superior quality. — 2,000 Megohm Grade.			
	Approx. Weight per Mile.	Guaranteed Insulation.	Reference No.	Price per Mile.	Approx. Weight per Mile.	Guaranteed Insulation.	Reference No.	Price per Mile.
	lbs.	Mgms.			lbs.	Mgms.		
1/22	67	3000	12253	£9 5	66	6000	12255	£9 10
1/21	74	,,	12153	10 10	75	,,	12155	11 0
1/20	81	,,	12053	11 15	80	,,	12055	12 0
1/19	89	,,	11953	12 10	88	,,	11955	13 0
1/18	108	,,	11853	13 15	107	,,	11855	14 0
1/17	129	,,	11753	16 0	128	,,	11755	16 10
1/16	150	2500	11653	17 0	150	5000	11655	17 10
1/15	178	,,	11553	19 10	177	,,	11555	20 0
1/14	203	,,	11453	22 0	200	,,	11455	22 15
1/13	250	,,	11353	25 0	247	,,	11355	25 10
1/12	306	2000	11253	29 10	301	4000	11255	31 0
1/11	358	,,	11153	34 10	355	,,	11155	36 0
1/10	425	,,	11053	40 0	420	,,	11055	41 0
1/9	520	,,	10953	47 0	517	,,	10955	49 0
1/8	616	,,	10853	55 0	608	,,	10855	56 0
3/25	93	2500	32553	13 10	95	5000	32555	14 0
3/23	108	,,	32353	15 10	116	,,	32355	16 0
3/22	128	,,	32253	16 10	130	,,	32255	17 0
3/20	171	,,	32053	20 15	170	,,	32055	21 10
3/18	251	,,	31853	27 15	250	,,	31855	28 10
7/25	138	2500	72553	18 0	137	5000	72555	19 10
7/24	149	,,	72453	19 0	147	,,	72455	20 10
7/23	167	1500	72353	19 15	165	4000	72355	21 10
7/22	205	,,	72253	23 5	203	,,	72255	24 0
7/21½	216	,,	721½53	25 0	213	,,	721½55	26 0
7/21	246	,,	72153	27 10	243	,,	72155	29 0
7/20½	250	,,	720½53	29 0	247	,,	720½55	31 0

Goods packed and delivered f.o.b. 2½ per cent extra.

VULCANIZED INSULATION.—

CONDUCTORS AND DIELECTRICS.				SPECIFICATION.— CLASS No. 51. 300 Megohm Grade.				
Legal Standard Gauge.	Current at 1,000 Ampères per square inch. — Loss = Approx. 2½ volts per 100 yds.	CLASSES 51, 52 and 53.		Approx. Weight per Mile.	Guaranteed Insulation.	Reference No.	Price per Mile.	
S.W.G.	Ampères.	Dielectric.	Finish'd Diam.	lbs.	Mgms.		£	s.
7/20	7·267	·042	·296	310	600	72051	30	0
7/19	8·972	·044	·314	404	„	71951	35	0
7/18	12·920	·046	·346	523	„	71851	44	0
7/17	17·585	·048	·374	665	„	71751	55	0
7/16	22·989	·051	·405	824	„	71651	66	0
7/15	29·070	·053	·435	997	450	71551	79	0
7/14	35·889	·058	·470	1196	„	71451	92	0
19/22	11·957	·044	·342	480	600	192251	42	0
19/21	15·615	·046	·360	610	„	192151	51	0
19/20	19·765	·048	·394	720	„	192051	60	0
19/19	24·400	·051	·413	860	450	191951	71	0
19/18	35·138	·055	·463	1184	„	191851	90	0
19/17	47·826	·062	·518	1510	„	191751	114	0
19/16	62·467	·068	·578	1906	„	191651	143	0
19/15	79·060	·072	·636	2360	330	191551	174	0
19/14	97·604	·076	·692	2865	„	191451	214	0
19/13	129·083	·082	·784	3720	„	191351	270	0
19/12	164·953	·090	·872	4720	„	191251	340	0
19/11	205·215	·098	·956	5893	300	191151	410	0
19/10	249·870	·106	1·040	7040	„	191051	460	0
37/16	122·004	·082	·770	3580	330	371651	255	0
37/15	154·411	·088	·843	4380	„	371551	306	0
37/14	190·630	·096	·928	5390	300	371451	370	0
37/13	252·110	·106	1·043	7070	„	371351	465	0
37/12	322·169	·118	1·165	8825	„	371251	575	0
61/15	254·818	·106	1·046	7004	„	611551	470	0
61/14	314·588	·116	1·149	8573	„	611451	560	0
61/13	416·046	·130	1·300	10647	„	611351	740	0
61/12	531·661	·144	1·444	14185	„	611251	890	0
91/12	794·294	·166	1·765	22645	„	911251	1300	0
91/11	988·162	·186	1·930	24971	„	911151	1560	0

Goods packed and delivered f.o.b. 2½ per cent extra.

ELECTRIC LIGHT CABLES.

Conductors formed of High Conductivity Tinned Copper Wires. Insulated pure and Vulcanizing rubber, then taped, the whole thoroughly vulcanized together, then covered with warps and our strong patent braiding, well served with preservative and weather-resisting compound.

Legal Standard Gauge.	CLASS No. 52. 600 Megohm Grade.					CLASS No. 53. 1,000 Megohm Grade.				
	Approx. Weight per Mile.	Guaranteed Insulation.	Reference No.	Price per Mile.		Approx. Weight per Mile.	Guaranteed Insulation.	Reference No.	Price per Mile.	
S.W.G.	lbs.	Mgms.		£	s.	lbs.	Mgms.		£	s.
7/20	305	900	72052	31	0	307	1400	72053	32	0
7/19	395	„	71952	36	0	400	„	71953	38	0
7/18	513	„	71852	46	0	516	„	71853	48	0
7/17	647	„	71752	57	0	652	„	71753	59	0
7/16	801	„	71652	69	0	805	„	71653	72	0
7/15	973	750	71552	80	0	977	1200	71553	84	0
7/14	1167	„	71452	96	0	1170	„	71453	100	0
19/22	469	900	192252	44	0	480	1400	192253	46	0
19/21	595	„	192152	54	0	600	„	192153	56	0
19/20	700	„	192052	63	0	710	„	192053	65	0
19/19	835	750	191952	73	0	842	1200	191953	76	0
19/18	1166	„	191852	96	0	1171	„	191853	100	0
19/17	1483	„	191752	120	0	1495	„	191753	125	0
19/16	1886	„	191652	148	0	1890	„	191653	154	0
19/15	2315	650	191552	188	0	2331	1100	191553	192	0
19/14	2810	„	191452	220	0	2818	„	191453	230	0
19/13	3687	„	191352	280	0	3696	„	191353	292	0
19/12	4622	„	191252	358	0	4640	„	191253	374	0
19/11	5798	600	191152	435	0	5820	1000	191153	450	0
19/10	6908	„	191052	486	0	6940	„	191053	498	0
37/16	3468	650	371652	270	0	3488	1100	371653	279	0
37/15	4284	„	371552	325	0	4310	„	371553	335	0
36/14	5282	600	371452	395	0	5293	1000	371453	405	0
37/13	6865	„	371352	486	0	6874	„	371353	500	0
37/12	8650	„	371252	595	0	8670	„	371253	617	0
61/15	6864	„	611552	490	0	6875	„	611553	505	0
61/14	8410	„	611452	580	0	8444	„	611453	602	0
61/13	10540	„	611352	790	0	10560	„	611353	815	0
61/12	14044	„	611252	915	0	14070	„	611253	949	0
91/12	22435	„	911252	1350	0	22485	„	911253	1400	0
91/11	24920	„	911152	1650	0	24988	„	911153	1705	0

Goods packed and delivered f.o.b. 2½ per cent extra.

VULCANIZED INSULATION.—

SPECIFICATION.—Conductors formed of High Conductivity then taped, the whole thoroughly vulcanized together, then covered preservative and weather-resisting compound.

Legal Standard Gauge. S.W.G.	CLASS No. 55. 2,000 Megohm Grade. Dielectric.	Guaranteed Insulation.	Finished Diam.	Approx. Weight per Mile.	Reference No.	Price per Mile.
		Mgms.		lbs.		
7/20	·042	3300	·296	308	72055	£33 0
7/19	·044	„	·314	406	71955	39 0
7/18	·046	„	·346	520	71855	50 0
7/17	·048	„	·374	658	71755	62 0
7/16	·051	„	·405	808	71655	74 0
7/15	·053	2300	·435	982	71555	85 0
7/14	·058	„	·470	1174	71455	104 0
19/22	·044	3300	·342	490	192255	47 0
19/21	·046	„	·360	605	192155	58 0
19/20	·048	„	·394	721	192055	67 0
19/19	·051	2300	·413	850	191955	80 0
19/18	·055	„	·463	1178	191855	104 0
19/17	·062	„	·518	1509	191755	130 0
19/16	·068	„	·578	1898	191655	161 0
19/15	·072	2200	·636	2338	191555	196 0
19/14	·076	„	·692	2840	191455	240 0
19/13	·082	„	·784	3713	191355	305 0
19/12	·090	„	·892	4688	191255	390 0
19/11	·098	2000	·956	5855	191155	466 0
19/10	·106	„	1·040	6977	191055	510 0
37/16	·082	2200	·770	3502	371655	288 0
37/15	·088	„	·843	4336	371555	345 0
37/14	·096	2000	·928	5304	371455	416 0
37/13	·106	„	1·043	6899	371355	515 0
37/12	·118	„	1·165	8693	371255	640 0
61/15	·106	„	1·046	6894	611555	520 0
61/14	·116	„	1·149	8516	611455	620 0
61/13	·130	„	1·300	10600	611355	842 0
61/12	·144	„	1·444	14114	611255	984 0
91/12	·166	„	1·765	22550	911255	1450 0
91/11	·186	„	1·930	25043	911155	1760 0

Goods packed and delivered f.o.b. 2½ per cent extra.

ELECTRIC LIGHT CABLES.

Tinned Copper Wires. Insulated pure and Vulcanizing rubber, with warps and our strong patent braiding, well served with

Legal Standard Gauge. S.W.G.	CLASS No. 57. 5,000 Megohm Grade. Dielectric.	Guaranteed Insulation.	Finished Diam.	Approx. Weight per Mile.	Reference No.	Price per Mile.
		Mgms.		lbs.		
7/20	·054	5600	·320	365	72057	£43 0
7/19	·056	„	·336	417	71957	49 0
7/18	·059	„	·364	531	71857	61 0
7/17	·063	„	·400	680	71757	76 0
7/16	·068	„	·430	832	71657	95 0
7/15	·073	5400	·468	1010	71557	109 0
7/14	·078	„	·508	1217	71457	130 0
19/22	·059	5600	·364	515	192257	50 0
19/21	·062	„	·382	620	192157	73 0
19/20	·065	„	·414	754	192057	80 0
19/19	·069	5400	·440	889	191957	85 0
19/18	·074	„	·500	1192	191857	130 0
19/17	·080	„	·560	1530	191757	165 0
19/16	·088	„	·626	1970	191657	212 0
19/15	·096	5200	·693	2440	191557	248 0
19/14	·102	„	·757	2900	191457	320 0
19/13	·110	„	·850	3765	191357	362 0
19/12	·120	„	·966	4700	191257	430 0
19/11	·130	5000	1·084	5831	191157	586 0
19/10	·140	„	1·176	6972	191057	638 0
37/16	·110	5200	·866	3512	371657	350 0
37/15	·118	„	·940	4408	371557	400 0
37/14	·128	5000	1·050	5280	371457	505 0
37/13	·140	„	1·180	6918	371357	645 0
37/12	·155	„	1·318	8720	371257	798 0
61/15	·140	„	1·160	6998	611557	650 0
61/14	·155	„	1·244	8550	611457	788 0
61/13	·170	„	1·480	12300	611357	1066 0
61/12	·190	„	1·650	14275	611257	1325 0
91/12	·220	„	2·000	23365	911257	2080 0
91/11	·250	„	2·210	27411	911157	2620 0

Goods packed and delivered f.o.b. 2½ per cent extra.

VULCANIZED INSULATION.—

Single Wires and

LEAD COVERED.

Small Strands.

SPECIFICATION.—High Conductivity Tinned Copper proofed tape, the whole thoroughly

Wire, insulated pure and vulcanizing India Rubber, and vulcanized together, and Lead covered.

Legal Standard Gauge.	Finished Diameters, Classes 85, 86, 87, and 88.	CLASS 85. 300 Megohm Grade.			CLASS 86. 600 Megohm Grade.			CLASS 87. 1,000 Megohm Grade.			CLASS 88. 2,000 Megohm Grade.		
S. W. G.		Approx. weight per Mile.	Reference No.	Price per Mile.	Approx. weight per Mile.	Reference No.	Price per Mile.	Approx. weight per Mile.	Reference No.	Price per Mile.	Approx. weight per Mile.	Reference No.	Price per Mile.
		lbs.		£ s.	lbs.		£ s.	lbs.		£ s.	lbs.		£ s.
1/22	·170	373	12285	11 15	369	12286	12 0	369	12287	12 10	368	12288	13 0
1/21	·178	410	12185	13 5	408	12186	13 15	408	12187	14 0	407	12188	14 0
1/20	·185	450	12085	15 0	446	12086	15 10	446	12087	16 0	445	12088	16 10
1/19	·200	465	11985	15 10	464	11986	16 10	464	11987	17 0	463	11988	17 15
1/18	·215	510	11885	17 0	506	11886	17 10	504	11887	18 0	500	11888	18 10
1/17	·225	545	11785	19 10	544	11786	20 5	545	11787	21 0	544	11788	21 10
1/16	·233	580	11685	20 10	578	11686	21 0	576	11687	21 15	574	11688	22 10
1/15	·266	650	11585	23 0	648	11586	24 0	646	11587	24 15	645	11588	25 10
1/14	·270	730	11485	26 0	727	11486	27 0	720	11487	28 0	718	11488	28 10
1/13	·290	825	11385	30 0	824	11386	31 0	820	11387	32 0	818	11388	33 0
1/12	·293	910	11285	34 0	905	11286	36 0	906	11287	37 0	901	11288	38 0
1/11	·305	1037	11185	40 0	1034	11186	42 0	1030	11187	44 0	1027	11188	45 10
1/10	·326	1170	11085	45 0	1165	11086	48 0	1155	11087	50 0	1150	11088	52 0
1/9	·340	1345	10985	53 0	1330	10986	56 0	1328	10987	58 0	1325	10988	60 0
1/8	·360	1500	10885	61 10	1494	10886	66 0	1494	10887	68 0	1486	10888	70 0
3/25	·190	475	32585	16 10	474	32586	17 0	470	32587	18 0	470	32588	19 0
3/23	·215	510	32385	18 10	503	32386	19 10	512	32387	21 0	520	32388	22 0
3/22	·225	554	32285	20 0	551	32286	21 0	558	32287	22 10	560	32288	23 10
3/20	·260	700	32085	24 10	695	32086	26 0	695	32087	28 0	694	32088	29 0
3/18	·288	730	31885	31 10	727	31886	33 0	725	31887	34 0	720	31888	36 0
7/25	·225	565	72585	21 0	563	72586	22 0	571	72587	23 0	560	72588	24 10
7/24	·255	600	72485	22 10	602	72486	23 5	610	72487	24 0	595	72488	25 10
7/23	·260	636	72385	23 10	630	72386	25 0	633	72387	26 0	630	72388	27 0
7/22	·275	740	72285	27 0	736	72286	28 10	735	72287	29 0	730	72288	31 0
7/21½	·280	790	721½85	30 0	788	721½86	31 0	786	721½87	32 0	780	721½88	33 0
7/21	·284	835	72185	31 0	828	72186	32 10	826	72187	34 0	822	72188	35 10
7/20½	·290	860	720½85	32 0	840	720½86	34 0	840	720½87	35 10	837	720½88	37 0

Goods packed and delivered f.o.b. 2½ per cent extra.

Goods packed and delivered f.o.b. 2½ per cent extra.

VULCANIZED INSULATION.—

Electric Light

SPECIFICATION.—High Conductivity Tinned and proofed tape, the whole thoroughly

Legal Standard Gauge.	Finished Diameters. Classes 85, 86, 87, and 88.	CLASS 85. 300 Megohm Grade.			CLASS 86. 600 Megohm Grade.		
S. W. G.		Approx. Weight per Mile.	Reference No.	Price per Mile.	Approx. Weight per Mile.	Reference No.	Price per Mile.
		lbs.		£ s.	lbs.		£ s.
7/20	·300	940	72085	37 0	935	72086	38 10
7/19	·318	1104	71985	41 0	1095	71986	42 0
7/18	·350	1333	71885	51 0	1323	71886	54 0
7/17	·402	1595	71785	65 0	1577	71786	67 0
7/16	·435	1854	71685	77 0	1831	71686	80 0
7/15	·465	2217	71585	90 0	2193	71586	94 0
7/14	·498	2646	71485	110 0	2617	71486	113 0
19/22	·370	1300	192285	51 0	1289	192286	53 0
19/21	·391	1520	192185	62 0	1515	192186	63 0
19/20	·425	1710	192085	70 0	1690	192086	72 0
19/19	·446	1990	191985	80 0	1965	191986	84 0
19/18	·498	2634	191885	110 0	2616	191886	113 0
19/17	·544	3270	191785	134 0	3243	191786	140 0
19/16	·624	3936	191685	165 0	3916	191686	171 0
19/15	·684	4700	191585	199 0	4655	191586	211 0
19/14	·742	5515	191485	240 0	5460	191486	252 0
19/13	·862	6850	191385	300 0	6817	191386	315 0
19/12	·940	8340	191285	378 0	8244	191286	398 0
19/11	1·033	9903	191185	450 0	9808	191186	475 0
19/10	1·116	11770	191085	512 0	11638	191086	525 0
37/16	·834	6660	371685	290 0	6548	371686	304 0
37/15	·910	7860	371585	344 0	7764	371586	367 0
37/14	1·000	9310	371485	412 0	9202	371486	434 0
37/13	1·140	11760	371385	520 0	11555	371386	542 0
37/12	1·260	14355	371285	666 0	14180	371286	690 0
61/15	1·150	11724	611585	524 0	11584	611586	550 0
61/14	1·250	14133	611485	638 0	13970	611486	660 0
61/13	1·428	18147	611385	940 0	18040	611386	990 0
61/12	1·588	23745	611285	1100 0	23604	611286	1190 0
91/12	1·930	36945	911285	1685 0	36735	911286	1780 0
91/11	2·130	42771	911185	1908 0	42720	911186	1990 0

Goods packed and delivered f.o.b. 2½ per cent extra.

LEAD COVERED.

Cables.

Copper Wire, insulated pure and vulcanizing India Rubber, vulcanized together, and Lead covered.

