

TRADE "EDISWAN" MARK

Section I.

INCANDESCENCE LAMPS
PRICE LIST.

THE
EDISON & SWAN
UNITED ELECTRIC LIGHT
COMPANY, LIMITED.

Head Office:

100, VICTORIA STREET, LONDON, S.W.

City Office and Show Rooms:

110, CANNON STREET, E.C.

West End Order Office:

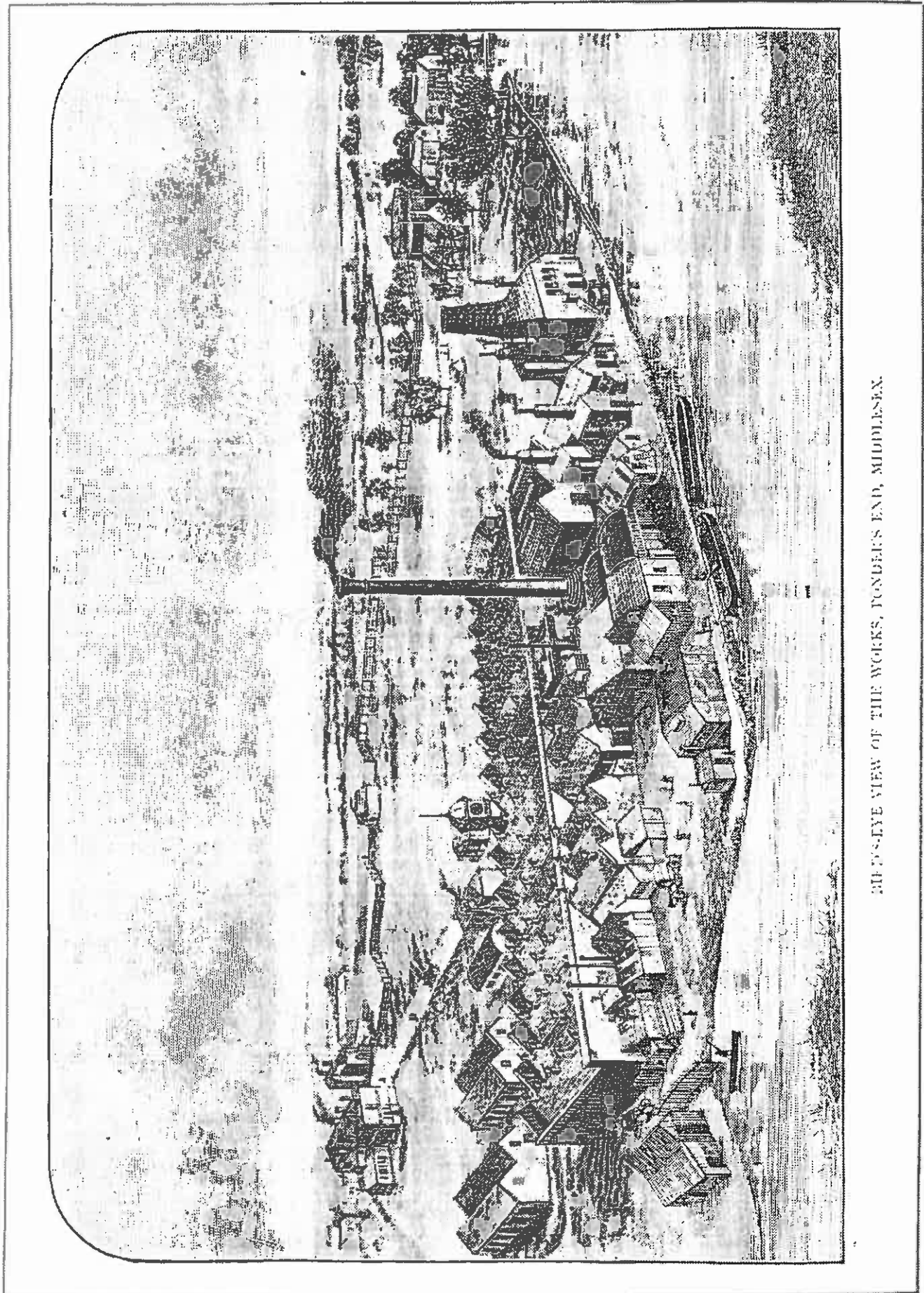
50, PARLIAMENT STREET, S.W.

Works:

PONDER'S END, MIDDLESEX,

AND

SOUTH BENWELL, NEWCASTLE-ON-TYNE.



312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

THE EDISON AND SWAN UNITED ELECTRIC LIGHT COMPANY, LIMITED.



PRICE LIST.



(SUBJECT TO ALTERATION WITHOUT NOTICE.)

Head Office: 100, VICTORIA STREET, LONDON, S.W.