Legal Standard Gauge.	CLASS 87. 1,000 Megohm Grade.			CLASS 88. 2,000 Megohm Grade.			CLASS 89. 5,000 Megohm Grade.			
S. W. G.	Approx. Weight per Mile.	Reference No.	Price per Mile.	Approx. Weight per Mile.	Reference No.	Price per Mile.	Finished Diameter	Approx. Weight per Mile.	Reference No.	Price per Mile.
	lbs.		£ s.	lbs.		£ s.		lbs.		£ s.
7/20	937	72087	40 0	938	72088	41 0	·322	1095	72089	51 0
7/19	1100	71987	44 0	1106	71988	46 0	·340	1217	71989	57 10
7/18	1326	71887	56 0	1330	71888	58 0	·372	1441	71889	75 0
7/17	1582	71787	70 0	1588	71788	72 0	·432	1810	71789	93 0
7/16	1835	71687	83 0	1838	71688	85 0	·465	2212	71689	115 0
7/15	2197	71587	96 0	2202	71588	100 0	·508	2630	71589	138 0
7/14	2620	71487	115 0	2624	71488	121 0	·550	3067	71489	166 0
19/22	1300	192287	55 10	1310	192288	57 0	·390	1535	192289	69 0
19/21	1510	192187	66 0	1505	192188	70 0	·410	1730	192189	90 0
19/20	1700	192087	75 0	1711	192088	78 0	·448	1944	192089	105 0
19/19	1972	191987	88 0	1980	191988	91 0	·480	2319	191989	122 0
19/18	2621	191887	115 0	2628	191888	118 0	·548	3042	191889	165 0
19/17	3255	191787	146 0	3269	191788	150 0	·640	3840	191789	205 0
19/16	3920	191687	178 0	3928	191688	184 0	·708	4700	191689	260 0
19/15	4671	191587	218 0	4678	191588	225 0	·777	5520	191589	300 0
19/14	5468	191487	268 0	5490	191488	268 0	·865	6250	191489	355 0
19/13	6826	191387	325 0	6843	191388	335 0	·968	7595	191389	430 0
19/12	8260	191287	410 0	8288	191288	421 0	1·091	9020	191289	520 0
19/11	9880	191187	495 0	9865	191188	520 0	1·214	10240	191189	642 0
19/10	11670	191087	570 0	11707	191088	585 0	1·316	12650	191089	747 0
37/16	6568	371687	318 0	6582	371688	327 0	·967	7292	371689	425 0
37/15	7790	371587	377 0	7816	371588	387 0	1·063	8548	371589	475 0
37/14	9213	371487	455 0	9224	371488	466 0	1·180	10040	371489	600 0
37/13	11564	371387	568 0	11589	371388	585 0	1·313	12708	371389	750 0
37/12	14200	371287	700 0	14223	371288	720 0	1·417	15550	371289	950 0
61/15	11595	611587	570 0	11614	611588	586 0	1·330	12700	611589	760 0
61/14	14004	611487	705 0	14076	611488	727 0	1·454	15530	611489	912 0
61/13	18060	611387	1044 0	18100	611388	1160 0	1·679	19900	611389	1218 0
61/12	23630	611287	1250 0	23674	611288	1320 0	1·884	24830	611289	1560 0
91/12	36785	911287	1880 0	36850	911288	1980 0	2·260	37665	911289	2900 0
91/11	42788	911187	2130 0	42843	911188	2290 0	2·490	46210	911189	3170 0

Goods packed and delivered f.o.b. 2½ per cent extra.

ARMOURING AND MECHANICAL PROTECTION FOR E. L. WIRES AND SMALL STRAND.

Sizes.	Armouring with G.I. Wires. CLASSES 51 to 55.				Braiding and Serving over Armour. CLASSES 51 to 55.			
S.W.G.	Approx. Finished Diameter.	Total Weight per Mile.	Reference No.	Price per Mile Extra.	Approx. Finished Diameter.	Total Weight per Mile.	Reference No.	Price per Mile Extra.
	Inch.	lbs.		£ s. d.	inch.	lbs.		£ s. d.
1/22	·230	331	In ordering, please quote our ordinary reference numbers, adding the word "Armoured."	6 0 0	·280	423	In ordering, please quote our ordinary reference numbers, adding the words "Armoured and Braided."	2 10 0
1/21	·234	348		6 0 0	·284	440		2 10 0
1/20	·242	392		6 10 0	·292	488		2 15 0
1/19	·248	420		7 0 0	·298	516		3 0 0
1/18	·258	479		7 0 0	·308	579		3 5 0
1/17	·270	509		7 10 0	·320	617		3 10 0
1/16	·278	547		8 0 0	·328	655		3 10 0
1/15	·286	574		8 10 0	·336	686		3 15 0
1/14	·326	717		10 0 0	·376	845		4 5 0
1/13	·340	802		11 0 0	·390	938		5 0 0
1/12	·354	887		12 0 0	·404	1027		5 10 0
1/11	·404	1155		13 0 0	·454	1315		6 0 0
1/10	·418	1297		14 0 0	·468	1461		7 0 0
1/9	·436	1391		16 0 0	·486	1563		8 0 0
1/8	·456	1558		17 10 0	·506	1738		9 0 0
3/25	·248	415	In ordering, please quote our ordinary reference numbers, adding the word "Braided."	7 0 0	·278	511		3 0 0
3/23	·260	480		7 10 0	·290	584		3 10 0
3/22	·272	504		8 0 0	·302	612		3 15 0
3/20	·320	679		9 0 0	·352	807		4 5 0
3/18	·350	748		12 0 0	·380	888		5 0 0
7/25	·272	509	In ordering, please quote our ordinary reference numbers, adding the word "Armoured."	8 0 0	·302	617		3 15 0
7/24	·278	523		8 0 0	·308	631		4 0 0
7/23	·286	559		8 10 0	·316	671		4 5 0
7/22	·332	751		10 0 0	·362	883		4 10 0
7/21½	·342	776		11 0 0	·372	912		4 15 0
7/21	·348	830		11 10 0	·378	966		5 0 0
7/20½	·354	850		12 0 0	·384	990		5 15 0

Goods packed and delivered f.o.b. 2½ per cent extra.

Braiding and Serving Lead Covered. CLASSES 85 to 88.				Armouring Lead Covered with G. I. Wires. CLASSES 85 to 88.				Braiding and Serving over Lead and Armour.			
Approx. Finished Diameter.	Total Weight per Mile.	Reference No.	Price per Mile Extra.	Approx. Finished Diameter.	Total Weight per Mile.	Reference No.	Price per Mile Extra.	Approx. Finished Diameter.	Total Weight per Mile.	Reference No.	Price per Mile Extra.
Inch.	lbs.		£ s.	inch.	lbs.		£ s.	Inch.	lbs.		£ s.
·220	461	In ordering, please quote our ordinary reference numbers, adding the word "Braided."	2 5	·290	819	In ordering, please quote our ordinary reference numbers, adding the word "Armoured."	6 5	·340	935	In ordering, please quote our ordinary reference numbers, adding the words "Armoured and Braided."	2 15
·224	480		2 7	·294	950		6 10	·344	1066		2 15
·232	507		2 10	·302	1011		6 15	·352	1131		3 0
·238	528		2 17	·308	1032		7 5	·358	1152		3 5
·248	583		3 0	·318	1120		7 10	·368	1244		3 5
·260	639		3 0	·330	1176		7 15	·380	1308		3 15
·278	770		3 5	·408	1520		8 15	·458	1680		3 15
·286	826		3 10	·416	1648		9 0	·466	1812		4 0
·298	886		3 15	·428	1708		10 5	·478	1876		4 10
·312	980		4 0	·442	1860		11 10	·492	2036		5 5
·336	1197		4 5	·466	2077		12 10	·516	2261		6 0
·354	1303		4 10	·484	2303		13 10	·534	2495		6 10
·368	1437		4 15	·498	2549		14 10	·548	2745		8 0
·386	1584		5 0	·516	2696		16 10	·566	2900		9 0
·406	1758		5 5	·536	2870		18 0	·586	3082		10 0
·238	523	In ordering, please quote our ordinary reference numbers, adding the word "Armoured."	7 5	·308	1027			·358	1147		3 5
·250	586		7 15	·320	1123			·370	1251		3 10
·272	730		8 10	·402	1480			·452	1640		3 15
·292	833		9 10	·422	1655			·472	1823		4 10
·332	1128		12 10	·462	2003			·512	2187		5 10
·272	735	In ordering, please quote our ordinary reference numbers, adding the words "Armoured and Braided."	3 5	·402	1485		8 10	·452	1645		3 15
·278	764		3 7	·408	1514		8 10	·458	1674		4 0
·286	811		3 10	·416	1633		9 0	·466	1797		4 5
·304	915		3 15	·434	1737		10 5	·484	1909		4 15
·314	969		4 0	·444	1849		11 10	·494	2025		5 5
·320	1004		4 0	·450	1884		12 0	·500	2064		5 10
·336	1160		4 0	·466	2040		12 10	·516	2224		6 0

Goods packed and delivered f.o.b. 2½ per cent extra.

ARMOURING AND MECHANICAL PROTECTION FOR ELECTRIC LIGHT CABLES.

Sizes.	Armouring with G.I. Wires. CLASSES 51 to 55.				Braiding and Serving over Armour.			
S.W.G.	Approx. Finished Diameter.	Total Weight per Mile.	Reference No.	Price per Mile Extra.	Approx. Finished Diameter.	Total Weight per Mile.	Reference No.	Price per Mile Extra.
	Inch.	lbs.		£ s. d.	Inch.	lbs.		£ s. d.
7/20	·420	1012	In ordering, please quote our ordinary reference numbers, adding the word "Armoured."	14 0 0	·480	1180	In ordering, please quote our ordinary reference numbers, adding the words "Armoured and Braided."	6 0 0
7/19	·436	1103		16 0 0	·496	1275		6 10 0
7/18	·464	1287		18 10 0	·524	1471		7 0 0
7/17	·492	1687		20 0 0	·552	1683		7 10 0
7/16	·554	2044		22 10 0	·614	2254		8 10 0
7/15	·582	2329		25 0 0	·642	2561		9 0 0
7/14	·610	2658		28 0 0	·670	2894		9 10 0
19/22	·456	1254		17 0 0	·516	1434		7 0 0
19/21	·490	1430		19 0 0	·550	1626		7 10 0
19/20	·536	1951		22 0 0	·596	2163		8 0 0
19/19	·562	2315		24 0 0	·622	2539		8 10 0
19/18	·610	2619		28 0 0	·670	2863		9 0 0
19/17	·634	3082		33 0 0	·694	3334		9 10 0
19/16	·716	3661		36 0 0	·776	3945		10 10 0
19/15	·764	4145		41 0 0	·824	4449		11 10 0
19/14	·832	4997		45 0 0	·892	5329		12 10 0
19/13	·924	6343		50 0 0	·984	6711		14 0 0
19/12	1·006	8250		55 0 0	1·066	8650		15 0 0
19/11	1·106	9057		63 0 0	1·166	9457		16 10 0
19/10	1·210	11300		70 0 0	1·270	11784		18 10 0
37/16	·918	6211		49 0 0	·978	6575		13 0 0
37/15	·986	7118		55 0 0	1·046	7510		14 0 0
37/14	1·082	8747		62 0 0	1·142	9179		15 10 0
37/13	1·214	11343		69 0 0	1·274	11827		17 0 0
37/12	1·344	14195		78 0 0	1·404	14731		19 0 0
61/15	1·218	11406		69 0 0	1·278	11890		17 0 0
61/14	1·332	13988		78 0 0	1·392	14520		19 0 0
61/13	1·496	17745		110 0 0	1·556	18341		22 0 0
61/12	1·632	21090		125 0 0	1·692	21742		24 0 0
91/12	1·894	29241		160 0 0	1·954	30000		29 0 0
91/11	2·104	36288		215 0 0	2·264	37128		32 0 0

Armouring and Braiding Class 57 is 5 per cent more than the above.

Goods packed and delivered f.o.b. 2½ per cent extra.

Braiding and Serving. Lead Covered. CLASSES 85 to 88.				Armouring Lead Covered with G. I. Wires. CLASSES 85 to 88.				Braiding and Serving over Lead and Armour.			
Approx. Finished Diameter.	Total Weight per Mile.	Reference No.	Price per Mile Extra.	Approx. Finished Diameter.	Total Weight per Mile.	Reference No.	Price per Mile Extra.	Approx. Finished Diameter.	Total Weight per Mile.	Reference No.	Price per Mile Extra.
Inch.	lbs.		£ s.	Inch.	lbs.		£ s.	Inch.	lbs.		£ s.
·362	1240	In ordering, please quote our ordinary reference numbers, adding the word "Braided."	4 10	·532	2471	In ordering, please quote our ordinary reference numbers, adding the word "Armoured."	14 10	·592	2683	In ordering, please quote our ordinary reference numbers, adding the words "Armoured and Braided."	6 10
·378	1330		4 15	·548	2561		17 0	·608	2777		6 15
·406	1547		5 10	·576	2901		19 0	·636	3129		7 10
·444	1977		5 15	·614	3447		20 10	·674	3691		8 0
·474	2214		6 5	·644	3801		23 10	·704	4057		9 0
·512	2684		6 15	·682	4271		26 0	·742	4543		9 10
·546	3044		7 5	·716	4809		29 10	·776	5093		10 0
·398	1494		5 0	·568	2448		18 0	·628	3072		7 10
·432	1844		5 10	·602	3314		20 0	·662	3554		8 0
·456	2086		6 0	·626	3556		23 0	·686	3804		8 10
·482	2303		6 15	·652	3890		24 10	·712	4150		8 15
·546	2984		7 10	·716	4749		29 10	·776	5033		9 10
·604	3779		8 0	·774	5604		35 0	·834	5912		10 0
·666	4669		9 0	·850	6874		39 0	·910	7214		11 0
·714	5328		10 0	·920	8098		42 0	·980	8466		12 0
·772	6331		11 0	·978	9201		49 0	1·038	9589		13 0
·864	7773		12 0	1·094	11453		52 0	1·154	11889		14 10
·950	9634		13 0	1·208	14294		57 0	1·268	14774		16 0
1·036	11494		14 10	1·316	17259		66 0	1·376	17783		17 10
1·112	13193		16 0	1·392	18958		74 0	1·452	19514		19 10
·852	7683		12 0	1·080	11263		51 0	1·140	11695		15 10
·930	9377		13 0	1·188	13937		57 0	1·248	14409		16 0
1·002	10633		14 0	1·282	16398		65 0	1·342	16910		17 0
1·116	13269		15 10	1·396	19234		74 0	1·456	19790		19 0
1·234	16192		17 10	1·530	23217		82 0	1·590	23829		21 0
1·120	13366		15 10	1·400	19331		74 0	1·460	19891		19 0
1·222	15914		17 10	1·518	22939		82 0	1·578	23543		21 0
1·368	19867		19 10	1·664	27367		116 0	1·724	28031		23 10
1·514	24401		22 0	1·810	33766		133 0	1·870	34490		26 0
1·886	33522		28 0	2·122	45065		170 0	2·182	45913		31 0
1·988	41983		31 0	2·348	58783		226 0	2·408	59719		34 0

Armouring and Braiding Class 89 is 5 per cent more than the above.

Goods packed and delivered f.o.b. 2½ per cent extra.

MECHANICAL PROTECTION FOR CONCENTRIC ELECTRIC LIGHT CABLES.

Size.	CONCENTRIC CABLES. CLASS 81.								CONCENTRIC CABLES. CLASSES 82 & 83.							
S.W.G.	Reference No.	Lead Covering Extra.		Galvanized Iron Armour Extra.		Yarning over all, Lead Covered or Armoured.			Reference No.	Lead Covering Extra.		Galvanized Iron Armour Extra.		Yarning over all, Lead Covered or Armoured.		
		Per Mile.		Per Mile.		Per Mile.				Per Mile.		Per Mile.		Per Mile.		
		£	s.	£	s.	£	s.			£	s.	£	s.	£	s.	
7/20	In ordering, please quote our ordinary reference numbers, adding the words "Lead Covered" or "Armoured" as required.	26	0	20	0	10	0		In ordering, please quote our ordinary reference numbers, adding the words "Lead Covered" or "Armoured" as required.	41	0	31	0	12	10	
7/19		27	0	21	0	10	10			42	0	32	0	13	0	
7/18		28	0	23	0	11	0			44	0	33	0	13	10	
7/17		29	0	25	0	11	10			45	0	35	0	14	0	
7/16		37	0	27	0	12	10			49	0	37	0	14	10	
7/15		39	0	30	0	13	0			50	0	39	0	15	0	
7/14		44	0	36	0	13	10			53	0	44	0	16	0	
19/20		36	0	24	0	12	0			49	0	38	0	14	0	
19/19		39	0	28	0	12	10			50	0	40	0	15	0	
19/18		44	0	36	0	13	10			53	0	44	0	16	0	
19/17		53	0	40	0	14	10			67	0	53	0	17	10	
19/16		56	0	45	0	16	0			70	0	60	0	18	10	
19/15		69	0	52	0	16	10			82	0	64	0	19	10	
19/14		79	0	60	0	18	10			84	0	70	0	20	0	
19/13		94	0	72	0	21	0			111	0	82	0	22	0	
19/12		118	0	86	0	23	0			120	0	94	0	23	10	
37/16		92	0	72	0	20	10			94	0	80	0	21	0	
37/15		114	0	86	0	22	10			116	0	88	0	23	0	
37/14		122	0	95	0	24	0			126	0	100	0	24	10	
37/13		154	0	105	0	26	0			160	0	115	0	27	0	
37/12		188	0	115	0	28	0			195	0	120	0	30	0	

The armour of above may be two laps of steel instead of iron wire at same price.

For prices of Concentric Cables see pages 34-39.

Goods packed and delivered f.o.b. 2½ per cent extra.

CONDUCTIVITY WEDGE ARMOUR.

LOCKED ARMOUR.

Special attention is called to our CONDUCTIVITY WEDGE or LOCKED ARMOUR which combines a conductor with a perfect shield, thus ensuring immunity from injury for cables having an uninsulated return.

We also supply cables with Locked Armour for mechanical protection only, the armour being composed wholly of mild steel, thoroughly galvanized to resist corrosion. Cables so protected are eminently suited for MINING PURPOSES. Prompt delivery can be given of any size or quality of cable. Particulars and prices on application.

For ordinary armour see p. 26, etc.

EDMUNDS'

PATENT COMBINED AUTOMATIC SWITCH.

Specially adapted for use in Town Lighting Systems. This switch is constructed so as to switch in and switch out Arc Lights and also switch in Incandescents when Arcs are not required. They are in use on several important systems. Full details sent by post.

BELL AND TELEPHONE WIRES AND CABLES.

Price list for these may be had on application.

BOARD OF TRADE CABLES.

VULCANIZED INSULATION.

For Board of Trade requirements, 2,000 Volts=1/10" dielectric on all sizes.

SPECIFICATION:—

Conductors formed of High Conductivity Tinned Copper Wires.

Insulated pure and vulcanizing rubber (thickness of dielectric ·10" or 1/10" on all sizes), then taped, the whole thoroughly vulcanized together, then covered with longitudinal warps and our strong patent braiding, well served with preservative and weather-resisting compound.