City Show Rooms: 110, CANNON STREET, E.C.

West End Order Office: 50, PARLIAMENT STREET, S.W.

Chief Works: PONDER'S END, MIDDLESEX.

Telegraphic Addresses:—

"EDISWAN, PONDER'S END."

"EDISWAN, LONDON."

FOR PROVINCIAL ADDRESSES, SEE INSIDE.

Telegraphic Addresses for Branches—"EDISWAN," { Followed by Name
of Town.

February 1st. 1893.

❧ CONTENTS. ❧

LAMP SECTION (1). Pages 3 to 67.

	Inclusive.
Addresses of Ediswan Depôts	page 2
Bulbs, Standard shapes and sizes	par. 4—15
Series Lamps	,, 16
Sunlight Lamps	,, 17—21
Terminals for Lamps	,, 22—34
Currents and Markings of Lamps	,, 35
Overrunning	,, 36
Mill Lighting	,, 36
Standards of Measurement	,, 37
Used-up Lamps	,, 38
Instructions for Ordering... ..	,, 39
Terms, Packing, &c.	,, 40—44
Lamps for Special Purposes	,, 45—53
Fancy Lamps	,, 54—57
Advertisements	pages 55, 61

THE EDISON & SWAN UNITED ELECTRIC LIGHT COMPANY, LIMITED,

Are the Sole Manufacturers of

INCANDESCENCE LAMPS

IN THE UNITED KINGDOM,

And will supply Lamps to any Specification, and adapt them to any purpose.

The Company also Manufacture, at their Works in London and Newcastle, all kinds of

ELECTRIC LIGHTING MATERIALS,

and are prepared to supply, in large and small quantities.

INCANDESCENCE LAMP HOLDERS,

SWITCHES,

INSTRUMENTS,

GLOBES, SHADES,

CUT-OUTS,

ELECTROLIERS,

CABLES, CASINGS,

SWITCH-BOARDS,

BRACKETS,

ETC., ETC.

Head Office:

100, VICTORIA ST., LONDON, S.W.

City Office and Show Rooms:

110, CANNON ST., E.C.

Works:

PONDER'S END, MIDDLESEX.
SOUTH BENWELL, NEWCASTLE-ON-TYNE.

West End Order Office:

50, PARLIAMENT STREET, S.W.

**STOCKS KEPT in Principal Provincial Towns AT THEIR DEPÔTS
as under:**

BIRMINGHAM:

City Buildings, 14 & 16, Martineau St.

HULL:

1, Grosvenor Buildings, Carr Lane.

CARDIFF:

111, Bute Docks.

LEEDS:

127, St. Ann's Buildings, Albion Street.

DUNDEE:

17, Castle Street.

LIVERPOOL:

6, Tower Gardens, Water Street.

GLASGOW:

153, West George Street.

NEWCASTLE-ON-TYNE:

Works, South Benwell.

THE EDISON & SWAN UNITED ELECTRIC LIGHT COMPANY, LIMITED.

OFFICE: 100, VICTORIA STREET, LONDON, S.W.

CHIEF WORKS: PONDER'S END, MIDDLESEX.

Price List.

SECTION I.—LAMPS.

Preface.

1 THE illustrations which follow have been made with great care, and, it is hoped, will assist Customers in their selection of Lamps, particularly those required for special purposes, &c.

Customers are strongly advised not to have their Fittings made too close to the sizes given of Lamps, for, although the greatest care is taken to manufacture the Lamps of equal size, there is practically a little variation.

When reference is made to this Price List, please quote date of List, marginal number, and the number of Bulb or Figure (see also par. 39).

Incandescence Lamps.

2

THE Company keep at their Works, Ponder's End, Middlesex, a large stock of Lamps of every C.P. and E.M.F. required for general use ; and although they cannot in all cases guarantee the execution of orders from stock, every effort will be made to give early delivery.

Many Customers are in the habit of stocking about 1,000 Lamps, thereby saving themselves and the Company a great deal of inconvenience, as also the expense and trouble of telegrams and correspondence, when they require Lamps suddenly. This method of stocking from 50 or 100 to 1,000 Lamps, according to the number of Lamps in use, would greatly add to the convenience of Customers and facilitate business.

The following Tables give particulars of the Standard Candle-powers and Voltages, which have been fixed with great care, and are the result of the Company's experience.

3

EDISON LAMPS.

NOMINAL CANDLE-POWER.	ELECTRO-MOTIVE FORCE.	TARIFF PRICE LIST.
8	48 to 55 Volts.	<i>s.</i> 3 <i>d.</i> 9
10	89 ,, 105 ,,	3 9
16	89 ,, 105 ,,	3 9
32	89 ,, 105 ,,	4 0
50	89 ,, 105 ,,	5 0

List of Standard Candle-powers and Voltages.

4

" EDISWAN " LAMPS.

(FOR ILLUSTRATIONS, CURRENTS, &c., see Pages 6 to 24.)

	NOMINAL CANDLE-POWER.	STANDARD VOLTAGES. (STOCKED.)	LIMIT OF E.M.F. AT TARIFF PRICES.	NO. OF BULB.	TARIFF PRICE LIST.	
					s.	d.
Ordinary. Generally used on Central Stn. Circuits.	8	100	—	2	3	9
	8	110	—	2	3	9
	16	100	—	2	3	9
	16	110	—	2	3	9
Special.	1	2 to 8	8	Miniature.	3	9
	1	2 " 8	8	Pencil Micro.	3	9
	1	2 " 8	8	Round Micro.	3	9
	1	2 " 8	12	6	3	9
	2 ¹ / ₂	5 " 8	—	5	3	9
	2 ¹ / ₂	9 " 25	52	4 & 3	3	9
	5	10 " 20	—	4	3	9
	5	21 " 35	105	3, 3a & 2	3	9
	8	15 " 25	—	3	3	9
	8	16 " 40	—	3a	3	9
	8	41 " 55	120	2	3	9
	16	30 " 40	—	3a	3	9
	16	41 " 105	160	2	3	9
25	45 " 105	120	1 & 2	3	9	
Extra Special, including Series.	16	(6·8 Ampères)	—	Series.	4	7
	16	(10 ")	—	"	5	0
	32	55 to 105	120	1 & 2	4	0
	32	(6·8 Ampères)	—	Series.	5	0
	32	(10 ")	—	"	5	6
	50	80 to 105	120	1	5	0
	50	(6·8 Ampères)	—	Series.	6	0
50	(10 ")	—	"	6	6	
" Sunlight " Lamps.	100	50 to 110	120	Special	7	6
	150	50 " 110	120	"	10	0
	200	50 " 110	120	"	10	0
	300	50 " 110	120	"	12	6
	400	50 " 110	120	"	15	0
	500	65 " 110	120	"	17	6
	600	65 " 110	120	"	20	0
	800	80 " 110	120	"	25	0
	1000	80 " 110	120	"	30	0

5

The Company strongly recommend their Customers to use Lamps within the Standard Voltages.

FOR SPECIAL AND COLOURED GLASS LAMPS NOT DESCRIBED ABOVE,
SEE PARAGRAPHS 45-57.

FOR DISCOUNT AND PAYMENTS, SEE PARAGRAPH 43, PAGE 29.

OBSCURED or VARNISHED Lamps 3d. per Lamp extra. SILVERED Lamps from 1/3 per Lamp extra.

Illustrations of "Ediswan" Lamps.

6

MINIATURE.

These Lamps are often used for surgical and dental work, for fitting in flowers (real or artificial), head-dresses, and for various other effects.

Mounts will be supplied to order at an extra charge.

E.M.F. 2-8 volts.

Price (unmounted) - - 3.9 each.



Fig. 1.
FULL SIZE.

7

PENCIL-SHAPED MICRO.

These small Pencil-shaped Lamps are adapted for microscope and surgical purposes, electrical jewellery, and for various other effects.

The illustration represents a Lamp unmounted. Mounts will be supplied to Customers' instructions at an extra charge.

E.M.F. 2-8 volts.

Price (unmounted) - 3.9 each.



Fig. 2.
FULL SIZE.

8

ROUND MICRO.

This figure represents another form of Microscope Lamp, and where the light is not required to be so close to the object, is better than the pencil-shaped form, on account of the larger bulb, which gives it greater durability. It is also very useful for decorative purposes. Mounts will be supplied at an extra charge.

E.M.F. 2-8 volts.

Price (unmounted) - - 3.9 each.



Fig. 3.
FULL SIZE.

Illustrations of "Ediswan" Lamps.

9

BULB No. 6 (FAIRY).

One Candle-power, E.M.F. 2-12 volts.

Price - - - 3/9 each.

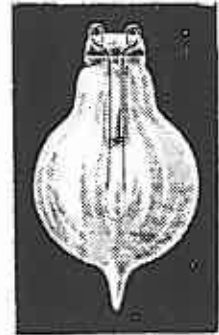


Fig. 4
FULL SIZE.

10

BULB No. 5.

2½ Candle-power, E.M.F. 5-8 volts.

Price - - - 3/9 each.

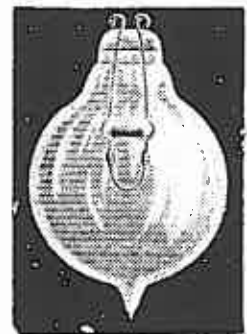


Fig 5
FULL SIZE.