Legal Standard Gauge.	Diameter of each Wire.		Current at 1,000 ampères per square inch. At above ratio, loss = approx. 2½ volts per 100 yards.	Diameter of finished Cable in inches.	CLASS 66. 1,000 Megohms per Mile.			CLASS 67. 2,000 Megohms per Mile.			CLASS 68. 5,000 Megohms per Mile.		
S.W.G.	Inches.	M/M.			Approx. Weight per Mile.	Reference No.	Price per Mile.	Approx. Weight per Mile.	Reference No.	Price per Mile.	Approx. Weight per Mile.	Reference No.	Price per Mile.
					lbs.			lbs.			lbs.		
1/16	·064	1·626	3·217	·344	432	11666	£42	427	11667	£49	389	11668	£57
1/15	·072	1·829	4·071	·352	466	11566	46	460	11567	52	428	11568	61
1/14	·080	2·032	5·026	·360	512	11466	50	505	11467	57	465	11468	66
1/13	·092	2·337	6·647	·372	566	11366	55	559	11367	63	515	11368	73
1/12	·104	2·642	8·494	·384	624	11266	60	617	11267	68	572	11268	79
1/11	·116	2·946	10·568	·396	688	11166	65	681	11167	74	633	11168	86
1/10	.128	3·251	12·868	·408	755	11066	70	747	11067	80	698	11068	93
7/23	·024	·610	3·230	·372	456	72366	44	440	72367	52	400	72368	60
7/21½	·030	·764	5·040	·390	540	721½66	53	528	721½67	60	500	721½68	70
7/20	·036	·914	7·267	·408	603	72066	58	596	72067	66	550	72068	77
7/19	·040	1·016	8·972	·420	666	71966	63	660	71967	72	611	71968	84
7/18	·048	1·219	12·920	·444	789	71866	76	780	71867	84	727	71868	98
7/17	·056	1·422	17·585	·468	928	71766	88	918	71767	98	858	71768	114
7/16	·064	1·626	22·989	·492	1095	71666	105	1085	71667	116	1020	71668	132
7/15	·072	1·829	29·070	·516	1262	71566	115	1251	71567	127	1180	71568	148
7/14	·080	2·032	35·889	·540	1450	71466	131	1437	71467	144	1361	71468	168
19/21	·032	·813	15·615	·460	877	192166	90	867	192167	100	810	192168	116
19/20	·036	·914	19·765	·480	1008	192066	93	997	192067	103	934	192068	120
19/19	·040	1·016	24·400	·500	1140	191966	112	1130	191967	123	1062	191968	142
19/18	·048	1·219	35·138	·540	1433	191866	131	1421	191867	144	1345	191868	168
19/17	·056	1·422	47·826	·580	1770	191766	158	1755	191767	170	1669	191768	204
19/16	·064	1·626	62·467	·620	2160	191666	182	2144	191667	197	2031	191668	238
19/15	·072	1·829	79·060	·660	2554	191566	222	2538	191567	239	2470	191568	279
19/14	·080	2·032	97·640	·700	2985	191466	253	2977	191467	272	2926	191468	318

Goods packed and delivered f.o.b. 2½ per cent extra.

Goods packed and delivered f.o.b. 2½ per cent extra.

Low-Tension Concentric Cables

VULCANIZED INDIA-RUBBER,

For any Voltage not exceeding 500 Volts.

Outer (or Return) Conductor mechanically protected only.

CLASS 71.

SPECIFICATION.—Tinned Copper. Insulated pure and vulcanized India Rubber, and proofed tape. Outer Conductor of equivalent area, doubly taped, braided, and served preservative compound.

S.W.G.	Dielectric between Conductors.	Guarante'd Insulation Resistance between Conductors.	Approx. Weight per Mile.	Approx. finished Diameter.	Reference No.	Price per Mile.
	Inch.	Megohms.	lbs.	Inch.		£ s.
7/23	·050	1000	388	·340	72371	33 0
7/21½	·050	1000	490	·375	721½71	40 0
7/20	·060	1000	638	·408	72071	50 0
7/19	·060	1000	746	·420	71971	58 0
7/18	·060	1000	956	·452	71871	74 0
7/17	·060	1000	1191	·484	71771	88 0
7/16	·065	750	1507	·548	71671	110 0
7/15	·065	750	1776	·570	71571	130 0
7/14	·065	750	2097	·602	71471	148 0
19/20	·060	750	1323	·516	192071	100 0
19/19	·065	750	1564	·554	191971	118 0
19/18	·065	750	2075	·602	191871	148 0
19/17	·065	600	2689	·666	191771	184 0
19/16	·070	600	3365	·716	191671	230 0
19/15	·075	600	4186	·798	191571	272 0
19/14	·080	450	5059	·850	191471	330 0
19/13	·090	450	6576	·960	191371	420 0
19/12	·100	450	8330	1·064	191271	540 0
37/16	·090	400	6298	·948	371671	400 0
37/15	·100	400	7869	1·024	371571	510 0
37/14	·105	300	9531	1·114	371471	600 0
37/13	·110	300	12315	1·256	371371	765 0
37/12	·120	300	15486	1·384	371271	960 0

For underground work drawn into conduits or pipes, we recommend an extra braid or stout tape, price 3/- per mile extra for every 10 mils. in the finished diameters.

Goods packed and delivered f.o.b. 2½ per cent extra.

High-Tension Concentric Cables

VULCANIZED INDIA-RUBBER (Medium Quality).

Suitable for all ordinary work, and to comply with B.O.T. Rules up to 2000 Volts.

Outer (or Return) Conductor mechanically protected only.

CLASS 72.

SPECIFICATION.—Tinned Copper. Insulated pure and vulcanized India Rubber, and proofed tape. Outer Conductor of equivalent area, doubly taped, braided, and served preservative compound.

S.W.G.	Dielectric between Conductors.	Guarante'd Insulation Resistance between Conductors.	Approx. Weight per Mile.	Approx. finished Diameter.	Reference No.	Price per Mile.
	Inch.	Megohms.	lbs.	Inch.		£ s.
7/23	·050	2500	594	·440	72372	60 0
7/21½	·050	2500	704	·470	721½72	69 0
7/20	·100	2500	863	·488	72072	80 0
7/19	·100	2500	958	·500	71972	90 0
7/18	·100	2500	1178	·532	71872	108 0
7/17	·100	2500	1428	·564	71772	125 0
7/16	·100	2500	1700	·608	71672	140 0
7/15	·100	2000	2009	·640	71572	165 0
7/14	·100	2000	2331	·672	71472	186 0
19/20	·100	2500	1563	·596	192072	136 0
19/19	·100	2500	1783	·616	191972	152 0
19/18	·100	2000	2321	·672	191872	186 0
19/17	·100	2000	2950	·736	191772	220 0
19/16	·100	2000	3627	·776	191672	270 0
19/15	·100	1500	4409	·848	191572	320 0
19/14	·100	1500	5235	·888	191472	360 0
19/13	·100	1500	6732	·980	191372	450 0
19/12	·105	1000	8338	1·074	191272	550 0
37/16	·100	1500	6402	·952	371672	440 0
37/15	·105	1000	7877	1·034	371572	530 0
37/14	·112	1000	9454	1·124	371472	620 0
37/13	·125	1000	12528	1·286	371372	820 0
37/12	·140	1000	15763	1·424	371272	1020 0

For underground work drawn into conduits or pipes, we recommend an extra braid or stout tape, price 3/- per mile extra for every 10 mils. in the finished diameters.

Goods packed and delivered f.o.b. 2½ per cent extra.

HIGH-TENSION CONCENTRIC CABLES

VULCANIZED INDIA-RUBBER (Superior Quality),

Suitable for use under B.O.T. Rules for Pressures not exceeding 2000 Volts.

Outer (or Return) Conductor mechanically protected only.

CLASS 73.

SPECIFICATION.—Tinned Copper. Insulated pure and vulcanized India Rubber, and proofed tape. Outer Conductor of equivalent area, doubly taped, braided, and served preservative compound.

S.W.G.	Dielectric between Conductors.	Guarante'd Insulation Resistance between Conductors.	Approx. Weight per Mile.	Approx. finished Diameter.	Reference No.	Price per Mile.	
	Inch.	Megohms.	lbs.	Inch.		£	s.
7/23	·050	1000	560	·440	72373	68	0
7/21½	·050	1000	680	·470	721½73	78	0
7/20	·100	5000	826	·488	72073	90	0
7/19	·100	5000	922	·500	71973	100	0
7/18	·100	5000	1144	·532	71873	118	0
7/17	·100	5000	1386	·564	71773	136	0
7/16	·100	5000	1662	·608	71673	156	0
7/15	·100	4000	1956	·640	71573	180	0
7/14	·100	4000	2286	·672	71473	200	0
19/20	·100	5000	1521	·596	192073	150	0
19/19	·100	5000	1733	·616	191973	167	0
19/18	·100	4000	2262	·672	191873	200	0
19/17	·100	4000	2886	·736	191773	240	0
19/16	·100	4000	3546	·776	191673	290	0
19/15	·100	3500	4340	·848	191573	335	0
19/14	·100	3500	5166	·888	191473	382	0
19/13	·100	3500	6621	·980	191373	472	0
19/12	·105	3000	8260	1·074	191273	580	0
37/16	·100	3500	6293	·952	371673	460	0
37/15	·105	3000	7798	1·034	371573	550	0
37/14	·112	3000	9361	1·124	371473	650	0
37/13	·125	3000	12385	1·286	371373	860	0
37/12	·140	3000	15607	1·424	371273	1080	0

For underground work drawn into conduits or pipes, we recommend an extra braid or stout tape, price 3/- per mile extra for every 10 mils. in the finished diameter.

Goods packed and delivered f.o.b. 2½ per cent extra.

LOW-TENSION CONCENTRIC CABLES

VULCANIZED INDIA-RUBBER,

For any Voltage not exceeding 500 Volts.

BOTH CONDUCTORS INSULATED.

CLASS 81.

SPECIFICATION.—Tinned Copper. Insulated pure and vulcanized India rubber and proofed tape. Outer conductor of equivalent area, insulated pure and vulcanized India rubber, taped, braided, and served preservative compound.

S.W.G.	Dielectric of inner and outer Conductors.	Guaranteed Insulation Resistance.		Approx. Weight per Mile.	Approx. finished Diameter.	Reference No.	Price per Mile.	
		Inner.	Outer.					
	Inch.	Megohms.		lbs.	Inch.		£	s.
7/23	·050	1000	500	656	·452	72381	70	0
7/21½	·050	1000	500	774	·470	721½81	81	10
7/20	·060	1000	500	958	·528	72081	100	0
7/19	·060	1000	500	1081	·540	71981	110	0
7/18	·060	1000	500	1311	·572	71881	130	0
7/17	·060	1000	500	1569	·604	71781	150	0
7/16	·065	750	300	1970	·678	71681	186	0
7/15	·065	750	300	2265	·700	71581	210	0
7/14	·065	750	300	2603	·732	71481	230	0
19/20	·060	750	300	1720	·636	192081	155	0
19/19	·065	750	300	2033	·684	191981	190	0
19/18	·065	750	300	2582	·732	191881	230	0
19/17	·065	600	300	3239	·796	191781	270	0
19/16	·070	600	300	4015	·856	191681	330	0
19/15	·075	600	300	4964	·948	191581	400	0
19/14	·080	400	200	5944	1·010	191481	470	0
19/13	·090	400	200	7705	1·140	191381	595	0
19/12	·100	400	200	9727	1·264	191281	750	0
37/16	·090	400	200	7520	1·128	371681	590	0
37/15	·100	400	200	9219	1·224	371581	715	0
37/14	·105	300	150	10986	1·314	371481	845	0
37/13	·110	300	150	14125	1·476	371381	1050	0
37/12	·120	300	150	17658	1·624	371281	1300	0

For underground work drawn into conduits or pipes, we recommend an extra braid or stout tape, price 3/- per mile extra for every 10 mils. in the finished diameters.

For prices of Armour see page 30.

Goods packed and delivered f.o.b. 2½ per cent extra.

HIGH-TENSION CONCENTRIC CABLES

VULCANIZED INDIA-RUBBER (Medium Quality),

Suitable for all ordinary work, and to comply with B.O.T. Rules under 2000 Volts.

BOTH CONDUCTORS INSULATED.

CLASS 82.

SPECIFICATION.—Tinned Copper. Insulated pure and vulcanized India Rubber and proofed tape. Outer conductor of equivalent area, insulated pure and vulcanized India rubber, taped, braided, and served preservative compound.

S.W.G.	Dielectric of inner and outer Conductors.	Guaranteed Insulation Resistance.		Approx. Weight per Mile.	Approx. finished Diameter.	Reference No.	Price per Mile.	
		Inner.	Outer.					
	Inch.	Megohms.		lbs.	Inch.		£	s.
7/23	·100	2500	1200	1280	·652	72382	162	0
7/21½	·100	2500	1200	1414	·670	721½82	175	0
7/20	·100	2500	1200	1549	·688	72082	185	0
7/19	·100	2500	1200	1664	·700	71982	195	0
7/18	·100	2500	1200	1906	·732	71882	220	0
7/17	·100	2500	1200	2210	·764	71782	250	0
7/16	·100	2500	1200	2539	·808	71682	280	0
7/15	·100	2000	1000	2891	·840	71582	310	0
7/14	·100	2000	1000	3255	·872	71482	340	0
19/20	·100	2500	1200	2388	·796	192082	260	0
19/19	·100	2500	1200	2629	·816	191982	290	0
19/18	·100	2000	1000	3237	·872	191882	340	0
19/17	·100	2000	1000	3946	·936	191782	385	0
19/16	·100	2000	1000	4668	·976	191682	440	0
19/15	·100	1500	750	5540	1·048	191582	500	0
19/14	·100	1500	750	6415	1·088	191482	560	0
19/13	·100	1500	750	8027	1·180	191382	670	0
19/12	·105	1000	500	9825	1·284	191282	810	0
37/16	·100	1500	750	7662	1·152	371682	652	0
37/15	·105	1000	500	9313	1·244	371582	770	0
37/14	·112	1000	500	11086	1·344	371482	910	0
37/13	·125	1000	500	14667	1·540	371382	1190	0
37/12	·140	1000	500	18420	1·704	371282	1490	0

For underground work drawn into conduits or pipes, we recommend an extra braid or stout tape, price 3/- per mile extra for every 10 mils. in the finished diameters.

For prices of Armour see page 30.

Goods packed and delivered f.o.b. 2½ per cent extra.

HIGH-TENSION CONCENTRIC CABLES

VULCANIZED INDIA-RUBBER (Superior Quality),

Suitable for work, under B.O.T. Rules, between 500 and 2000 Volts.

For private installations higher Voltages may be used.

BOTH CONDUCTORS INSULATED.

CLASS 83.

SPECIFICATION.—Tinned Copper. Insulated pure and vulcanized India Rubber, and proofed tape. Outer conductor of equivalent area, insulated pure and vulcanized India rubber, taped, braided, and served preservative compound.

S.W.G.	Dielectric of inner and outer Conductors.	Guaranteed Insulation Resistance.		Approx. Weight per Mile.	Approx. finished Diameter.	Reference No.	Price per Mile.	
		Inner.	Outer.					
	Inch.	Megohms.		lbs.	Inch.		£	s.
7/23	·100	5000	2500	1200	·652	72383	192	0
7/21½	·100	5000	2500	1330	·670	721½83	205	0
7/20	·100	5000	2500	1457	·688	72083	220	0
7/19	·100	5000	2500	1568	·700	71983	230	0
7/18	·100	5000	2500	1817	·732	71883	260	0
7/17	·100	5000	2500	2096	·764	71783	285	0
7/16	·100	5000	2500	2425	·808	71683	320	0
7/15	·100	4000	2000	2747	·840	71583	350	0
7/14	·100	4000	2000	3106	·872	71483	380	0
19/20	·100	5000	2500	2269	·796	192083	305	0
19/19	·100	5000	2500	2504	·816	191983	330	0
19/18	·100	4000	2000	3098	·872	191883	380	0
19/17	·100	4000	2000	3785	·936	191783	435	0
19/16	·100	4000	2000	4487	·976	191683	490	0
19/15	·100	3500	1500	5368	1·048	191583	555	0
19/14	·100	3500	1500	6234	1·088	191483	625	0
19/13	·100	3500	1500	7798	1·180	191383	745	0
19/12	·105	3500	1500	9605	1·284	191283	890	0
37/16	·100	3500	1500	7431	1·152	371683	715	0
37/15	·105	3000	1500	9107	1·244	371583	850	0
37/14	·112	3000	1500	10829	1·344	371483	990	0
37/13	·125	3000	1500	14322	1·540	371383	1310	0
37/12	·140	3000	1500	17993	1·704	371283	1640	0

For underground work drawn into conduits or pipes, we recommend an extra braid or stout tape, price 3/- per mile extra for every 10 mils. in the finished diameters.

For prices of Armour see page 30.

Goods packed and delivered f.o.b. 2½ per cent extra.

"DIATRINE" CABLES.

HIGH INSULATION. LOW CAPACITY. GUARANTEED DURABILITY.

SPECIFICATION.—H. C. Copper Wire, insulated with our Patent "Diatrine" Lead Covered and Armoured (as required). These Cables are tested for insulation, and also with pressures much in excess of what they are required for in use, so that their reliability is guaranteed.

LOW TENSION SINGLE CABLES.

CLASS 76.

Particulars of Conductor.			Plain Lead Covered.				Lead Covered and Armoured with Steel Strip Yarned or Taped over all.			
Size of Conductor.	Sectional Area. Square inch.	Sectional Area. Square M/M	Finished Diameter.	Weight per Mile.	Reference No.	Price per Mile.	Finished Diameter.	Weight per Mile.	Reference No.	Price per Mile.
				Cwt.		£		Cwt.		£
7/20	·0072	4·64	·368	12	72076	29	·808	35	When ordering please state Reference number, adding the word "Armoured."	62
7/18	·0129	8·32	·415	16	71876	40	·855	41		76
7/17	·0175	11·28	·440	18	71776	47	·880	43		85
7/16	·0229	14·77	·470	22	71676	57	·910	49		97
7/15	·0290	18·70	·495	24	71576	66	·935	52		108
7/14	·0358	23·09	·520	26	71476	78	·960	55		120
19/17	·0478	30·83	·610	34	191776	105	1·050	67		155
19/16	·0624	40·24	·660	41	191676	130	1·120	81		186
19/15	·0790	50·95	·710	49	191576	158	1·170	91		220
19/14	·0976	62·95	·750	55	191476	186	1·210	99		250
37/16	·1220	78·69	·850	68	371676	235	1·310	116		305
37/15	·1544	99·58	·915	81	371576	286	1·375	132		360
37/14	·1906	122·93	·970	91	371476	340	1·430	145		415
37/·082	·200	139·02	·995	98	378276	360	1·455	153		440
37/13	·250	162·6	1·065	112	371376	435	1·525	170		520
61/·078	·300	193·5	1·132	129	617876	508	1·590	190		600
37/12	·322	207·75	1·160	135	371276	543	1·620	197		635
61/·084	·350	225·8	1·185	139	618476	578	1·645	206		670
61/·090	·400	258·0	1·250	159	619076	655	1·710	226		755
61/·095	·450	290 0	1·295	171	619576	720	1·755	240		825
61/·101	·500	322·5	1·350	185	6110176	805	1·810	255		910

These Cables can be supplied with our Patent Locked Armour

Goods packed and delivered f.o.b. 2½ per cent extra.

"DIATRINE" CABLES.

HIGH INSULATION. LOW CAPACITY. GUARANTEED DURABILITY.

SPECIFICATION.—H. C. Copper Wire, insulated with our Patent "Diatrine," Lead Covered or Armoured (as required). These Cables are tested for insulation, and also with pressures much in excess of what they are required for in use, so that their reliability is guaranteed.

HIGH TENSION SINGLE CABLES.

CLASS 77.

Particulars of Conductor.			Plain Lead Covered.				Lead Covered and Armoured with Steel Strip Yarned or Taped over all.			
Size of Conductor.	Sectional Area. Square inch.	Sectional Area. Square M/M	Finished Diameter.	Weight per Mile.	Reference No.	Price per Mile.	Finished Diameter.	Weight per Mile.	Reference No.	Price per Mile.
				Cwt.		£		Cwt.		£
7/20	·0072	4·64	·460	17	72077	38	·900	43	When ordering please state Reference number, adding the word "Armoured."	83
7/18	.0129	8·32	·500	21	71877	50	·940	48		90
7/17	·0175	11·28	·540	26	71777	60	·980	55		102
7/16	·0229	14·77	·565	28	71677	70	1·000	58		115
7/15	·0290	18·70	·585	30	71577	80	1·025	61		129
7/14	·0350	23·09	·610	32	71477	92	1·050	65		142
19/17	·0478	30·83	·700	41	191777	110	1·160	82		176
19/16	·0624	40·24	·750	49	191677	145	1·210	93		215
19/15	·0790	50·95	·800	58	191577	175	1·260	104		245
19/14	·0976	62·95	·840	64	191477	205	1·300	112		275
19/13	·1290	83·20	·910	77	191377	255	1·370	128		325
19/12	·1649	106·36	1·020	95	191277	320	1·480	150		400
37/16	·1220	78·69	·900	75	371677	245	1·360	125		315
37/15	·1540	99·58	1·005	92	371577	305	1·465	147		385
37/14	·1906	122·93	1·060	102	371477	360	1·520	160		445
37/·082	·2000	139·02	1·075	105	378277	375	1·535	164		460
37/13	·2500	162·60	1·155	124	371377	455	1·615	186		550
61/·078	·3000	193·50	1·220	141	617877	535	1·680	207		635
37/12	·3220	207·75	1·250	148	371277	555	1·710	215		655

at an extra charge of 25 per cent on the armoured prices.