11

BULB No. 4.

2½ Candle-power, E.M.F. 9-35 volts.

5 " " " 10-20 "

Price - - - 3/9 each.

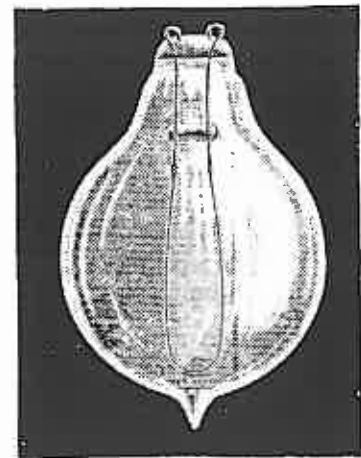


Fig. 6
FULL SIZE.

Illustrations of "Ediswan" Lamps.

12

BULB No. 3

2½ Candle-power, E.M.F. 36-52 volts.

5 " " " 21-45 "

8 " " " 15-25 "

Price - - - 3/9 each.

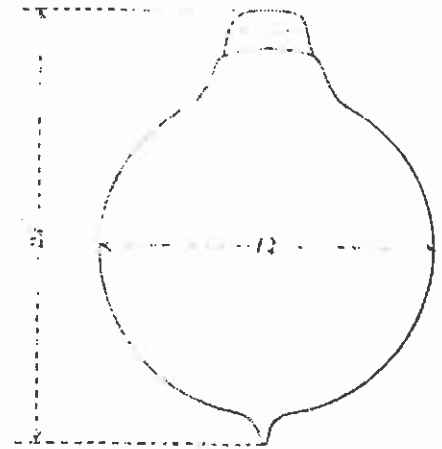


Fig. 7
FULL SIZE.

13

BULB No. 3A.

5 Candle-power, E.M.F. 50-65 volts

8 " " " 26-40 "

16 " " " 30-40 "

Price - - - 3/9 each.

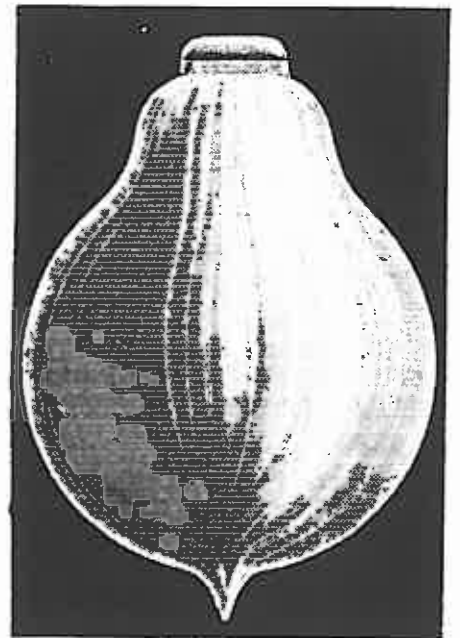


Fig. 8.
FULL SIZE.

Illustrations of "Ediswan" Lamps.

14

BULB No. 2.

8 C.P., E.M.F. 41-120 Volts
 16 " " 41-160 "

Price of 8, 16 and 25 C.P.
 3/9 each.

Price of 32 C.P. 4/- each.

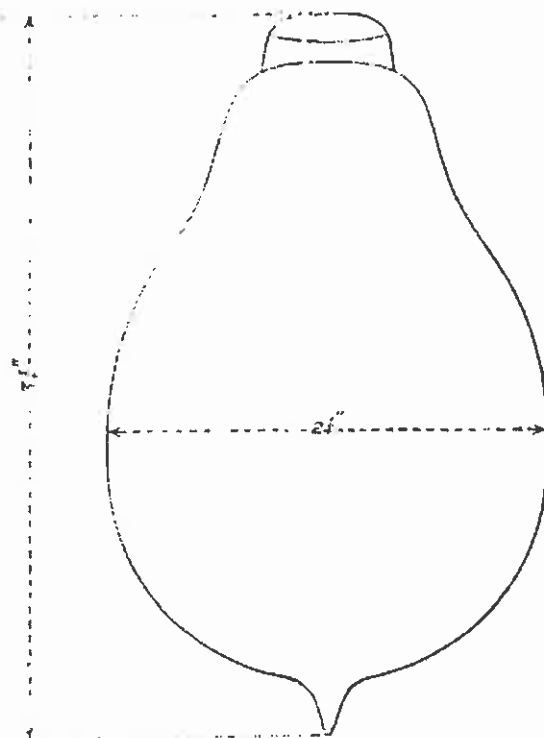


Fig. 9.
 FULL SIZE.

15

BULB No. 1.

This Bulb is used for 50 Candle-power Lamps, 80-105 Volts, and a few of the 25 & 32 C.P. Lamps.

Prices, 25 C.P. ... 3/9 each.
 " 32 C.P. ... 4- ..
 " 50 C.P. ... 5/- ..

NOTE.—The Company recommend 50 C.P. Lamps to be used with Lug Terminals in preference to Caps of any kind fixed with plaster.

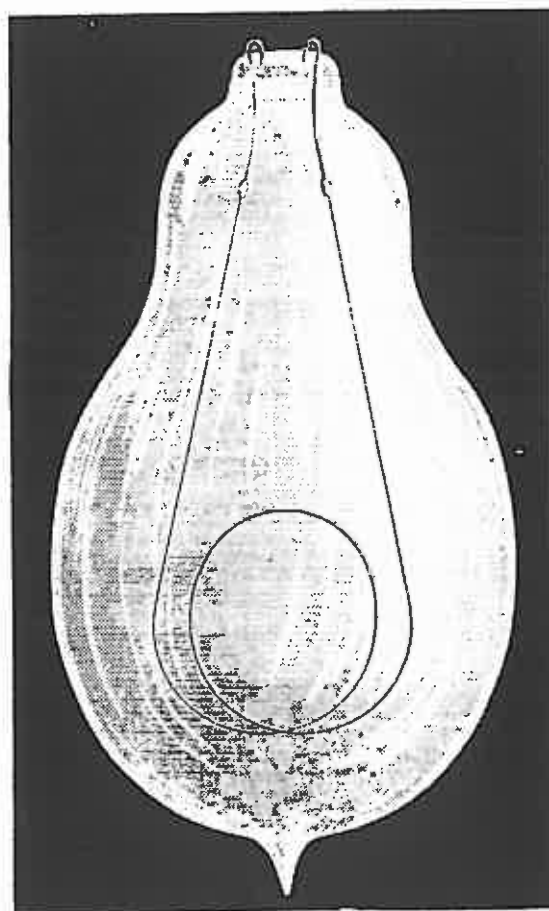


Fig. 10.
 FULL SIZE.

Illustrations of "Ediswan" Lamps

16

SERIES LAMP.

Below is a list of the Standard sizes of Lamps manufactured by the Company.

Taking 0.8 ampères.

16 C.P.	...	4.7
32 C.P.	...	5.7
50 C.P.	...	6.7

Taking 1.0 ampères.

16 C.P.	...	5.7
32 C.P.	...	5.6
50 C.P.	...	6.6

Special quotations will be furnished for others not mentioned.

These Lamps are made with Copper Lug Terminals and fit into a Lug Adapter, made to screw into the "Ediswan" Series Holder, which is shown in Fittings Section.