Goods packed and delivered f.o.b. 2½ per cent extra.

"DIATRINE" CABLES.

HIGH INSULATION. LOW CAPACITY. GUARANTEED DURABILITY.

SPECIFICATION.—H.C. Copper Wire, both conductors insulated with our Patent "Diatrine," Lead Covered and Armoured (as required). These Cables are tested for insulation, and also with pressures much in excess of what they are required for in use, so that their reliability is guaranteed.

LOW TENSION CONCENTRIC CABLES.

CLASS 78.

Particulars of Conductor.			Plain Lead Covered.				Lead Covered and Armoured with Steel Strip Yarned or Taped over all.			
Size of Conductor.	Sectional Area. Square inch.	Sectional Area. Square M/M	Finished Diameter.	Weight per Mile.	Reference No.	Price per Mile.	Finished Diameter.	Weight per Mile.	Reference No.	Price per Mile.
				Cwt.		£		Cwt.	When ordering please state Reference number, adding the word "Armoured."	£
7/20	·0072	4·64	·602	30	72078	**70**	1·042	60		**118**
7/18	·0129	8·32	·650	35½	71878	**88**	1·110	74		**145**
7/17	·0175	11·28	·685	39	71778	**105**	1·145	79		**160**
7/16	·0229	14·77	·725	42	71678	**125**	1·185	88		**188**
7/15	·0290	18·70	·760	49	71578	**145**	1·220	94		**205**
7/14	·0350	23·09	·815	58	71478	**170**	1·275	104		**240**
19/17	·0478	30·83	·945	80	191778	**230**	1·405	133		**310**
19/16	·0624	40·24	1·010	88	191678	**275**	1·470	143		**355**
19/15	·0790	50·95	1·070	101	191578	**325**	1·535	156		**410**
19/14	·0976	62·95	1·150	114	191478	**390**	1·610	176		**480**
37/16	·1220	78·69	1·310	142	371678	**490**	1·770	211		**590**
37/15	·1540	99·58	1·400	165	371578	**595**	1·860	239		**700**
37/14	·1906	122·93	1·460	183	371478	**700**	1·920	260		**810**
37/·082	·2000	139·02	1·505	196	378278	**740**	1·965	275		**850**
37/13	·2500	162·60	1·600	223	371378	**885**	2·060	306		**1000**
61/·078	·3000	193·50	1·710	261	617878	**1040**	2·170	350		**1165**
37/12	·3220	207·75	1·740	275	371278	**1116**	2·200	363		**1240**

These Cables can be supplied with our Patent Locked Armour

Goods packed and delivered f.o.b. 2½ per cent extra.

"DIATRINE" CABLES.

HIGH INSULATION. LOW CAPACITY. GUARANTEED DURABILITY.

SPECIFICATION.—H.C. Copper Wire, both conductors insulated with our Patent "Diatrine," Lead Covered and Armoured (as required). These Cables are tested for insulation, and also with pressures much in excess of what they are required for in use, so that their reliability is guaranteed.

HIGH TENSION CONCENTRIC CABLES.

CLASS 79.

Particulars of Conductor.			Plain Lead Covered.				Lead Covered and Armoured with Steel Strip Yarned or Taped over all.			
Size of Conductor.	Sectional Area. Square inch.	Sectional Area. Square M/M	Finished Diameter.	Weight per Mile.	Reference No.	Price per Mile.	Finished Diameter.	Weight per Mile.	Reference No.	Price per Mile.
				Cwt.		£		Cwt.	When ordering please state Reference number, adding the word "Armoured."	£
7/20	·0072	4·64	·760	43	72079	**95**	1·220	87		**156**
7/18	·0129	8·32	·830	52	71879	**120**	1·290	100		**190**
7/17	·0175	11·28	·855	56	71779	**137**	1·315	105		**207**
7/16	·0229	14·77	·900	63	71679	**160**	1·360	112		**232**
7/15	·0290	18·70	·930	69	71579	**180**	1·390	120		**256**
7/14	·0350	23·09	·960	74	71479	**210**	1·430	127		**278**
19/17	·0478	30·83	1·110	90	191779	**275**	1·570	156		**360**
19/16	·0624	40·24	1·165	106	191679	**315**	1·625	168		**407**
19/15	·0790	50·95	1·230	121	191579	**385**	1·690	187		**480**
19/14	·0976	62·95	1·305	134	191479	**434**	1·765	203		**535**
19/13	·1290	83·20	1·380	153	191379	**530**	1·840	226		**635**
19/12	·1649	106·36	1·565	195	191279	**677**	2·025	280		**798**
37/16	·1220	78·96	1·370	150	371679	**510**	1·830	220		**610**
37/15	·1540	99·58	1·550	188	371579	**655**	2·010	270		**765**
37/14	·1906	122·93	1·650	220	371479	**765**	2·110	306		**890**

at an extra charge of 25 per cent on the armoured prices.

Goods packed and delivered f.o.b. 2½ per cent extra.

ELECTRIC LIGHT WIRES
PURE RUBBER

Conductors formed of High Conductivity Tinned Copper Wires.

Legal Standard Gauge.	Diameter of each Wire.		Current at 1,000 Ampères per sq. inch. — At above ratio, loss = approx. 2½ volts per 100 yards.	Current, with a loss of one volt per 100 yards.
S.W.G.	Inches.	M/M.	Ampères.	Ampères.
1/22	·028	·711	·615	·251
1/21	·032	·813	·804	·328
1/20	·036	·914	1·017	·416
1/19	·040	1·016	1·256	·513
1/18	·048	1·219	1·809	·739
1/17	·056	1·422	2·463	1·006
1/16	·064	1·626	3·217	1·314
1/15	·072	1·829	4·071	1·664
1/14	·080	2·032	5·026	2·054
1/13	·092	2·337	6·647	2·717
1/12	·104	2·642	8·494	3·472
1/11	·116	2·946	10·568	4·319
1/10	·128	3·251	12·868	5·259
1/9	·144	3·658	16·286	6·656
1/8	·160	4·064	20·106	8·218
3/25	·020	·508	·961	·385
3/23	·024	·610	1·384	·554
3/22	·028	·711	1·884	·755
3/20	·026	·914	3·114	1·248
3/18	·048	1·219	5·537	2·218
7/25	·020	·508	2·200	·880
7/24	·022	·559	2·713	1·087
7/23	·024	·610	3·230	1·294
7/22	·028	·711	4·396	1·761
7/21½	·030	·762	5·046	2·022
7/21	·032	·813	5·741	2·300
7/20½	·034	·863	6·482	2·708

Goods packed and delivered f.o.b. 2½ per cent extra.

AND SMALL STRAND.
INSULATION.

CLASS No. 11.
Single India Rubber.

SPECIFICATION.—Double Cotton covered and served, then covered with ONE layer of pure India Rubber, then ONE lap of proof tape, then strong patent braiding and ozokerited.

Finished Diameter.	Approximate Weight per Mile.	Reference No.	Price per Mile.
	lbs.		
·128	35	12211	£ 4 10
·132	47	12111	5 0
·136	50	12011	5 5
·140	62	11911	6 0
·148	74	11811	6 15
·156	88	11711	7 15
·164	116	11611	8 15
·172	138	11511	10 10
·180	152	11411	11 15
·217	195	11311	14 0
·229	228	11211	17 0
·241	275	11111	20 0
·253	348	11011	23 0
·269	433	10911	27 0
·285	520	10811	32 0
·182	55	32511	6 0
·191	71	32311	6 15
·199	82	32211	7 15
·210	115	32011	9 15
·240	174	31811	14 10
·178	80	72511	8 15
·206	98	72411	9 15
·212	118	72311	10 10
·224	160	72211	11 15
·230	178	721½11	13 0
·236	197	72111	15 0
·239	215	720½11	16 0

Goods packed and delivered f.o.b. 2½ per cent extra.

ELECTRIC LIGHT WIRES AND SMALL STRAND.

PURE RUBBER INSULATION.

CLASS No. 12. Double India Rubber.

SPECIFICATION.—Double Cotton covered and served, then covered with TWO layers of pure India Rubber, then ONE lap of proof tape, then strong patent braiding and ozokerited.

Legal Standard Gauge. S.W.G.	Finished Diameter.	Approx. Weight per Mile.	Reference No.	Price per Mile.
		lbs.		
1/22	·143	37	12212	£6 10
1/21	·147	49	12112	7 0
1/20	·151	54	12012	7 10
1/19	·155	68	11912	9 0
1/18	·163	78	11812	9 10
1/17	·171	93	11712	11 0
1/16	·179	123	11612	12 0
1/15	·187	145	11512	13 10
1/14	·195	160	11412	15 5
1/13	·232	204	11312	17 15
1/12	·244	239	11212	21 0
1/11	·256	289	11112	24 0
1/10	·268	356	11012	28 0
1/9	·284	457	10912	33 0
1/8	·300	548	10812	37 0
3/25	·197	57	32512	8 15
3/23	·206	74	32312	9 10
3/22	·214	87	32212	11 0
3/20	·225	122	32012	13 0
3/18	·255	181	31812	18 0
7/25	·208	90	72512	11 10
7/24	·221	103	72412	13 0
7/23	·227	124	72312	14 0
7/22	·239	170	72212	15 15
7/21½	·245	189	721½12	17 0
7/21	·251	210	72112	18 10
7/20½	·254	230	720½12	20 0

Goods packed and delivered f.o.b. 2½ per cent extra.

CLASS No. 13. Triple India Rubber.

SPECIFICATION.—Double Cotton covered and served, then covered with THREE layers of pure India Rubber, then ONE lap of proof tape, then strong patent braiding and ozokerited.

CLASS No. 14. Double India Rubber and Double Metallic Foil.

SPECIFICATION.—Double Cotton covered and served, then covered with TWO layers of pure India Rubber, then ONE lap of proof tape, then specially protected with a *Double Metallic Foil*, then strong patent braiding and ozokerited.

Finished Diameter.	Approx. Weight per Mile.	Reference No.	Price per Mile.	Finished Diameter.	Approx. Weight per Mile.	Reference No.	Price per Mile.
	lbs.				lbs.		
·168	39	12213	£ 8 5	·158	47	12214	£ 8 0
·172	52	12113	8 15	·162	62	12114	8 10
·176	57	12013	9 10	·166	67	12014	9 5
·180	71	11913	10 5	·170	85	11914	10 0
·188	82	11813	11 10	·178	98	11814	11 5
·196	98	11713	12 15	·186	120	11714	12 10
·204	129	11613	14 10	·194	154	11614	14 5
·212	152	11513	16 10	·202	182	11514	16 0
·220	169	11413	17 15	·210	203	11414	17 10
·267	215	11313	22 0	·257	258	11314	21 10
·279	251	11213	26 5	·269	301	11214	25 15
·291	303	11113	30 10	·281	364	11114	29 15
·303	373	11013	34 15	·293	447	11014	34 0
·319	480	10913	41 10	·309	576	10914	41 0
·335	575	10813	43 5	·325	690	10814	42 10
·232	59	32513	10 5	·222	70	32514	10 0
·241	76	32313	10 10	·231	91	32314	10 5
·249	89	32213	13 0	·239	107	32214	12 15
·260	125	32013	15 15	·250	150	32014	15 10
·290	184	31813	24 0	·280	220	31814	23 10
·240	95	72513	14 0	·234	115	72514	13 15
·256	109	72413	15 5	·246	130	72414	15 5
·262	128	72313	16 10	·252	154	72314	16 5
·274	180	72213	18 10	·264	216	72214	18 0
·280	200	721½13	20 10	·270	266	721½14	20 0
·286	225	72113	22 5	·276	270	72114	21 15
·289	242	720½13	23 10	·279	291	720½14	23 0

Goods packed and delivered f.o.b. 2½ per cent extra.

Conductors formed of High Conductivity Tinned Copper Wires.

Legal Standard Gauge.	Diameter of each Wire.		Current at 1,000 Ampères per sq. inch. — At above ratio, loss = approx. 2½ volts per 100 yards.	Current with a loss of one volt per 100 yards.
S.W.G.	Inches.	M/M.	Ampères.	Ampères.
7/20	·036	·914	7·267	2·912
7/19	·040	1·016	8·972	3·595
7/18	·048	1·219	12·920	5·177
7/17	·056	1·422	17·585	7·047
7/16	·064	1·626	22·989	9·204
7/15	·072	1·829	29·070	11·649
7/14	·080	2·032	35·889	14·381
19/22	·028	·711	11·957	4·782
19/21	·032	·813	15·615	6·245
19/20	·036	·914	19·765	7·904
19/19	·040	1·016	24·400	9·758
19/18	·048	1·219	35·138	14·053
19/17	·056	1·422	47·826	19·127
19/16	·064	1·626	62·467	24·983
19/15	·072	1·829	79·060	31·619
19/14	·080	2·032	97·604	39·035
19/13	·092	2·337	129·083	51·625
19/12	·104	2·642	164·953	65·971
19/11	·116	2·946	205·215	82·073
19/10	·128	3·251	249·870	99·932
37/16	·064	1·626	122·004	48·652
37/15	·072	1·829	154·411	61·574
37/14	·080	2·032	190·630	76·016
37/13	·092	2·337	252·110	100·530
37/12	·104	2·642	322·169	128·470
61/15	·072	1·829	254·818	101·510
61/14	·080	2·032	314·588	125·320
61/13	·092	2·337	416·046	165·740
61/12	·104	2·642	531·661	211·800
91/12	·104	2·642	794·294	315·960
91/11	·116	2·946	988·162	393·080

Goods packed and delivered f.o.b. 2½ per cent extra.

CLASS No. 11.
Single India Rubber.

SPECIFICATION.—Strong braiding, special serving, ONE layer of pure India Rubber, ONE prepared tape, strong patent braiding and ozokerited.

Finished Diam.	Approximate Weight per Mile.	Reference No.	Price per Mile.
	lbs.		
·258	250	72011	£20 0
·270	290	71911	22 0
·294	410	71811	28 0
·318	520	71711	35 0
·357	615	71611	42 10
·381	741	71511	50 0
·405	915	71411	60 0
·305	350	192211	30 0
·325	440	192111	36 0
·345	545	192011	40 0
·365	648	191911	46 0
·405	890	191811	60 0
·445	1175	191711	76 0
·485	1520	191611	95 0
·525	1920	191511	118 0
·565	2320	191411	140 0
·625	3110	191311	178 0
·685	3980	191211	222 0
·765	4910	191111	270 0
·825	5945	191011	323 0
·633	3025	371611	174 0
·689	3760	371511	212 0
·745	4610	371411	255 0
·829	5995	371311	330 0
·913	7435	371211	414 0
·833	5998	611511	332 0
·905	7436	611411	407 0
1·013	8950	611311	532 0
1·121	11380	611211	680 0
1·349	17458	911211	1006 0
1·481	21640	911111	1325 0

Goods packed and delivered f.o.b. 2½ per cent extra.

PURE RUBBER
ELECTRIC

Legal Standard Gauge.	CLASS No. 12. Double India Rubber. SPECIFICATION.—Strong braiding, special serving, TWO layers of pure India Rubber, ONE prepared tape, cotton warps, strong patent braiding and ozokerited.			
S.W.G.	Finished Diam.	Approx. Weight per Mile.	Reference No.	Price per Mile.
		lbs.		
7/20	·298	296	72012	£21 0
7/19	·310	357	71912	23 10
7/18	·334	468	71812	30 0
7/17	·358	588	71712	37 0
7/16	·397	689	71612	45 0
7/15	·421	850	71512	53 0
7/14	·445	998	71412	63 0
19/22	·345	425	192212	31 0
19/21	·365	500	192112	37 10
19/20	·385	620	192012	42 0
19/19	·405	736	191912	48 10
19/18	·445	984	191812	63 0
19/17	·485	1204	191712	80 0
19/16	·525	1584	191612	99 0
19/15	·565	1960	191512	124 0
19/14	·605	2353	191412	148 0
19/13	·665	3190	191312	188 0
19/12	·725	4044	191212	234 0
19/11	·815	4961	191112	288 0
19/10	·875	6005	191012	340 0
37/16	·683	2885	371612	181 0
37/15	·739	3610	371512	222 0
37/14	·795	4410	371412	269 0
37/13	·879	6050	371312	345 0
37/12	·963	7305	371212	435 0
61/15	·883	5745	611512	350 0
61/14	·955	7015	611412	428 0
61/13	1·063	9140	611312	560 0
61/12	1·171	11595	611212	715 0
91/12	1·419	17700	911212	1060 0
91/11	1·551	22000	911112	1400 0

Goods packed and delivered f.o.b. 2½ per cent extra.

INSULATION.
LIGHT CABLES.

CLASS No. 13. Triple India Rubber. SPECIFICATION.—Strong braiding, special serving, THREE layers of pure India Rubber, TWO prepared tapes, cotton warps, strong patent braiding and ozokerited.				CLASS No. 14. Double India Rubber and Double Metallic Foil. SPECIFICATION. — Strong braiding, special serving, TWO layers of pure India Rubber, ONE prepared tape, TWO layers of *Metallic Foil*, cotton warps, strong patent braiding and ozokerited.			
Finished Diam.	Approx. Weight per Mile.	Reference No.	Price per Mile.	Finished Diam.	Approx. Weight per Mile.	Reference No.	Price per Mile.
	lbs.				lbs.		
·323	320	72013	£25 0	·313	477	72014	£24 10
·335	372	71913	28 10	·325	540	71914	28 0
·359	488	71813	35 10	·349	604	71814	35 0
·383	614	71713	45 0	·373	760	71714	44 0
·427	724	71613	53 0	·417	916	71614	52 0
·451	890	71513	64 15	·441	1062	71514	63 10
·475	1048	71413	76 10	·465	1233	71414	75 0
·375	450	192213	45 0	·365	550	192214	44 0
·395	525	192113	46 0	·385	640	192114	45 10
·415	650	192013	50 10	·405	792	192014	50 0
·435	772	191913	57 0	·425	930	191914	56 0
·475	1034	191813	76 10	·465	1240	191814	75 0
·515	1264	191713	98 0	·505	1517	191714	96 0
·555	1659	191613	122 10	·545	1991	191614	120 0
·595	2051	191513	149 10	·585	2461	191514	147 0
·635	2468	191413	177 10	·625	2962	191414	174 0
·695	3345	191313	227 10	·685	4014	191314	223 0
·755	4244	191213	284 0	·745	5094	191214	278 0
·845	5206	191113	341 0	·835	6246	191114	334 0
·905	6305	191013	410 0	·895	7565	191014	400 0
·713	3025	371613	220 0	·703	3630	371614	214 0
·769	3790	371513	269 0	·759	4550	371514	264 0
·825	4630	371413	321 0	·815	5556	371414	315 0
·909	6350	371313	410 0	·899	7620	371314	400 0
·993	6670	371213	520 0	·983	8010	371214	510 0
·913	6030	611513	418 0	·903	7236	611514	410 0
·985	7365	611413	500 0	·975	8838	611414	489 0
1·093	9595	611313	654 0	1·083	11514	611314	640 0
1·201	12170	611213	835 0	1·191	14604	611214	818 0
1·449	18405	911213	1240 0	1·339	21165	911214	1212 0
1·581	22800	911113	1634 0	1·571	25710	911114	1600 0

Goods packed and delivered f.o.b. 2½ per cent extra.