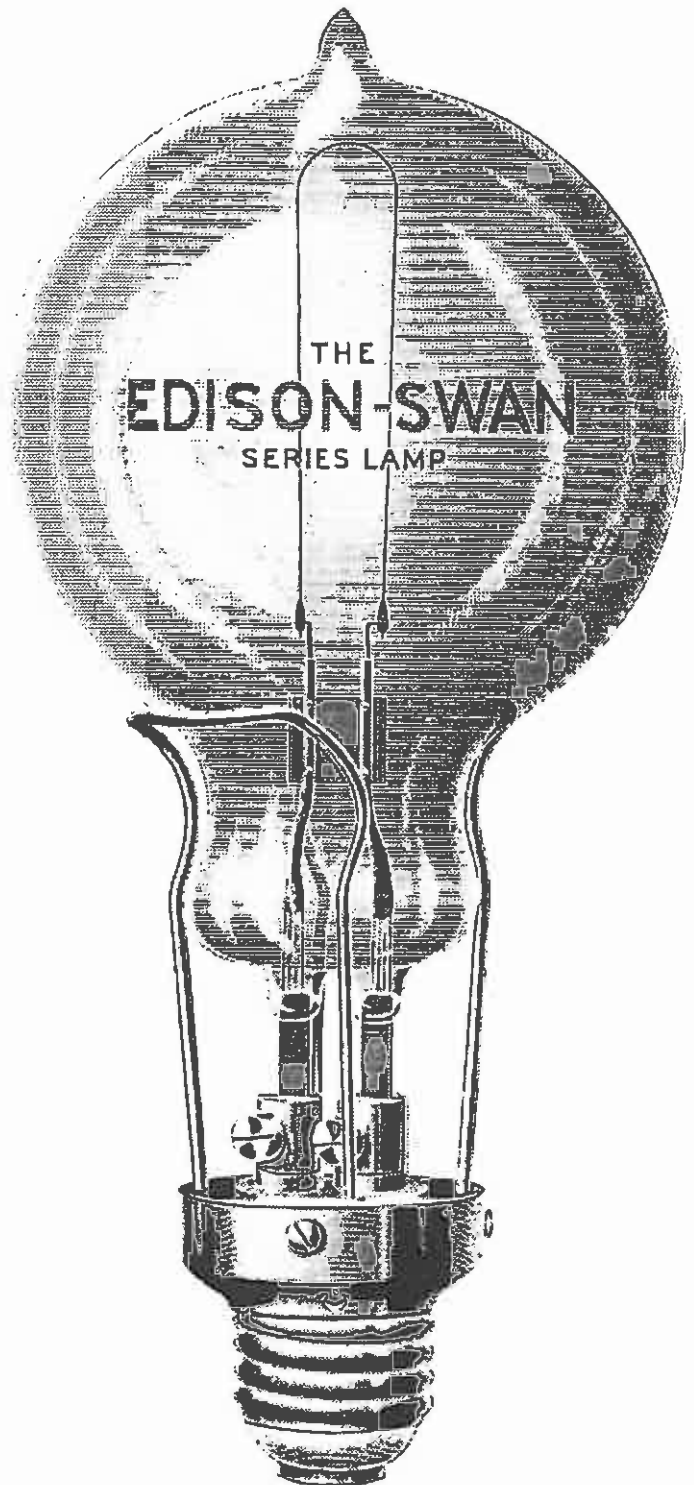


Fig. 11.

"Ediswan Sunlight" Lamps.

17 THE Company supply High Candle-power Lamps of 100, 150, 200, 300, 400, 500, 600, 800, 1,000, 1,200, 1,500 and 2,000 c.p.

These Lamps are suitable for interior lighting in hotels, restaurants, theatres, or other public buildings, in workshops, factories, &c., and for out-door lighting of every description. They are specially useful on board ship for cargo lanterns, &c., for the lighting of railway stations, for building operations, and in every situation where a powerful and steady light is required.

The Lamps are supplied in two classes:—

"A" High Efficiency.

"B" Longer Duration.

In proportion to their actual c.p., they are much more economical than groups of small Incandescent Lamps; for example, the 200 c.p. Lamp gives a light equal to 12 to 13 Lamps of 16 c.p., but costs rather less than the price of three 16 c.p. Lamps, and in addition to this, they are made to run at very much higher efficiencies.

The Lamps are fitted with strong Copper Lugs, sealed into the glass, and which can either be fitted direct into the New Lug Holder, or have Flexible Cord attached, for the convenience of those who have other Holders already installed. The New Lug Holder referred to is made with strong wire prongs, which fit into the curved neck of the Lamps, which obviates entirely the use of netting. (See illustrations on following pages; also Fittings Section for Holders).

For Currents absorbed by Lamps of either class, see Tables on page 24

Illustrations of "Sunlight" Lamps.

18

100 C.P. LAMP.

E.M.F.—50 to 110 Volts.

Price 7.6 each.

N.B.—Although these lamps are fitted with Lug Terminals, it is sometimes imperative that they be used in existing B.C. Holders, and in order to meet such cases a Special Brass Collar has been introduced, which can be fitted at an extra charge of 6c. per lamp. The Company will not be held responsible for the life of lamps of this class, fitted with ordinary B.C. or E.S. Terminals.