AERIAL CONDUCTORS.

Conductors formed of High Conductivity Hard Drawn Copper Wires.

S.W.G.	CLASS No. 1.—SIMPLEX. Finished Diam.	Weight per Mile.	Reference No.	Price per Mile.
		lbs.		
1/18	·110	50	11801	£4 0
1/16	·126	84	11601	5 0
1/14	·142	126	11401	7 0
1/12	·166	213	11201	10 10
1/11	·178	259	11101	13 10
1/10	·190	310	11001	16 0
1/9	·206	387	10901	18 0
1/8	·222	473	10801	22 0
1/7	·238	563	10701	26 0
1/6	·254	665	10601	31 0
1/5	·274	802	10501	39 0
1/4	·294	953	10401	46 0
1/3	·314	1114	10301	55 0
7/20	·176	187	72001	12 0
7/19	·198	231	71901	14 0
7/18	·220	319	71801	18 0
7/17	·248	421	71701	24 0
7/16	·270	544	71601	29 0
7/15	·296	675	71501	36 0
7/14	·320	826	71401	42 0
19/22	·220	298	192201	20 0
19/21	·240	380	192101	24 0
19/20	·260	545	192001	26 0
19/19	·280	576	191901	32 0
19/18	·320	810	191801	42 0
19/17	·360	1085	191701	56 0
19/16	·400	1398	191601	70 0
19/15	·440	1752	191501	87 0
19/14	·480	2145	191401	107 0
19/13	·540	2808	191301	138 0
19/12	·600	3562	191201	174 0

Goods packed and delivered f.o.b. 2½ per cent extra.

SPECIFICATION.

SIMPLEX { *Wires.*—One strong patent braid, well served with our weather-resisting, preservative compound. *Cables.*—First taped, then one strong patent braid, well served, as above.

DUPLEX { *Wires and Cables.*—Twice braided with our strong patent braid, each braid being separately served with our weather-resisting, preservative compound.

TRIPLEX { *Wires and Cables.*—Thrice braided with our strong patent braid, each braid being separately served with our weather-resisting, preservative compound.

CLASS No. 2.—DUPLEX. Finished Diam.	Weight per Mile	Reference No.	Price per Mile.	CLASS No. 3.—TRIPLEX. Finished Diam.	Weight per Mile	Reference No.	Price per Mile.
	lbs.				lbs.		
·172	62	11802	£5 0	·234	72	11803	£6 0
·188	102	11602	6 0	·250	120	11603	8 0
·204	150	11402	9 0	·266	174	11403	11 0
·228	253	11202	12 10	·290	293	11203	15 0
·240	303	11102	15 10	·302	347	11103	17 10
·252	358	11002	18 0	·314	406	11003	21 0
·268	443	10902	21 0	·330	499	10903	25 0
·284	537	10802	25 0	·346	601	10803	29 0
·300	631	10702	29 0	·362	699	10703	33 0
·316	741	10602	34 0	·378	817	10603	39 0
·336	886	10502	42 0	·398	970	10503	47 0
·356	1044	10402	50 0	·418	1136	10403	55 0
·376	1214	10302	59 0	·438	1314	10303	65 0
·233	227	72002	14 0	·278	267	72003	17 0
·245	279	71902	16 0	·290	327	71903	19 0
·269	375	71802	21 0	·314	431	71803	25 0
·293	485	71702	26 0	·338	549	71703	31 0
·317	620	71602	33 0	·362	696	71603	38 10
·341	759	71502	41 0	·386	843	71503	47 0
·365	922	71402	50 0	·410	1018	71403	57 0
·265	354	192202	22 0	·310	410	192203	26 0
·285	444	192102	26 0	·330	473	192103	31 0
·305	545	192002	30 0	·350	617	192003	35 0
·325	656	191902	37 0	·370	736	191903	43 0
·365	906	191802	50 0	·410	1002	191803	57 0
·405	1197	191702	66 0	·450	1309	191703	74 0
·445	1526	191602	82 0	·490	1654	191603	91 0
·485	1896	191502	100 0	·530	2040	191503	111 0
·525	2305	191402	122 0	·570	2469	191403	135 0
·585	2992	191302	160 0	·630	3176	191303	176 0
·645	3770	191202	200 0	·690	3978	191203	225 0

Goods packed and delivered f.o.b. 2½ per cent extra.

CONCENTRIC WIRING.

"ANDREWS'" AND THE "SAFETY CONCENTRIC" SYSTEMS.

Specification.—H.C. Tinned Copper, Insulated pure and Vulcanized India Rubber, taped, yarned, Return Conductor, composed of G.I. or other wires, left bare.

600 Megohms per mile.

S.W.G.	Ampères at 1000 per sq. in.	Dielectric.	Approx. Fin'sh'd Diam.	Approx. Weight per mile.	Price per mile.
	Amps.	Inch.	Inch.	Cwts.	£ s.
1/18	1·80	·034	·285	5	29 0
1/16	3·21	·036	·300	5½	32 10
1/15	4·07	·036	·327	6½	36 0
1/14	5·02	·038	·340	7	39 0
1/13	6·64	·038	·345	7½	46 10
1/12	8·49	·040	·350	8	50 0
7/22	4·39	·039	·340	6¾	42 0
7/20	7·26	·042	·360	7¾	51 0
7/18	12·92	·046	·400	13	72 0
7/17	17·58	·048	·458	15	82 0
7/16	22·98	·051	·500	17	100 0
7/15	29·07	·053	·505	19	126 0
7/14	35·88	·058	·510	20¼	140 0
19/17	47·82	·062	·600	28	191 0
19/16	62·46	·068	·685	34	230 0
19/15	70·06	·072	·850	44	276 0
19/14	97·60	·076	·990	59	336 0
37/16	122·00	·082	1·070	71	420 0
37/15	154·41	·088	1·110	90	510 0
37/14	190·63	·096	1·225	112	620 0

Patent "Kopperklad" Wires and Cables Insulated with Rubber, etc.

600 Megohms per mile.

S.W.G.	Amps. at 1000 per sq. inch.	Price per mile.
	Amps.	£ s.
1/18	1·80	29 0
1/16	3·21	32 10
1/15	4·07	36 0
1/14	5·02	39 0
1/13	6·64	46 10
1/12	8·49	50 0
7/22	4·39	42 0
7/20	7·26	51 0
7/18	12·92	72 0
7/17	17·58	82 0
7/16	22·98	100 0

"KOPPERKLAD" WIRES take up less space than any other system of concentrics. They are neat in appearance, and can be supplied in various colours for decorative purposes.

FLEXIBLE CONCENTRICS, having the Outer Conductor of Plaited Wires.

S.W.G.	Equivalent in Solid Wire.	Price per Gross Yards.
		£ s. d.
62/38	18	4 0 0
110/38	16	4 15 0
140/38	15	5 5 0
290/38	12	7 0 0

FLEXIBLE CONCENTRICS, having the Outer Conductor of Plaited Strip.

S.W.G.	Equivalent in Solid Wire.	Price per Gross Yards.
		£ s. d.
62/38	18	4 10 0
110/38	16	5 10 0
140/38	15	6 10 0
290/38	12	8 10 0

Goods packed and delivered f.o.b. 2½ per cent extra.

CONCENTRIC WIRING.

FOR "C.C." SYSTEM.

Insulation Resistance of Inner Conductor, 1,000 Megohms per mile.

Lead Covered.

Size.	Ampères at 1,000 per sq. in.	Dielectric.	Approx Fin'sh'd Diam.	Approx Weight per mile.	Price per mile.
	Amps.	Inch.	Inch.	Cwts.	£ s.
7/21½	5·00	·040	·330	13½	53 0
7/20	7·26	·042	·350	15	56 0
7/18	12·92	·046	·410	19½	80 0
7/16	22·98	·051	·500	27¼	110 0
7/15	29·07	·053	·545	33½	138 0
7/14	35·88	·058	·580	37¾	155 0
19/18	35·13	·055	·580	37¾	155 0
19/17	47·82	·062	·660	47¼	200 0
19/16	62·46	·068	·740	59½	240 0
19/15	70·06	·072	·810	72	300 0
19/14	97·60	·076	·880	85	360 0
37/16	122·00	·082	·970	103½	440 0
37/15	154·41	·088	1·065	121½	520 0
37/14	190·63	·096	1·165	147	630 0
37/13	252·00	·106	1·320	176	840 0

Insulation Resistance of Inner Conductor, 1,000 Megs. per mile.

Lead Covered, and armoured with G. I. Wires.

Approx Fin'sh'd Diam.	Approx Weight per mile.	Price per mile.
Inch.	Cwts.	£ s.
·480	19¾	56 0
·520	22½	60 0
·600	28½	85 0
·700	39½	122 10
·748	46½	154 0
·800	53½	175 0
·890	53½	175 0
·834	65	210 10
·940	81	270 0
1·050	98	330 10
1·160	120	400 0
1·240	138	520 0
1·350	166	620 0
1·450	197	750 0
1·600	240	880 0

We can supply the above Cables 19/18 and larger, with our Patent "Diatrine" Insulation at approximately 20 per cent less prices.

PENDANT WIRES FOR ABOVE.

		£ s. d.	
7/23	Finished Black	3 10 0	per gross yards.
7/21½	„ „	4 0 0	„
7/21½	„ Polished Cotton ...	4 5 0	„
7/21½	„ Maroon Genappe ...	5 10 0	„
7/21½	„ Silk	7 10 0	„

Goods packed and delivered f.o.b. 2½ per cent extra.

VULCANIZED INSULATED TWIN WIRES FOR SHIP USE, AND ESPECIALLY ROUGH USAGE.

(CIRCULAR).

SPECIFICATION.—High Conductivity Tinned Copper Wire, No. 38, S.W.G., laid up to any required capacity. Each Conductor is insulated with pure and vulcanizing India-Rubber, Braided and served. The two Conductors are twisted together, wormed wlth Jute Yarns, strongly braided over all, and served with Black Preservative Compound.

Size.	Solid Equiv'lent S.W.G.	CLASS No. 91. 300 Megohms.					CLASS No. 93. 2,000 Megohms.				
S.W.G.	S.W.G.	Approx. Finished Diameter.	Weight per Gross Yds.	Reference No.	Price per Gross Yds		Approx. Finished Diameter.	Weight per Gross Yds.	Reference No.	Price per Gross Yds.	
		inch.	lbs.		£	s.		lbs.		£	s.
21/38	22	·300	18	213891	3	0	·300	16	213893	3	5
35/38	20	·325	24	353891	3	10	·325	22	353893	4	0
62/38	18	·395	30	623891	4	5	·395	27	623893	5	0
110/38	16	·420	38	1103891	5	0	·420	35	1103893	6	0
172/38	14	·510	60	1723891	7	0	·510	56	1723893	8	0
227/38	13	·600	75	2273891	9	0	·600	70	2273893	10	0
290/38	12	·720	92	2903891	11	0	·720	84	2903893	12	0
440/38	10	·900	120	4403891	14	10	·900	110	4403893	15	10

Special Armouring the above 10 per cent extra.

TWIN FLEXIBLE CABLES.

(VULCANIZED INSULATION.)

SPECIFICATION.—High Conductivity Copper Wire, No. 30's, insulated with pure and vulcanized India-rubber, then taped, the two Conductors twisted together and finished as below. Insulation Resistance 300 Megs. per mile.

Number of Wires in each Cond'r.	Equivalent in Strand.	CLASS 46. Fancy Silk Covered, any design. Price per Gross Yards.			CLASS 47. Fancy Cotton Covered, any design. Price per Gross Yards.			CLASS 48. Braided in Cotton, Served Black. Price per Gross Yards.			CLASS 49. Braided and Spirally Armoured. Price per Gross Yards.		
		£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
28	7/23	6	10	0	5	0	0	4	0	0	4	15	0
45	7/21	8	0	0	6	5	0	5	0	0	6	0	0
60	7/20	9	10	0	7	10	0	6	0	0	7	0	0
80	7/19	11	0	0	8	10	0	7	0	0	8	0	0
114	7/18	12	10	0	10	10	0	9	0	0	10	5	0
158	7/17	16	10	0	14	0	0	11	10	0	13	0	0
200	7/16	18	0	0	15	10	0	13	0	0	14	10	0
250	7/15	22	0	0	18	10	0	16	0	0	17	15	0

Single Conductors at half the above prices.

Goods packed and delivered f.o.b. 2½ per cent extra.

VULCANIZED INSULATION FANCY TWIN FLEXIBLE CORDS (HEAVY INSULATION).

SPECIFICATION.—High Conductivity Tinned Copper Wire, No. 38, S.W.G., laid up to any required capacity. Each Conductor is insulated with pure and vulcanizing India-Rubber, S.C.C. and then fancy-covered in Silk, Genappe, or polished Cotton, and twisted into a pair.

Size.	Solid Equiv'lent S.W.G.	CLASS No. 95. Silk Covered. Any Design.				CLASS No. 96. Genappe Covered. Any Design.				CLASS No. 97. Polished Cotton. Any Design.			
S.W.G.	S.W.G.	W'ght per Gross Yds.	Reference No.	Price per Gross Yds.		W'ght per Gross Yds.	Reference No.	Price per Gross Yds.		W'ght per Gross Yds.	Reference No.	Price per Gross Yds.	
		lbs.		£	s.	lbs.		£	s.	lbs.		£	s.
21/38	22	5½	213895	3	15	6	213896	3	5	6	213897	3	0
35/38	20	7	353895	4	10	8	353896	4	0	8	353897	3	5
62/38	18	11	623895	6	10	12	623896	5	0	12	623897	4	5
110/38	16	17	1103895	8	0	18	1103896	6	10	18	1103897	6	6
172/38	14	24	1723895	12	0	25	1723896	10	0	25	1723897	8	0

The same Conductors, laid up circular for pulley work, 5 per cent extra.

VULCANIZED INSULATION FANCY TWIN FLEXIBLE CORDS (LIGHT INSULATION).

SPECIFICATION.—High Conductivity Plain Copper Wire No. 40, S.W.G. Each Conductor S.C.C., then insulated with vulcanized India-Rubber, and fancy covered over all and twisted into a pair.

Size.	CLASS 61. Silk Covered, any design.				CLASS 62. Genappe Covered, any design.				CLASS 63. Polished Cotton, any design.			
S.W.G.	Weight per Gross Yards.	Reference No.	Price per Gross Yards.		Weight per Gross Yards.	Reference No.	Price per Gross Yards.		Weight per Gross Yards.	Reference No.	Price per Gross Yards.	
	lbs.		£	s.	lbs.		£	s.	lbs.		£	s.
25/40	4	254061	2	5	4½	254062	2	0	5	254063	1	15
35/40	4½	354061	2	15	5	354062	2	10	5	354063	2	0
70/40	8	704061	3	15	10	704062	3	10	12	704063	3	0
125/40	14	1254061	5	10	17	1254062	5	0	20	1254063	4	10
225/40	27	2254061	7	10	30	2254062	7	0	34	2254063	6	10

Goods packed and delivered f.o.b. 2½ per cent extra

PURE RUBBER INSULATION.

FANCY TWIN FLEXIBLE CORDS.

SPECIFICATION.—High Conductivity Copper Wire, No. 38, S.W.G., laid up to any required capacity. Each Conductor is insulated with Cotton, then pure India Rubber, then Cotton, and then fancy covered in Silk, Genappe, or polished Cotton.

Legal Standard Gauge.	Solid Equivalent in S.W.G.	CLASS No. 25. Silk Covered, any design.			CLASS No. 26. Genappe Covered, any design.			CLASS No. 27. Polished Cotton, any design.		
		Reference No.	Weight per Gross Yards.	Price per Gross Yards.	Reference No.	Weight per Gross Yards.	Price per Gross Yards.	Reference No.	Weight per Gross Yards.	Price per Gross Yards.
S.W.G.	S.W.G		lbs. oz.	£ s.		lbs. oz.	£ s.		lbs. oz.	£ s.
21/38	22	213825	3 10	1 17	213826	3 10	1 10	213827	3 10	1 8
35/38	20	353825	4 14	2 8	353826	4 14	2 2	353827	4 14	1 18
62/38	18	623825	8 12	3 15	623826	8 12	3 5	623827	8 12	2 15
110/38	16	1103825	15 0	5 0	1103826	15 0	4 5	1103827	15 0	3 10
172/38	14	1723825	20 0	6 15	1723826	22 0	5 15	1723827	20 0	5 6

The above are supplied either circular or simply twisted, and the prices are the same in either style. We keep stock in a number of designs, and can make any special design quickly; they can also be supplied with two laps of pure rubber at an additional cost of 12½ per cent on above prices.

PURE RUBBER INSULATION.

NON-IGNITABLE CORDS.

(CIRCULAR.)

SPECIFICATION.—High Conductivity Copper Wire. These have the two Conductors insulated as above, then twisted together and filled; BRAIDED OVER WITH PURE ASBESTOS YARN, and then suitably braided over all.

Legal Standard Gauge	Solid Equivalent in S.W.G.	CLASS No. 31. Silk Covered, any design.			CLASS No. 32. Genappe Covered, any design.			CLASS No. 33. Polished Cotton, any design.		
		Reference No.	Weight per Gross Yards.	Price per Gross Yards.	Reference No.	Weight per Gross Yards.	Price per Gross Yards.	Reference No.	Weight per Gross Yards.	Price per Gross Yards.
S.W.G.	S.W.G		lbs.	£ s.		lbs.	£ s.		lbs.	£ s.
21/38	22	213831	7	2 4	213832	7	2 0	213833	7	1 16
35/38	20	353831	10	2 17	353832	10	2 10	353833	10	2 5
62/38	18	623831	17	4 10	623832	17	4 0	623833	17	3 12
110/38	16	1103831	31	6 0	1103832	31	5 0	1103833	31	4 10
172/38	14	1723831	56	8 0	1723832	56	7 0	1723833	56	6 7

The above can be supplied with two laps of pure rubber at an additional cost of 12½ per cent on above prices.

Goods packed and delivered f.o.b. 2½ per cent extra.

TWIN FLEXIBLE WORKSHOP WIRES.

(CIRCULAR.)

Pure Rubber Insulation.

Specification.—High Conductivity Copper Wire, No. 38, S.W.G., laid up to any required capacity. Each conductor is insulated with cotton, then pure India Rubber, then braid and serving, the two twisted together, strongly braided and served with Black Preservative Compound.

Legal Standard Gauge.	Solid Equivalent in S.W.G.	CLASS No. 22.			
		Approx. Weight Gross Yards.	Reference No.	Price per Gross Yards.	
S.W.G.	S.W.G.	lbs. oz.		£ s. d.	
21/38	22	12 4	213822	1 15	0
35/38	20	12 12	353822	2 4	6
62/38	18	17 4	623822	3 5	0
110/38	16	22 12	1103822	4 5	0
172/38	14	28 4	1723822	5 0	0

Also supplied with a non-ignitable serving at the same price; and can also be supplied with two laps of pure rubber at an additional cost of 12½ per cent on above prices.

TWIN SOLID WORKSHOP WIRES.

(FLAT.)

Pure Rubber Insulation.

Specification. — High Conductivity Solid Copper Wire, tinned. Each conductor double cotton covered and served, then insulated with pure India Rubber and prepared tape, then laid side by side and braided over all, and served with Black Preservative Compound.

Legal Standard Gauge.	Current at 1,000 Amperes per sq. in.	CLASS No. 23.		
		Approx. Weight Gross Yards.	Reference No.	Price per Gross Yards.
S W. G.	Amps.	lbs.		£ s.
22	0·615	7	22223	1 0
20	1·017	8	22023	1 5
19	1·256	9	21923	1 10
18	1·809	11	21823	1 15
17	2·463	16	21723	2 5
16	3·217	20	21623	2 10
15	4·071	24	21523	3 0
14	5·026	28	21423	3 10
13	6·647	39	21323	4 0
12	8·494	41	21223	4 14

ELECTROLIER AND FITTINGS WIRE.

Vulcanized Insulation.

Specification.—High Conductivity Tinned Copper Wire, Vulcanized Insulation, braided and served with Preservative Compound.

Legal Standard Gauge.	Solid Equivalent in S.W.G.	CLASS No. 99.			
		Finished Diam.	Approx. Weight per Mile.	Reference No.	Price per Mile.
S.W.G	S.W.G		lbs.		£ s.
20	..	·122	56	12099	8 5
18	...	·133	68	11899	11 0
3/25	20	·122	57	32599	10 5
7/26	18	·133	78	72699	14 0

Pure Rubber Insulation.

Specification.—High Conductivity Tinned Copper Wire, Insulated with single lap of pure India Rubber, Braid and Ozokerit.

Legal Standard Gauge.	CLASS No. 15.			
	Finished Diam.	Approx. Weight per Mile.	Reference No.	Price per Mile.
S.W.G		lbs.		£ s.
22	·072	24	12215	4 0
20	·080	35	12015	5 0
18	·092	49	11815	6 0

FLEXIBLE DYNAMO CABLES.

(CAN BE SUPPLIED WITH OUR PATENT SOLID END CONNECTIONS.)

Constructed of Fine Wire, specially laid up for FLEXIBILITY.

Each Cable contains enough wires to carry the current given below, calculated on a basis of 1,000 Ampères per sq. in.

SPECIFICATION.—Cotton Covered, then insulated with a layer of pure India Rubber and a lap of prepared tape, braided in soft cotton, and finally braided all over with a nice red polished cotton. Any other colour or combination can be given to order, at the same prices. Special lengths made to order with patent solid ends for connecting pieces.

CLASS 19.	Approx. finished diameter.	Approx. weight per 100 yds.	Reference Number.	Price, per yd.
To carry—	In.	lb.		s. d.
10 Ampères, at 1,000 Ampères per sq. in.	·245	16	102619	0 10
15 ,, ,, ,,	·270	23¼	152619	1 0
20 ,, ,, ,,	·340	33	202619	1 3
25 ,, ,, ,,	·350	38	252619	1 5
30 ,, ,, ,,	·370	45½	302619	1 6
35 ,, ,, ,,	·385	53	352619	1 10
40 ,, ,, ,,	·400	60	402619	2 0
45 ,, ,, ,,	·410	67	452619	2 3
50 ,, ,, ,,	·416	74	502619	2 5
60 ,, ,, ,,	·516	83	602619	2 10
70 ,, ,, ,,	·530	112	702619	3 3
80 ,, ,, ,,	·540	120	802619	3 8
100 ,, ,, ,,	·550	143	1002619	4 6
150 ,, ,, ,,	·740	220	1502619	5 9
200 ,, ,, ,,	·880	274	2002619	6 10
250 ,, ,, ,,	·940	375	2502619	8 0
300 ,, ,, ,,	·970	450	3002619	9 3

Stock of all the above Sizes. Larger or smaller Sizes to Order.

GAUZE BRUSHES FOR DYNAMOS AND MOTORS.

Made of very soft Gauze, 7″ or 8″ long.

	Best H.C. Copper Gauze		Special Alloy Gauze.		Special Anti-Friction Gauze	
	Refer'nce No.	Price (each).	Refer'nce No.	Price (each).	Refer'nce No.	Price (each).
		s. d.		s. d.		s. d.
¾ in. wide × ¼ in. thick...	2010	1 4	2022	1 2	2034	1 3
1 ,, ,, ,, ,, ...	2011	1 8	2023	1 4	2035	1 5
1¼ ,, ,, ,, ,, ...	2012	2 0	2024	1 8	2036	1 9
1⅝ ,, ,, ,, ,, ...	2013	2 2	2025	1 10	2037	1 11
1½ ,, ,, ,, ,, ...	2014	2 5	2026	2 1	2038	2 2
1¾ ,, ,, ,, ,, ...	2015	2 9	2027	2 6	2039	2 7
2 ,, ,, ,, ,, ...	2016	3 0	2028	2 7	2040	2 9
2¼ ,, ,, ,, ,, ...	2017	3 4	2029	3 0	2041	3 1
2½ ,, ,, ,, ,, ...	2018	3 9	3030	3 3	2042	3 4
1¼ ,, ,, 3/16 ,, ...	2019	1 9	2031	1 8	2043	1 9
2⅛ ,, ,, 3/16 ,, ...	2020	2 8	2032	2 6	2044	2 7
2 ,, ,, ⅜ ,, ...	2021	4 3	2033	4 0	2045	4 2

Other Sizes at proportionate Prices.

Goods packed and delivered f.o.b. 2½ per cent extra.

CASINGS AND COVERS.

Prices per 100 feet run.

Size of Groove.	Distance between Grooves.	Finished Size.	Reference.	Redwood and Covers.	Size of Groove.	Distance between Grooves.	Finished Size.	Reference.	Redwood and Covers.
Inch.	Inch.	Inch.		£ s. d.	Inch.	Inch.	Inch.		£ s. d.
3/16	½	1⅝ × ⅜	4010	0 7 6	3/16	¾	2¾ × ⅞	4015	0 15 0
5/16	½	1⅝ × ½	4011	0 8 6	⅛	⅞	3⅛ × 1⅛	4016	0 19 3
⅜	⅝	1⅞ × ⅝	4012	0 10 0	3/16	1⅛	3⅜ × 1 3/16	4017	1 1 0
7/16	⅝	2⅛ × 21/32	4013	0 10 9	3/16	1⅛	4⅜ × 1⅜	4018	1 8 6
½	⅝	2⅜ × ¾	4014	0 12 0	3/16	1½	4⅞ × 1 7/16	4019	1 13 0

CONCENTRIC CABLES.

Pure Rubber Insulation. For Ship Use.

SPECIFICATION.—High Conductivity Copper Wire, Inner conductor braided and served, three layers of pure India Rubber, and two layers of proof tape; then the outer, or return, conductor laid on spirally; then one layer of proof tape, and two layers of pure India Rubber, one layer of proof tape and strong patent braiding served with our Special Preservative Compound.

Legal Standard Gauge.	Current at 1000 Ampères per sq. inch.	Class No. 21.		
		Approx. weight per gross yards.	Reference Number.	Price per Gross Yards.
S.W.G.	Amps.	lb.		£ s.
7/24	2·713	26	72421	4 5
19/24	7·380	46	192421	5 15
19/22	11·957	78	192221	8 10
19/20	19·765	120	192021	11 0

FUSIBLE WIRE FOR CUT-OUTS.

According to Mr. W. H. Preece's Table.

Approximate S.W.G.	Diameter.	Current required to fuse.	Class 18.	
			Reference No.	Price per lb.
	Inch.	Ampères.		s. d.
8½	0·1548	100	10118	2 0
9·0	0·1443	90	9018	2 0
9½	0·1334	80	8018	2 0
10·0	0·1220	70	7018	2 0
11·0	0·1101	60	6018	2 0
12½	0·0975	50	5018	2 0
13·0	0·0909	45	4518	2 0
13½	0·0840	40	4018	2 0
14½	0·0769	35	3518	2 0
15·0	0·0694	30	3018	2 1
16·0	0·0614	25	2518	2 1
17·0	0·0529	20	2018	2 3
19·0	0·0437	15	1518	2 4
21·0	0·0334	10	1018	2 8
25·0	0·0210	5	518	3 9
26·0	0·0181	4	418	4 0
28·0	0·0149	3	318	4 6
31·0	0·0113	2	218	6 0
36·0	0·0072	1	118	9 0

Goods packed and delivered f.o.b. 2½ per cent extra.

GLOVERS' "COMPACTUM" COTTON AND SILK LAPPED COPPER WIRE, AND GERMAN SILVER WIRE.

S.W.G.	Copper Wire.				German Silver Wire.		
	Price per lb. Single Cotton Covered.	Price per lb. Double Cotton Covered.	Price per lb. Single Silk Covered.	Price per lb. Double Silk Covered.	Price per lb. Bare.	Price per lb. Single Silk Covered.	Price per lb. Double Silk Covered.
To							
14	1/-	1/2	1/10	3/-	2/9	4/-	6/-
15	1/-	1/2	1/10	3/-	2/9	4/1	6/1
16	1/-	1/2	1/10	3/3	2/9	4/3	6/3
17	1/-	1/2	1/10	3/3	2/9	4/6	6/6
18	1/-	1/2	2/-	3/6	2/9	4/9	6/9
19	1/2	1/4	2/2	3/9	2/10	4/10	7/-
20	1/4	1/6	2/3	4/-	3/-	5/-	7/3
21	1/5	1/7	2/5	4/1	3/1	5/4	8/-
22	1/6	1/8	2/6	4/3	3/2	5/9	8/6
23	1/7	1/10	2/7	4/6	3/3	6/2	8/9
24	1/8	2/-	2/8	4/9	3/4	6/6	9/-
25	1/9	2/2	2/9	4/10	3/6	7/-	9/9
26	1/10	2/4	2/9	5/-	3/8	7/6	10/9
27	2/-	2/5	3/-	5/5	4/-	8/3	11/1
28	2/2	2/6	3/6	5/9	4/3	8/9	11/6
29	2/4	2/9	3/10	6/3	4/6	9/6	12/-
30	2/6	3/-	4/3	6/9	4/9	10/-	12/6
31	2/8	3/4	4/6	7/6	5/-	10/3	13/-
32	3/-	3/8	4/6	8/-	5/3	10/6	14/-
33	3/3	4/3	4/10	8/6	5/6	10/9	15/-
34	3/6	4/6	5/3	9/-	6/-	11/-	16/-
35	4/-	5/6	6/3	10/-	6/6	11/6	16/6
36	4/6	6/-	7/-	11/3	7/-	12/-	17/-
37			8/-	13/-	8/-	13/6	18/6
38			9/-	14/9	9/-	15/-	20/-
39			11/6	16/7	10/6	17/6	25/-
40			12/6	18/6	12/-	20/6	28/-
41			16/6	25/-	15/-	22/6	31/-
42			18/6	30/-	20/-	28/-	34/-
43			30/-	45/-	23/-	35/-	45/-

Goods packed and delivered f.o.b. 2½ per cent extra.

GLOVERS' "COMPACTUM" SILK LAPPED REOSTENE AND MANGANIN WIRES.

Reostene Wire.			Manganin Wire.			S.W.G.
Price per lb. Bare.	Price per lb. Single Silk Covered.	Price per lb. Double Silk Covered.	Price per lb. Bare.	Price per lb. Single Silk Covered.	Price per lb. Double Silk Covered.	
						To
2/9	4/-	5/2	4/6	6/6	9/-	14
2/9	4/-	5/3	4/6	6/6	9/-	15
2/9	4/-	5/5	4/9	6/9	9/3	16
2/9	4/-	5/5	5/-	7/-	9/6	17
2/10	4/3	5/9	5/6	7/3	10/-	18
2/11	4/6	6/1	5/9	7/6	11/6	19
3/0	4/8	6/5	6/-	8/-	12/-	20
3/1	4/10	6/7	6/3	8/6	12/6	21
3/2	5/-	6/10	6/6	9/-	13/-	22
3/3	5/2	7/1	6/9	9/6	13/6	23
3/5	5/6	7/6	7/-	10/-	14/-	24
3/6	5/9	7/9	7/3	10/6	14/6	25
3/8	6/-	8/2	7/6	11/-	15/-	26
3/10	6/6	8/7	7/9	11/6	16/-	27
4/-	6/10	9/1	8/-	12/-	17/-	28
4/2	7/3	9/8	8/3	13/-	18/-	29
4/4	7/10	10/4	8/6	14/-	19/-	30
4/6	8/4	11/3	8/9	15/-	20/-	31
4/9	9/-	12/-	9/-	16/-	21/-	32
5/-	9/10	12/10	9/3	17/-	22/-	33
5/3	10/6	13/5	9/6	18/-	23/-	34
5/9	10/11	14/11	10/-	19/-	24/-	35
6/-	12/8	16/5	10/6	20/-	25/-	36
7/-	15/-	19/1	11/-	21/-	29/-	37
8/-	16/6	21/9	11/6	22/-	33/-	38
9/-	19/3	24/4	12/6	25/-	37/-	39
10/-	21/3	27/3	15/6	28/-	41/-	40
12/-	27/-	35/6	18/6	30/-	46/-	41
14/-	34/-	42/-	23/-	36/-	52/-	42
16/6	39/-	51/-	30/-	45/-	65/-	43

Goods packed and delivered f.o.b. 2½ per cent extra.

RESISTANCE METALS.

Size.	Diameter.		Yards per lb., bare.	Iron.
Birmingham. W.G.	Inch.	M/M.		Ohms per lb., bare.
14	·083	2·1082	16	·457018788
15	·072	1·8290	21	·80637168
16	·065	1·6510	26	1·21504620
17	·058	1·4732	33	1·91661780
18	·049	1·2446	46	3·7623852
19	·042	1·0668	62	6·9703056
20	·035	·8890	90	14·4550544
21	·032	·8130	108	20·6845644
22	·028	·7110	140	35·2883328
23	·025	·6350	176	55·5252168
24	·022	·5590	228	92·588244
25	·020	·5080	275	135·558312
26	·018	·4570	340	206·612868
27	·016	·4064	430	330·953412
28	·014	·3556	562	554·592464
29	·013	·3302	612	759·40944
30	·012	·3048	765	1045·97832
31	·0115	·2920	833	1247·355
32	·0110	·2793	910	1490·081856
33	·0100	·2540	1101	2003·33004
34	·0095	·2412	1220	2678·473296
35	·0087	·2209	1455	3808·06272
36	·0079	·2006	1764	5601·093
37	·0073	·1854	2066	8134·59264
38	·0068	·1727	2381	10202·076
39	·0063	·1600	2774	13849·02084
40	·0058	·1473	3273	19277·796
41	·0050	·1269	4405	34904·952
42	·0040	·1016	6880	85166·96
43	·0030	·0760	12256	281417·916

MANGANIN WIRE.

Current giving 212 deg. Fah. (100° C.) rise in temperature above the surrounding air.

B. W. G. No.	2	3	4	5	6	7	8	9	10	11
Ampères	50·6	49·0	39·0	34·6	30·6	25·5	22·5	19·0	16·4	13·9
B. W. G. No.	12	13	14	15	16	17	18	19	20	21
Ampères	12·0	9·8	7·97	6·47	5·55	4·68	3·63	2·9	2·2	1·9
B. W. G. No.	22	23	24	25	26	27	28	29	30	31
Ampères	1·57	1·32	1·093	0·952	0·807	0·677	0·555	0·497	0·44	0·41
B. W. G. ....No.	32	33	34	35	36	37	38	39	40	
Ampères	0·386	0·335	0·31	0·272	0·235	0·209	0·188	0·167	0·148	

RESISTANCE METALS.

German Silver Wire.	Manganin Wire.	Size.
Ohms per lb., bare.	Approximate Ohms per lb., bare.	Birmingham. W.G.
·97727283	1·95454576	14
1·7243168	3·4486336	15
2·5982120	5·1964240	16
4·0984280	8·1968560	17
8·045352	16·090704	18
14·905	29·810112	19
30·9065	61·813088	20
44·231	88·462288	21
75·459	150·918656	22
118·733	237·466336	23
197·987	395·97488	24
289·873	579·74624	25
441·813	883·627	26
707·699	1415·398	27
1207·305	2414·61	28
1623·894	3247·79	29
2236·68	4473·37	30
2667·3	5334·6	31
3186·34	6372·68	32
4283·85	8567·7	33
5727·55	11455·1	34
8143·0	16286·1	35
11977·2	23954·4	36
17406·8	34813·4	37
21815·8	43631·6	38
29614·3	59228·5	39
41223·0	82445·9	40
74639·5	149279·0	41
182117·6	364235·2	42
601774·2	1203548·3	43

"REOSTENE" WIRE.

Particulars of Resistance, Current Capacity, etc.

S. W. G.	Ohms at 15·5° C.	50°C. rise in temp'ture.			100°C. rise in temp'ture.			150°C. rise in temp'ture.		
		Ohms per yard at 65·5° C.	Amprs. giving a rise of 50° C.	Watts consumed per yd.	Ohms per yard at 115·5° C.	Amprs. giving a rise of 100° C.	Watts consumed per yd.	Ohms per yard at 165·5° C.	Amprs. giving a rise of 150° C.	Watts consumed per yd.
8	·0541	·0571	20·1	23·1	·0601	33 0	65·5	·0631	39	96
9	·0669	·0706	17·8	22·4	·0743	28·1	58·6	·0780	34	90
10	·0845	·0890	15·1	20·3	·0938	22·8	48·75	·0984	27·8	76·00
11	·1024	·1080	13·2	18·8	·1137	19·6	43·70	·119	23·7	66·7
12	·1290	·136	11·3	17·4	·143	16·6	39·35	·150	20·2	61·2
13	·1646	·174	9·4	15·4	·183	13·7	34·35	·192	16·6	52·8
14	·2180	·230	7·6	13·3	·242	11·6	32·55	·254	13·9	49·0
15	·2670	·282	6·7	12·7	·296	10·0	29·60	·311	12·1	45·5
16	·3382	·357	5·7	11·6	·377	8·60	27·90	·394	10·5	43·4
17	·4406	·465	4.7	10·3	·489	7·20	25·4	·513	8·8	39·7
18	·6008	·634	4·0	10·15	·667	5·93	23·5	·700	7·35	37·8
19	·8677	·915	3·2	9·38	·963	4·80	22·2	1·01	5·91	35·3
20	1·0680	1·13	2·84	9·12	·119	4·25	21·5	1·24	5·25	34·2
21	1·3528	1·43	2·5	8·94	1·50	3·75	21·1	1·59	4·61	33·8

JOINTING MATERIALS.

FOR VULCANIZED RUBBER WIRES AND CABLES.

	Per lb.—s.	d.
"Rubberoid" Jointing Torch ... ... each	1	3
Pure India Rubber Strip or Tape (any width)	10	6
" " Coated Tape	4	6
" " Solution (¼ and ½lb. tins)	2	0
" " " (in Capsules)	3	0
Vulcanizing Rubber Strip or Sheet	6	0
Curing Composition	3	0
Prepared Black Tape (proofed both sides)	2	6
" " (" one side)	2	0
Felt Tape (white)	6	0
Ozokerited Twill Tape (supplied in widths from ½in. to 2in.)	2	0
"Rubberoid" Compound Tape	2	3
Varnish, for finishing joints (also suitable for wood casings)...	2	0
Pure re-distilled Wood Naphtha, supplied for export only (including can) ... ...per gall.	4	6
Sulphur Compound, for vulcanizing joints	0	9
Silesia ... ... per yard	0	6

FOR PURE INDIA RUBBER WIRES AND CABLES.

	Per lb.—s.	d.
"Rubberoid" Jointing Torch ... ...each	1	3
Pure India Rubber Strip or Tape (any width)	10	6
" " Coated Tape	4	6
" " Solution (¼ and ½lb. tins)	2	0
" " " (in Capsules)	3	0
Prepared Black Tape (proofed both sides)	2	6
" " " (" one side)	2	0
Adhesive Drab Tape	2	6
Felt Tape (white)	6	0
Ozokerited Twill Tape (supplied in widths from ½in. to 2in.)	2	0
"Rubberoid" Compounded Tape	2	3
Varnish, for finishing joints	2	0

FOR GUTTA PERCHA WIRES AND CABLES.