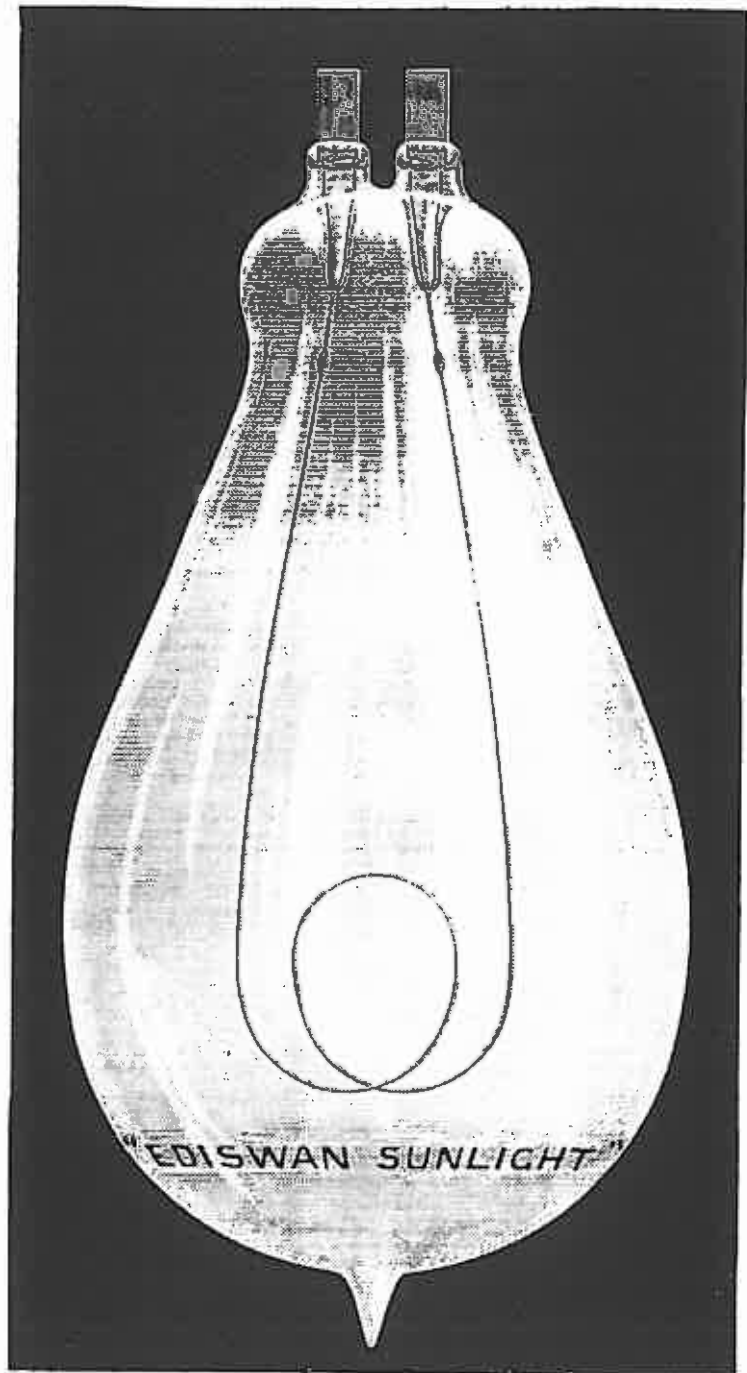


Fig. 11 A.
FULL SIZE.

Illustrations of "Sunlight" Lamps.

150 & 200 C.P. LAMPS.

19

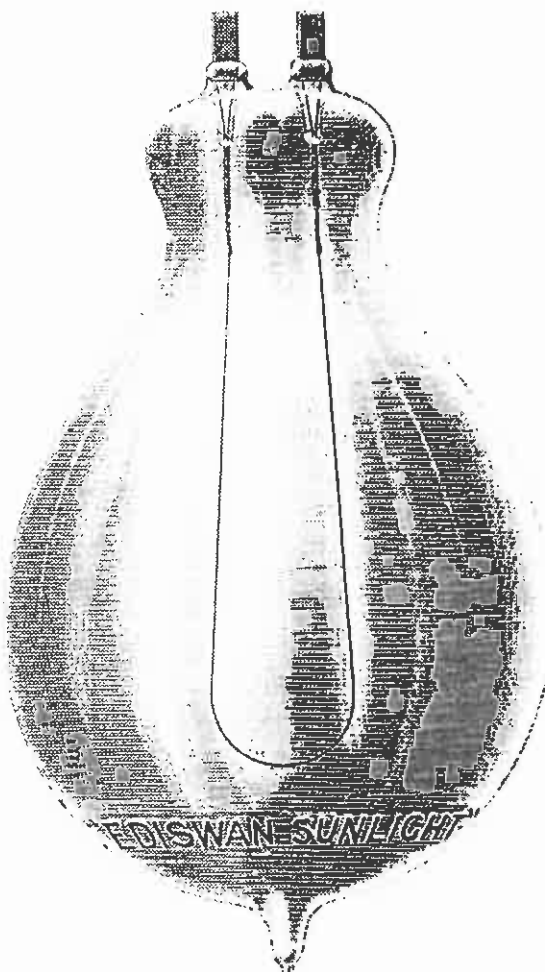


Fig. 12.
HALF ACTUAL SIZE.