	Per lb.—s.	d.
Gutta Percha Tissue	12	0
" " Sheet	9	0
Chatterton Compound (1oz. sticks)	6	0
Cotton Tape	2	6
Ozokerited or Tarred Twill Tape (supplied in widths from ½in. to 2in.)...	2	0

	s.	d.		s.	d.
Solder .. ..per lb.	0	11	**Baker's Solution** ..per pint	1	0
Cored Solder .. .. "	2	0	**Resin** .. .. per lb.	0	6

BINDING WIRES.

Size, S. W. G., No.	30	28	26	24	22	20
Copper, Plain ... ...per lb.	1/6	1/4	1/2	1/1	1/0	-/10
" Tinned ... ... "	2/3	2/0	1/7	1/4	1/2	1/0
Steel, Tinned, special quality "	...	...	...	3/3	3/-	3/-

The above prices vary with the fluctuations o the market.

Composition for Filling in Trenches 20/- per Cwt. NET.

"DIATRINE" TAPE 2/3 per lb. This has a high insulation and is much superior to proofed or Ozokerited Tape.

CONVERSION TABLES.

TABLE
For Ascertaining Prices per Yard or Mile.

Per Yard.	= Per Mile.	Per Yard.	= Per Mile.	Per Yard.	= Per Mile.
d.	£ s. d.	s. d.	£ s. d.	s. d.	£ s. d.
$\frac{1}{32}$	0 4 7	0 3	22 0 0	2 6	220 0 0
$\frac{1}{16}$	0 9 2	0 3½	25 13 4	2 9	242 0 0
$\frac{1}{8}$	0 18 4	0 4	29 6 8	3 0	264 0 0
$\frac{3}{16}$	1 7 6	0 4½	33 0 0	3 3	286 0 0
$\frac{1}{4}$	1 16 8	0 5	36 13 4	3 6	308 0 0
$\frac{5}{16}$	2 15 0	0 5½	40 6 8	3 9	330 0 0
$\frac{3}{8}$	3 13 4	0 6	44 0 0	4 0	352 0 0
$\frac{7}{16}$	4 11 8	0 7	51 6 8	4 3	374 0 0
$\frac{1}{2}$	5 10 0	0 8	58 13 4	4 6	396 0 0
$\frac{9}{16}$	6 8 4	0 9	66 0 0	4 9	418 0 0
$\frac{5}{8}$	7 6 8	0 10	73 6 8	5 0	440 0 0
1	9 3 4	0 11	80 13 4	6 0	528 0 0
$1\frac{1}{4}$	11 0 0	1 0	88 0 0	7 0	616 0 0
$1\frac{1}{2}$	12 16 8	1 3	110 0 0	7 6	660 0 0
$1\frac{3}{4}$	14 13 4	1 6	132 0 0	10 0	880 0 0
2	16 10 0	1 9	154 0 0	15 0	1320 0 0
$2\frac{1}{4}$	18 6 8	2 0	176 0 0	17 6	1540 0 0
$2\frac{1}{2}$	20 3 4	2 3	198 0 0	20 0	1760 0 0
$2\frac{3}{4}$					

Table, showing the value of fractional parts of a mile in yards and their approximate value in metres.

44 yds.	= $\frac{1}{40}$ of a mile	=	40 mètres.
55 "	= $\frac{1}{32}$ "	=	50 "
110 "	= $\frac{1}{16}$ "	=	100 "
160 "	= $\frac{1}{11}$ "	=	146 "
176 "	= $\frac{1}{10}$ "	=	161 "
220 "	= $\frac{1}{8}$ "	=	201 "
330 "	= $\frac{3}{16}$ "	=	302 "
440 "	= $\frac{1}{4}$ "	=	402 "
660 "	= $\frac{3}{8}$ "	=	603 "
880 "	= $\frac{1}{2}$ "	=	804 "
1100 "	= $\frac{5}{8}$ "	=	1006 "
1 Kilomètre	=	1093·6 Yards.	
1 Mile	=	1·6093 Kilomètres.	

Comparative Table of Kilogrammes and Pounds.

1 kilo.	=	2·2046	lbs.
8 "	=	17·638	"
10 "	=	22·046	"
15 "	=	33·069	"
20 "	=	44·092	"
25 "	=	55·115	"
50 "	=	110·23	"
100 "	=	220·46	"
1000 "	=	2204·6	"

SECTIONAL STRIP FOR

SIZES OF SOLID SECTIONAL COPPER WHICH AS LAMINATED STRIP, COVERED

Size in Inch.	Area in Square Inches.	Size in Inch.	Area in Square Inches.	Size in Inch.	Area in Square Inches.
·080 × ·040	·0032	·157 × ·098	·01539	·236 × ·043	·01015
·080 ,, ·064	·00512	·157 ,, ·127	·01994	·236 ,, ·117	·0276
·082 ,, ·072	·0059	·160 ,, ·060	·0096	·2364 ,, ·059	·01394
·085 ,, ·060	·0051	·160 ,, ·119	·01914	·240 ,, ·030	·0072
·090 ,, ·080	·0072	·162 ,, ·076	·01231	·240 ,, ·040	·0096
·096 ,, ·080	·00768	·165 ,, ·110	·01815	·240 ,, ·155	·0372
·100 ,, ·040	·0040	·165 ,, ·134	·02211	·240 ,, ·200	·0480
·100 ,, ·050	·0050	·170 ,, ·0325	·00552	·242 ,, ·122	·0295
·100 ,, ·060	·0060	·170 ,, ·150	·0255	·245 ,, ·125	·0306
·100 ,, ·064	·0064	·178 ,, ·072	·01282	·245 ,, ·145	·0355
·100 ,, ·069	·0069	·180 ,, ·040	·0072	·246 ,, ·148	·0364
·100 ,, ·075	·0075	·180 ,, ·060	·0108	·250 ,, ·046	·0115
·100 ,, ·080	·0080	·180 ,, ·070	·0126	·250 ,, ·049	·01225
·100 ,, ·090	·0090	·180 ,, ·080	·0144	·250 ,, ·052	·0130
·104 ,, ·080	·0083	·180 ,, ·155	·0279	·250 ,, ·060	·0150
·104 ,, ·092	·00957	·185 ,, ·115	·02127	·250 ,, ·075	·01875
·110 ,, ·036	·00396	·192 ,, ·050	·0096	·250 ,, ·100	·0250
·110 ,, ·045	·00495	·192 ,, ·064	·01229	·250 ,, ·140	·0350
·110 ,, ·048	·00528	·196 ,, ·065	·01274	·250 ,, ·145	·0362
·110 ,, ·080	·0088	·197 ,, ·157	·03093	·250 ,, ·150	·0375
·116 ,, ·104	·01206	·200 ,, ·070	·0140	·255 ,, ·125	·03187
·117 ,, ·045	·00526	·200 ,, ·075	·0150	·258 ,, ·066	·01703
·117 ,, ·084	·00983	·200 ,, ·110	·0220	·260 ,, ·180	·0468
·120 ,, ·040	·0048	·203 ,, ·060	·0122	·265 ,, ·090	·0238
·120 ,, ·050	·0060	·208 ,, ·056	·01165	·265 ,, ·110	·02915
·120 ,, ·0625	·0075	·209 ,, ·055	·0115	·268 ,, ·035	·00941
·120 ,, ·100	·0120	·209 ,, ·077	·0161	·270 ,, ·100	·0270
·120 ,, ·110	·0132	·210 ,, ·060	·0126	·270 ,, ·112	·03024
·127 ,, ·051	·00648	·210 ,, ·075	·01575	·275 ,, ·244	·0671
·128 ,, ·080	·01024	·210 ,, ·080	·0168	·2758 ,, ·0985	·02717
·130 ,, ·055	·00715	·210 ,, ·200	·0420	·280 ,, ·066	·01848
·130 ,, ·065	·00845	·211 ,, ·108	·0228	·280 ,, ·129	·03612
·130 ,, ·080	·0104	·220 ,, ·050	·0110	·280 ,, ·135	·0378
·132 ,, ·088	·0116	·220 ,, ·077	·01694	·280 ,, ·170	·0476
·133 ,, ·078	·01037	·220 ,, ·120	·0264	·280 ,, ·185	·0518
·140 ,, ·060	·0084	·220 ,, ·150	·0330	·295 ,, ·144	·04248
·140 ,, ·096	·0134	·221 ,, ·091	·0201	·300 ,, ·080	·0240
·140 ,, ·128	·0179	·230 ,, ·050	·0115	·300 ,, ·120	·0360
·144 ,, ·085	·01224	·230 ,, ·090	·0207	·300 ,, ·185	·0555
·150 ,, ·064	·0096	·230 ,, ·150	·0345	·300 ,, ·250	·0750
·151 ,, ·116	·01752	·230 ,, ·165	·03795	·309 ,, ·063	·01946
·152 ,, ·105	·01596	·232 ,, ·040	·0093	·310 ,, ·174	·05394
·153 ,, ·100	·0153	·234 ,, ·0625	·0146	·312 ,, ·070	·02184
·153 ,, ·140	·0214	·236 ,, ·039	·0092	·315 ,, ·138	·04347

Goods packed and delivered f.o.b. 2½ per cent extra.

FOR ARMATURE MATERIAL, AND

DYNAMO MANUFACTURE.

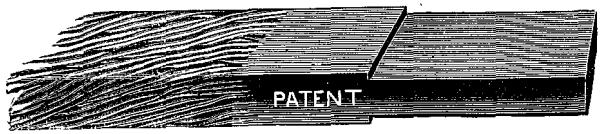
WE CAN SUPPLY QUICKLY AS SINGLE STRIP, OR TO ANY SPECIFICATION.

Size in Inch.	Area in Square Inches.	Size in Inch.	Area in Square Inches.	Size in Inch.	Area in Square Inches.
·315 × ·157	·04955	·450 × ·150	·0675	·650 × ·200	·1300
·320 ,, ·048	·01305	·4728 ,, ·039	·01844	·650 ,, ·220	·1430
·320 ,, ·072	·02304	·4728 ,, ·067	·03168	·670 ,, ·180	·1206
·320 ,, ·120	·0384	·4728 ,, ·197	·0934	·670 ,, ·280	·1876
·320 ,, ·250	·0860	·473 ,, ·0709	·03354	·675 ,, ·225	·15188
·325 ,, ·110	·03575	·473 ,, ·075	·03547	·700 ,, ·150	·1050
·329 ,, ·090	·0296	·473 ,, ·090	·04257	·700 ,, ·250	·1750
·330 ,, ·080	·0264	·473 ,, ·236	·11163	·705 ,, ·115	·08107
·330 ,, ·100	·0330	·473 ,, ·2955	·13977	·705 ,, ·245	·1727
·335 ,, ·050	·01675	·473 ,, ·354	·17744	·705 ,, ·263	·1854
·335 ,, ·060	·0201	·480 ,, ·075	·0360	·709 ,, ·216	·1531
·340 ,, ·050	·0170	·495 ,, ·110	·05445	·748 ,, ·630	·4712
·340 ,, ·075	·0255	·500 ,, ·083	·04150	·750 ,, ·064	·0480
·350 ,, ·045	·01575	·500 ,, ·118	·0590	·750 ,, ·080	·0600
·350 ,, ·060	·0210	·500 ,, ·160	·0800	·750 ,, ·220	·1650
·350 ,, ·100	·0350	·500 ,, ·1875	·09375	·788 ,, ·197	·1552
·350 ,, ·125	·04375	·500 ,, ·220	·1100	·788 ,, ·394	·3105
·350 ,, ·250	·0875	·500 ,, ·300	·1500	·800 ,, ·250	·2000
·350 ,, ·285	·09975	·505 ,, ·230	·11615	·805 ,, ·113	·09096
·354 ,, ·075	·02655	·510 ,, ·072	·0367	·805 ,, ·180	·1449
·354 ,, ·138	·04885	·512 ,, ·335	·1715	·837 ,, ·512	·4285
·3546 ,, ·059	·02092	·512 ,, ·433	·22169	·847 ,, ·473	·4006
·370 ,, ·180	·0666	·520 ,, ·338	·17576	·867 ,, ·473	·4101
·375 ,, ·200	·0750	·520 ,, ·3388	·17618	·875 ,, ·070	·0612
·379 ,, ·079	·0299	·525 ,, ·0975	·05119	·875 ,, ·144	·1260
·380 ,, ·200	·0760	·530 ,, ·110	·0583	·925 ,, ·150	·1387
·385 ,, ·198	·07623	·550 ,, ·300	·1650	·945 ,, ·236	·2230
·388 ,, ·156	·06053	·553 ,, ·049	·0271	·945 ,, ·394	·3723
·394 ,, ·174	·06855	·563 ,, ·250	·14075	1·0 ,, ·072	·0720
·394 ,, ·235	·09259	·565 ,, ·163	·09211	1·0 ,, ·100	·1000
·400 ,, ·045	·0180	·565 ,, ·395	·22317	1·0 ,, ·125	·1250
·400 ,, ·056	·0224	·571 ,, ·453	·25866	1·0 ,, ·250	·2500
·400 ,, ·070	·0280	·575 , ·0625	·03594	1·0 ,, ·275	·2750
·400 ,, ·100	·0400	·600 ,, ·140	·0840	1·0 ,, ·300	·3000
·400 ,, ·140	·0560	·605 ,, ·105	·06352	1·0 ,, ·305	·3050
·400 ,, ·150	·0600	·610 ,, ·060	·0366	1·0 ,, ·350	·3500
·420 ,, ·250	·1050	·625 ,, ·072	·0450	1·0 ,, ·512	·5120
·433 ,, ·275	·11907	·630 ,, ·354	·2230	1·024 ,, ·275	·2816
·433 ,, ·354	·1533	·640 ,, ·113	·0723	1·024 ,, ·512	·5243
·440 ,, ·058	·0255	·640 ,, ·150	·0960	1·044 ,, ·305	·3184
·440 ,, ·150	·0660	·640 ,, ·165	·1056	1·182 ,, ·275	·32505
·450 ,, ·060	·0270	·640 ,, ·174	·11136	1·5 , ·125	·1875
·450 ,, ·063	·02835	640 ,, ·250	·1600		
·450 ,, ·111	·04995	·650 ,, ·177	·1150		

Goods packed and delivered f.o.b. 2½ per cent extra.

COMPRESSED STRAND, see page 70.

GLOVERS' ANTI-FOUCALT MATERIAL.



PATENT ARMATURE BARS, with solid ends.

Below will be found the sizes of the tools we already have, others are being added from time to time.

SQUARE OR RECTANGULAR SIZES.—The dimensions given below are the widths of tools we have and are unalterable, but we can vary the size the other way to any dimension up to a square, *i.e.* :—

·250″ × ·250″ can alter to ·250 × ·180 or ·250 × ·110, &c.

Size one way in Inches.	Size one way in Inches.	Size one way in Inches.	Size one way in Inches.	Size one way in Inches.	Size one way in Inches.
2·460	·770	·560	·400	·296	·185
2·000	·745	·554	·390	·285	·180
1·490	·670	·510	·375	·280	·165
1·230	·664	·500	·370	·276	·155
1·100	·645	·495	·350	·255	·150
1·000	·630	·480	·325	·250	·136
·842	·610	·455	·320	·225	·133
·812	·600	·450	·310	·220	·120
·800	·580	·435	·305	·200	·113
·790	·570	·430	·300	·195	·110

TAPERED SECTIONS.—The sizes given below are unalterable as regards the depth of the bar, but they can vary in width as much as desired, the taper always remaining the same, *i.e.* :—

·560 tapering 48 mils. may be ·560 × ·560 tapering to ·512, or ·560 × ·300 tapering to ·252.

Size in Inch.	Size in Inch.	Size in Inch.
1·200 tapering 65 mils.	·670 tapering 48 mils.	·450 tapering 27 mils.
1·050 ,, 40 ,,	·650 ,, 29 ,,	·450 ,, 18 ,,
1·000 ,, 20 ,,	·650 ,, 20 ,,	·370 ,, 20 ,,
·945 ,, 38 ,,	·640 ,, 20 ,,	·350 ,, 10 ,,
·900 ,, 20 ,,	·625 ,, 30 ,,	·340 ,, 12 ,,
·850 ,, 20 ,,	·600 ,, 20 ,,	·330 ,, 25 ,,
·800 ,, 30 ,,	·600 ,, 35 ,,	·290 ,, 10 ,,
·750 ,, 27 ,,	·560 ,, 48 ,,	·270 ,, 10 ,,
·700 ,, 32 ,,	·560 ,, 30 ,,	·262 ,, 10 ,,
·700 ,, 20 ,,	·520 ,, 120 ,,	·255 ,, 7 ,,
·700 ,, 4 ,,	·500 ,, 31 ,,	·245 ,, 3 ,,
·700 ,, 40 ,,		

We have some semi-circular tools for making half-round sections. Bars can be rounded throughout or may have the rounded section on the top side at one end and underneath at the other, the centre being rectangular or square as required.

COMPRESSED STRAND IN CONTINUOUS LENGTHS.

We supply the above bare and insulated as may be required, prices of which are as follows:—

Bare sections over ¼″ square for Armatures (including Royalty).. **1s. 3d.** per lb. nett.
,, ,, Magnets (no Royalty) ..... **1s.** ,, ,,
Insulating with fine cotton braid not exceeding 25 mils..... **1½d.** ,, ,,
,, S.C.C. and fine braid ,, 32 ,, ... **2⅛d.** ,, ,,
,, double braid ,, 50 ,, ... **4d.** ,, ,,

Solid ends are charged according to size and the amount of tooling required, and whether tinned or plain.

SPECIAL MATERIAL

OR

ARMATURES, &c.

We manufacture every description of wire and cable required for Armature work, amongst which are the following :—

BARE ARMATURE BARS (WITH OR WITHOUT SOLID ENDS).—The price for these is 1s. 3d. per lb. nett, including Royalty. Solid Ends are extra and charged according to size and the amount of shaping and tooling required, and whether tinned or plain; if insulated the extras would be as on previous page. We can give prompt delivery of any section whether listed or not.

SOLID ROUND WIRES.—Double Cotton Covered. Special basis price to dynamo manufacturers. All sizes thicker than No. 15's **finely braided** instead of D.C.C. (double cotton covered) 1d. per lb. nett extra to D.C.C. basis.

SOLID SECTIONAL STRIP.—Any dimensions at 1d. per lb. nett more than round wire.

LAMINATED STRIP.—Special Fine Braid. Any dimensions, 3d. per lb. nett more than D.C.C. round wire.

STRANDED CABLES (NOT COMPRESSED). D.C.C. 1d. per lb. more than solid wire. Finely braided, instead of D.C.C., 2d. per lb. more than solid wire. Any of the above will be varnished at a uniform rate of 1d. per lb. nett. Tinned wire extra, according to size.

DIATRITE VARNISH, for Armatures.

SPECIAL TAPE, for Armatures.

COPPER WIRE AND TAPE, etc., for all electrical purposes.

HIGH CONDUCTIVITY COPPER CASTINGS supplied to order.

Goods packed and delivered f.o.b. 2½ per cent extra.

COMPARATIVE TABLE OF EQUIVALENT CONDUCTORS.

Showing the relation of various sizes to each other.

Equivalent Resistance and Weight of Pure Copper Wire carrying 1,000 Ampères per square inch.				91 STRAND. S.W.G.			
Ampères.	Equivalent diameter in inches.	Resistance per 1,000 yds. at 60° Fahr.	Lbs. per 1,000 yds.	Size in S. W. G.	Area in Square Inches.	Resistance per 1,000 yards at 60° Fahr.	Lbs. per 1,000 yds.
	Inches.	Ohms.	Lbs.			Ohms.	Lbs.
1000	1·128	·0244	11560	91/11	·988162	·02543	11422
800	1·009	·0305	9248	...	......	...	...
700	·9440	·0349	8092	91/12	·794294	·03164	9181
600	·8740	·0407	6936	91/13	·621567	·04044	7185
500	·7978	·0489	5780	91/14	·469990	·05348	5432
400	·7136	·0611	4624	91/15	·380695	·06603	4400
300	·6180	·0815	3468	91/16	·300797	·08357	3476
250	·5641	·0978	2890	91/17	·230296	·10915	2661
200	·5046	·1223	2312	—	—	—	—
175	·4720	·1398	2013	...	......	...	...
150	·4370	·1631	1734	91/18	·169202	·14857	1956
125	·3989	·1957	1445	...	......	...	...
100	·3568	·2446	1156	—	—	—	—
90	·3385	·2718	1040	...	......	...	...
80	·3191	·3058	925	—	—	—	—
70	·2985	·3495	809	...	......	...	...
60	·2763	·4077	694	—	—	—	—
50	·2523	·4893	578	...	......	...	...
40	·2256	·6116	462	—	—	—	—
35	·2111	·6990	405	...	......	...	...
30	·1954	·8155	347	—	—	—	—
25	·1784	·9786	289	...	......	...	...
20	·1595	1·2232	231	—	—	—	—
15	·1381	1·6310	173	...	......	...	...
12	·1236	2·0388	139	—	—	—	—
10	·1128	2·4465	116	...	......	...	...
9	·1070	2·7184	104	—	—	—	—
8	·1009	3·0582	92·5	...	......	...	...
7	·09440	3·4951	81·0	—	—	—	—
6	·08740	4·0776	69·5	...	......	...	...
5	·07978	4·8931	58·0	—	—	—	—
4	·07136	6·1164	46·5	...	......	...	...
3	·06180	8·1552	34·5	—	—	—	—
2	·05046	12·2328	23·0	...	......	...	...
1·75	·04720	13·9804	20·0	—	—	—	—
1·50	·04370	16·3105	17·5	...	......	...	...
1·25	·03989	19·5726	14·5	—	—	—	—
1	·03568	24·4657	11·5	...	......	...	...

To obtain the diameter of the strand, multiply the diameter of one wire by 11.

61 STRAND. S.W.G.			
Size in S. W. G.	Area in square inches.	Resistance per 1,000 yds. at 60° Fahr.	Lbs. per 1,000 yds.
		Ohms.	Lbs.
61/10	805356	·03116	9939
—	—	—	—
61/11	·661427	·03795	7646
61/12	·531661	·04721	6145
61/13	·416046	·06033	4809
61/14	·314588	·07979	3636
61/15	·254818	·09850	2945
61/16	·201339	·1246	2327
...	......	...	...
61/17	·154149	·1628	1781
61/18	·113255	·2216	1309
—	—	—	—
...	......	...	...
61/19	·0786455	·3191	909
...	......	...	...
61/20	·0637062	·3940	736
61/21	·0503316	·4987	572
61/22	·0385404	·6513	446
...	......	...	...
61/23	·0283139	·8865	327
61/24	·0237889	1·0551	275
—	—	—	—
...	......	...	...
—	—	—	—
...	......	...	...
—	—	—	—
...	......	...	...
—	—	—	—
...	......	...	...
—	—	—	—
...	......	...	...
—	—	—	—
...	......	...	...
—	—	—	—
...	......	...	...
—	—	—	—
...	......	...	...

To obtain the diameter of the strand, multiply the diameter of one wire by 9.

37 STRAND. S.W.G.			
Size in S. W. G.	Area in square inches.	Resistance per 1,000 yds. at 60° Fahr.	Lbs. per 1,000 yds.
		Ohms.	Lbs.
37/8	·762527	·03288	8815
37/9	·617646	·04060	7140
37/10	·488018	·05138	5641
37/11	·400802	·06265	4633
37/12	·322169	·07783	3723
37/13	·252110	·09947	2914
37/14	·190630	·1315	2203
...	......	...	...
37/15	·154411	·1624	1785
37/16	·122004	·2055	1410
—	—	—	—
37/17	·0934092	·2684	1080
—	—	—	—
37/18	·0686290	·3654	793
—	—	—	—
37/19	·0476565	·5262	550
37/20	·0386038	·6496	446
...	......	...	...
37/21	·0304992	·8222	352
37/22	·0233542	1·0737	270
37/23	·0171572	1·4616	198
37/24	·0143449	1·7396	165
—	—	—	—
...	......	...	...
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—	—	—	—
...	......	...	...

To obtain the diameter of the strand, multiply the diameter of one wire by 7.

COMPARATIVE TABLE OF EQUIVALENT CONDUCTORS.

Showing the relation of various sizes to each other.

Amperes.	19 STRAND. S.W.G.				7 STRAND. S.W.G.				3 STRAND. S.W.G.				SOLID. S.W.G.			
	Size in S.W.G.	Area in Square Inches.	Resistance per 1,000 yds. at 60° Fahr.	Lbs. per 1,000 yds.	Size in S.W.G.	Area in Square Inches.	Resistance per 1,000 yds. at 60° Fahr.	Lbs. per 1,000 yds.	Size in S.W.G.	Area in Square Inches.	Resistance per 1,000 yds. at 60° Fahr.	Lbs. per 1,000 yds.	Size in S.W.G.	Area in Square Inches.	Diameter in Inches.	Resistance per 1,000 yds. at 60° Fahr.	Lbs. per 1,000 yds.
			Ohms.	Lbs.			Ohms.	Lbs.			Ohms.	Lbs.			Ins.	Ohms.	Lbs.
1000																	
800																	
700																	
600																	
500	19/7	·472410	·05292	5461													
400	19/8	·390422	·06404	4513													
300	19/9	·316241	·07906	3655													
250	19/10	·249870	·10000	2888													
200	19/11	·205215	·1218	2372	7/6	·206723	·1207	2390									
175	...	.....	...	...	7/7	·173705	·1436	2008									
150	19/12	·164953	·1515	1906	7/8	·143558	·1752	1660									
125	19/13	·129083	·1937	1491	7/9	·116282	·2146	1343									
100	19/14	·0976045	·2561	1128	—	—	—	—									
90	...	.....	..	...	7/10	·0918775	·2716	1062									
80	19/15	·0790603	·3162	914	—	—	—	—									
70	...	.....	...	...	7/11	·0754576	·3307	872									
60	19/16	·0624677	·4002	722	7/12	·0606535	·4114	701									
50	19/17	·0478265	·5228	553	7/13	·0474638	·5257	549									
40	—	—	—	—	—	—	—	—									
35	19/18	·0351388	·7115	406	7/14	·0358892	·6953	415									
30	—	—	—	—	7/15	·0290705	·8584	336									
25	19/19	·0244006	1·0247	282	...	.....	...	...									
20	19/20	·0197655	1·2650	228	7/16	·0229890	1·0864	266									
15	19/21	·0156159	1·6011	180	7/17	·0175858	1·4190	203									
12	19/22	·0119576	2·0910	138	7/18	·0129207	1·9314	149									
10	...	.....	...	...	...	.....	...	...									
9	19/23	·0087847	2·8463	101·5	7/19	·0089721	2·7813	104									
8	.	.....	...	...	...	.. ...	...	...									
7	19/24	·0073807	3·3877	85	7/20	·0072678	3·4336	84									
6	...	.....	...	...	7/21	·0057419	4·3460	66									
5	—	—	—	—	7/21½	·0050469	4·9445	58									
4	...	.....	...	...	7/22	·0043968	5·6757	51									
3	—	—	—	—	7/23	·0032301	7·7256	37									
2	...	.....	...	...	7/24	·0027139	9·1952	31·5									
1·75	—	—	—	—	—	—	—	—									
1·50	...	.....	...	...	...	.....	...	...									
1·25	—	—	—	—	—	—	—	—									
1	...	.....		...	...	.....	...	...									
	To obtain the diameter of the strand, multiply the diameter of one wire by 5.				To obtain the diameter of the strand, multiply the diameter of one wire by 3.				To obtain the diameter of the strand, multiply the diameter of one wire by 2.								
3/18									·0055373	4·5066	64		14	·0050265	·080	4·8673	58
3/19									·0038451	6·4899	44		15	·0040715	·072	6·0089	47
3/20									·0031147	8·0118	36		16	·0032170	·064	7·6049	37
3/21									·0024608	10·1441	28		17	·0024630	·056	9·9332	28
3/22									·0018843	13·2433	22		18	·0018096	048	13·5198	21
3/23									·0013843	18·0265	16						
3/24									·0011631	21·4554	13·5		19	·0012566	·040	19·4697	14·5
3/25									·00096145	25·9555	11·0		20	·0010179	·036	24·0354	11·7

USEFUL FORMULÆ, &c.

Pure Copper weighs 555 lbs. per cubic foot.

The Specific Gravity of pure annealed copper wire is about 8·9 at 60° Fahr. Log. ·94390.

The Specific Resistance of pure copper, or the resistance of a cubic centimètre at 0° C. or 32° Fahr. = ·000001642 ohm. Log. $\bar{6}$·2153732, and of a cubic inch at 32° Fahr. or 0° C. = ·00000064 ohm. Log. $\bar{7}$·8061800.

The resistance of pure copper varies with the temperature ·215 per cent per degree Fahr., or ·387 per cent per degree Centigrade.

Stranded Wires.—A stranded conductor of given length is of greater weight than an equal length of the same number and size of wires unstranded, and also has a greater area than the same number unstranded.

1 Mil.	=	·001 inch.
Sectional area in square inches	=	d^2 inches × ·7854.
,, circular mils	=	d^2 in mils.
·7854 = Log. $\bar{1}$·8950909.		3·1416 = Log. ·4971509.

To convert—

Mils. to millimètres	multiply by	·02539954.
Inches to millimètres	,,	25·39954.
Square inches to square millimètres	,,	645·137.
Cubic inches to cubic millimètres	,,	16386·18.
Yards to mètres	,,	·914383.
Miles to kilomètres	,,	1·6093.
Pounds to kilogrammes	,,	·45359.
Millimètres to mils	,,	39·3708.
Millimètres to inches	,,	·0393708.
Square millimètres to square inches	,,	·00155006.
Cubic millimètres to cubic inches	,,	·000061027.
Mètres to yards	,,	1·09363.
Kilomètres to miles	,,	·62138.
Kilogrammes to pounds	,,	2·204621.

The resistance of any pure copper wire at 60° Fahr. or 15·5° Cent.
Ohms per mile = ·0430597564 divided by area in square inches.
Ohms per yard = ·00002446577 divided by area in square inches.
Ohms per kilomètre = 17·260152 divided by area in square $^{m}/_{m}$.

The weight in lbs. per mile of any pure copper wire—*

lbs. per mile = area in square inches	multiplied by	20350.
lbs. per yard = area in square inches	,,	11·5625.
Kilogrammes per kilomètre = area in square $^{m}/_{m}$	,,	8·89214.

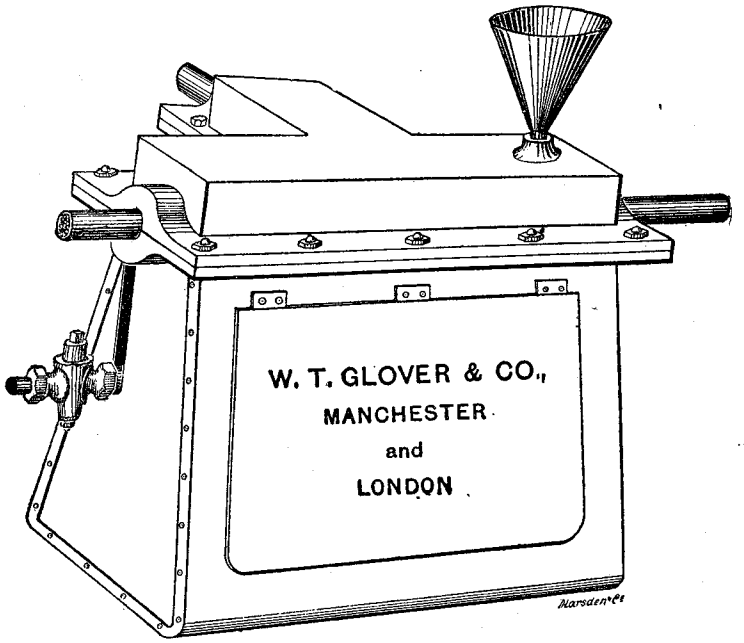
* A wire d. mils in diameter weighs $\frac{d^2}{62·57}$ lbs. per mile.

RELATIVE RESISTANCES AND WEIGHTS OF VARIOUS METALS AND ALLOYS AS COMPARED WITH PURE COPPER AT 60° FAHR. OR 15·5° CENT.

METAL.	Relative Resistance.	Relative Weight.	Variation of Resistance for Temperature.	
			Fahr.	Cent.
Iron	6·356	·8666	·388 %	·7 %
German Silver	12·437	·9549	·024 %	·044 %
Platinum Silver (2 oz. Ag. 1 oz. Pt.)	14·465	1·423	·017 %	·031 %
Manganin (manganese, nickel, copper) approx.	24·85		·000025	·000045
Reostene	44·5	·917	·0588	·011

GLOVERS' OPEN-AIR JOINTING APPARATUS

FOR MAKING VULCANIZED JOINTS.



The diagram illustrates our Open-Air Vulcanizer or "Cure," for making vulcanized rubber joints. The Apparatus is constructed for "T" as well as straight joints.

We keep stock and can give prompt delivery of any size, **£6 6s.**, including all necessary apparatus.

The jointing materials are extra, prices of which will be found on page 66.

We also make a special cure for jointing overhead lines, and a small one for vulcanizing for inside joints, illustrated on page 77.

Full instructions for use supplied on application.

CENTRAL STATION WORK.

We contract for the manufacture and laying of street mains and all the work generally connected therewith, either for lighting or tramway work. We have many patterns of joint and junction boxes, and can quickly make further additions to suit any existing network. Experienced jointers always available.

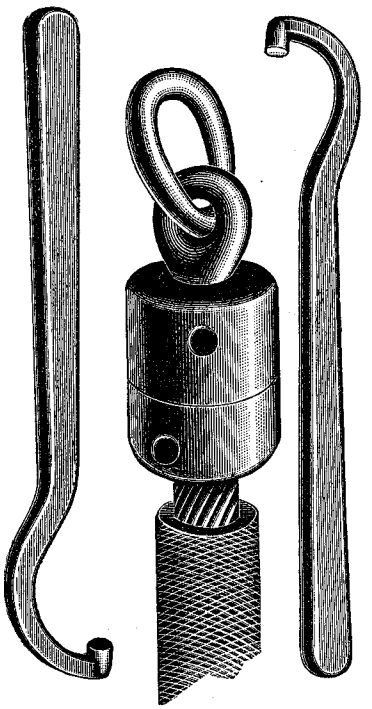
Annexed will be found illustrations of our Electric Jointing Cure and also our Patent Portable Cure for use on inside work and lofty places.

Goods packed and delivered f.o.b. 2½ per cent extra.

VOYSEY PATENT GRIP.

We are sole makers of a Grip designed by Mr. A. A. Voysey for drawing cables into pipes, culverts, etc., of which we give an illustration. This Patent Grip can be attached in two or three minutes. There is no waste of cable or rope, as in the old way. The Grip is made from bar steel so as to get the greatest strength in the smallest space. Each Grip will take several sizes of cable.

Size.	Diameter of Cable.	Outside Diameter of Grip.	Price Complete Net.
	Inches.	Inches.	£ s. d.
A	To $\frac{1}{2}$	1	1 15 0
B	„ $\frac{5}{8}$	$1\frac{1}{4}$	1 17 6
C	„ $\frac{3}{4}$	$1\frac{1}{2}$	2 0 0
D	„ $\frac{7}{8}$	$1\frac{5}{8}$	2 2 6
E	„ 1	$1\frac{3}{4}$	2 5 0
F	„ $1\frac{1}{8}$	2	2 7 6
G	„ $1\frac{1}{4}$	$2\frac{1}{4}$	2 10 0



WIRE GAUGES.

We supply all sizes in Micrometer Gauges. Prices from 15/- each;

Also Poole's Circular Gauge and Trotter's Patent Gauge.

PATENT CABLE SUSPENDER.

DELIVERY FROM STOCK.

Price—5½in., £5 per 1000 nett.
" 7½in., £6 per 1000 nett.

GLOVERS' ELECTRIC CURE FOR VULCANIZING JO

In addition to the ordinary Cures for Vulcanizing Joints, we are n facturing a Cure which is operated by Electricity. Each Cure will tak sizes of Cable. The Apparatus is not only handy, but clean and neat.

Price £4 10s. each.

COMPLETE.

FO

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See pag

GLOVER'S PATENT ELECTRIC CURE FOR VULCANISED

GLOVER'S PATENT ELECTRIC SOLDERING IRON.

Price £2 each.

Electric Soldering Irons, as per Illustration, wound for 100 volts, supplied from Stock. Any other form of Bolt can be supplied to Order; can also be wound for any voltage. Full instructions given with each tool.

EXTRACT FROM RULES OF THE INSTITUTION OF ELECTRICAL ENGINEERS FOR MAXIMUM CURRENTS, THICKNESS OF DIELECTRIC, AND INSULATION RESISTANCE FOR COPPER CONDUCTORS INSULATED AND LAID IN CASING OR TUBING.

1.	2.	3.	4.	5.	6.	7.	8.
Size, S.W.G.	Maximum Current for High External Temperatures.	Total Length in Yds. of Lead and Return giving 1 Volt Drop.	Maximum Current Allowable.	Total Length in Yds. of Lead and Return giving 1 Volt Drop.	Minimum Thickness of Dielectric in Mils or Thousandths of an inch.	Minimum Insulation Resistance in Megohms for One Mile of Class A.	Minimum Insulation Resistance in Megohms for One Mile of Class B.
18 or 62/38 or 97/40	3·1	23	4·2	18	35	1,200	300
3/32	3·3	23	4·4	17	36	,,	,,
17 or 130/40	4·0	25	5·4	19	36	,,	,,
3/20	4·8	26	6·6	19	38	,,	,,
16 or 110/38 or 172/40	4·9	27	6·8	19	36	,,	,,
15	5·9	28	8·2	20	37	800	,,
7/22	6·2	28	8·7	20	38	,,	,,
14 or 172/38 or 7/21½	7·0	29	9·8	21	38	,,	,,
3/18	7·5	30	11·0	20	40	600	,,
7/20	9·3	31	13·0	22	41	,,	,,
7/18	14·0	37	21·0	25	44	,,	,,
19/20	20·0	39	30·0	26	48	,,	,,
7/16	23·0	40	34·0	27	49	,,	,,
19/18	31·0	45	48·0	29	54	,,	,,
7/14	32·0	45	49·0	29	54	400	,,
19/16	49·0	51	77·0	32	62	,,	,,
19/14	70·0	56	110·0	35	70	,,	,,
37/16	83·0	59	130·0	37	75	,,	,,
19/12	100·0	66	170·0	39	82	300	,,
37/14	120·0	64	190·0	40	86	,,	,,
61/15	150·0	67	240·0	42	95	,,	,,
61/14	170·0	74	290·0	43	102	,,	,,
37/12	180·0	73	300·0	44	103	,,	,,
61/12	260·0	82	450·0	47	124	,,	,,
91/12	350·0	90	620·0	51	144	,,	,,
91/11	420·0	94	740·0	53	158	,,	,,

Class A is vulcanized rubber; Class B is non-rubber quality.