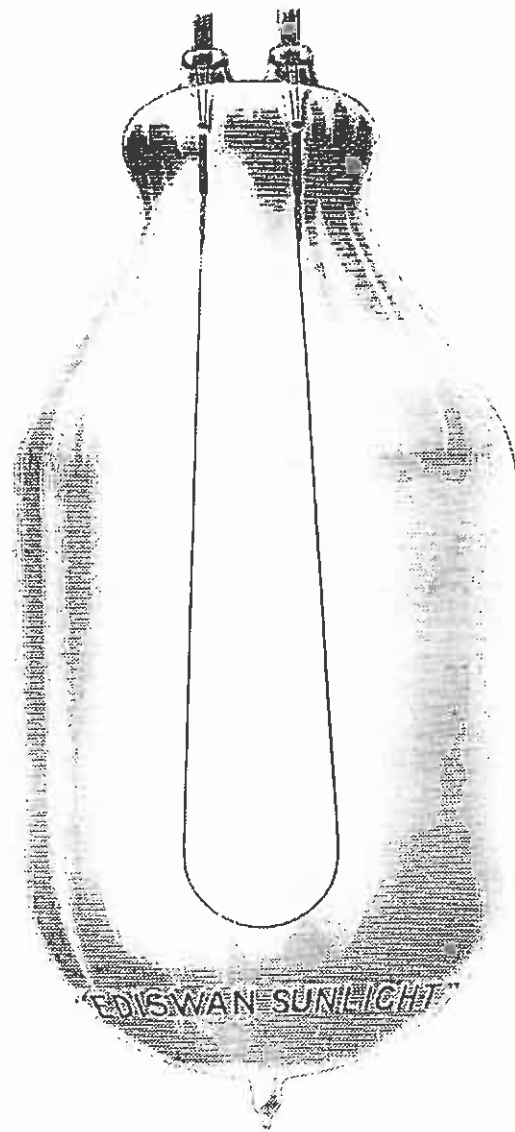


Fig. 12 A.
HALF ACTUAL SIZE.

E.M.F. 50 to 110 volts.

Price - - - 10/- each.

Illustrations of "Sunlight" Lamps.

20

300, 400, 500, & 600 C.P. LAMPS.

300 & 400 Candle-power.

50 to 110 volts.

500 & 600 Candle-power.

65 to 110 volts.

PRICES.

300 Candle-power	- -	12/6
400 " "	- -	15/-
500 " "	- -	17/6
600 " "	- -	20/-

This illustration represents Lamps of 80 volts. and upwards. Those of lower E.M.F. are slightly shorter.

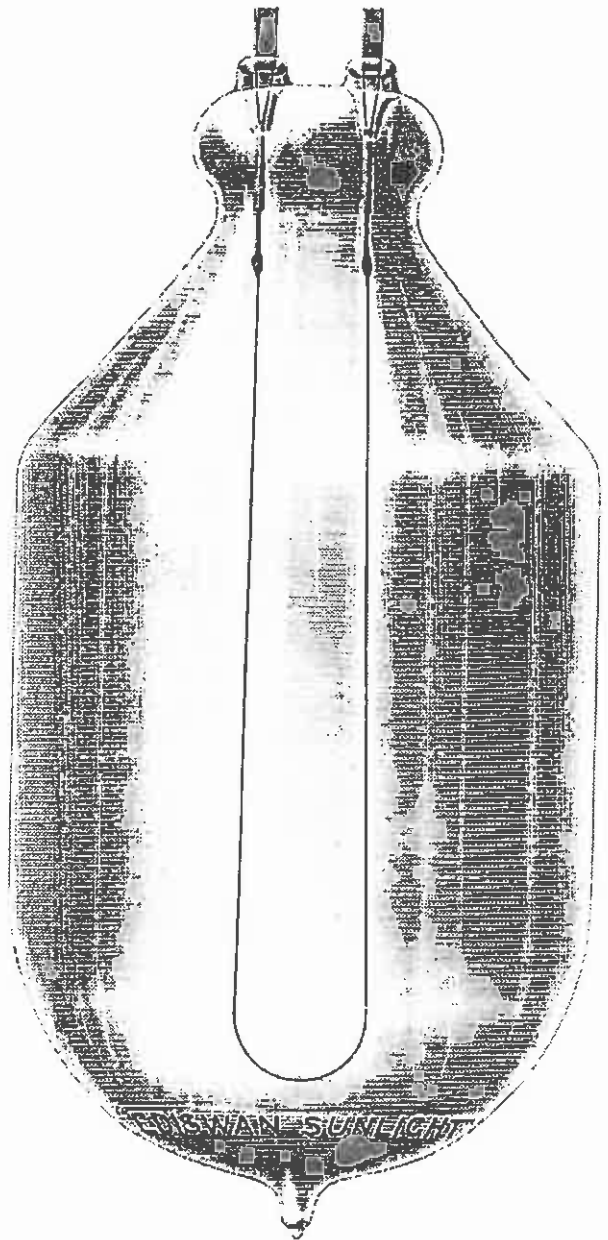


Fig. 13.
HALF ACTUAL SIZE.

Illustrations of "Sunlight" Lamps.

21

800, 1,000, 1,200, 1,500, & 2,000 C.P. LAMPS.

800, 1,000 & 1,200 C.P.

80 to 110 volts.

1,500 & 2,000 C.P.

100 to 110 volts.

PRICES.

800 Candle-power	-	25/-
1,000	-	30/-
1,200	-	35/6
1,500	-	39/-
2,000	-	42/-

This illustration represents the form, the size varying slightly according to C.P. & E.M.F.

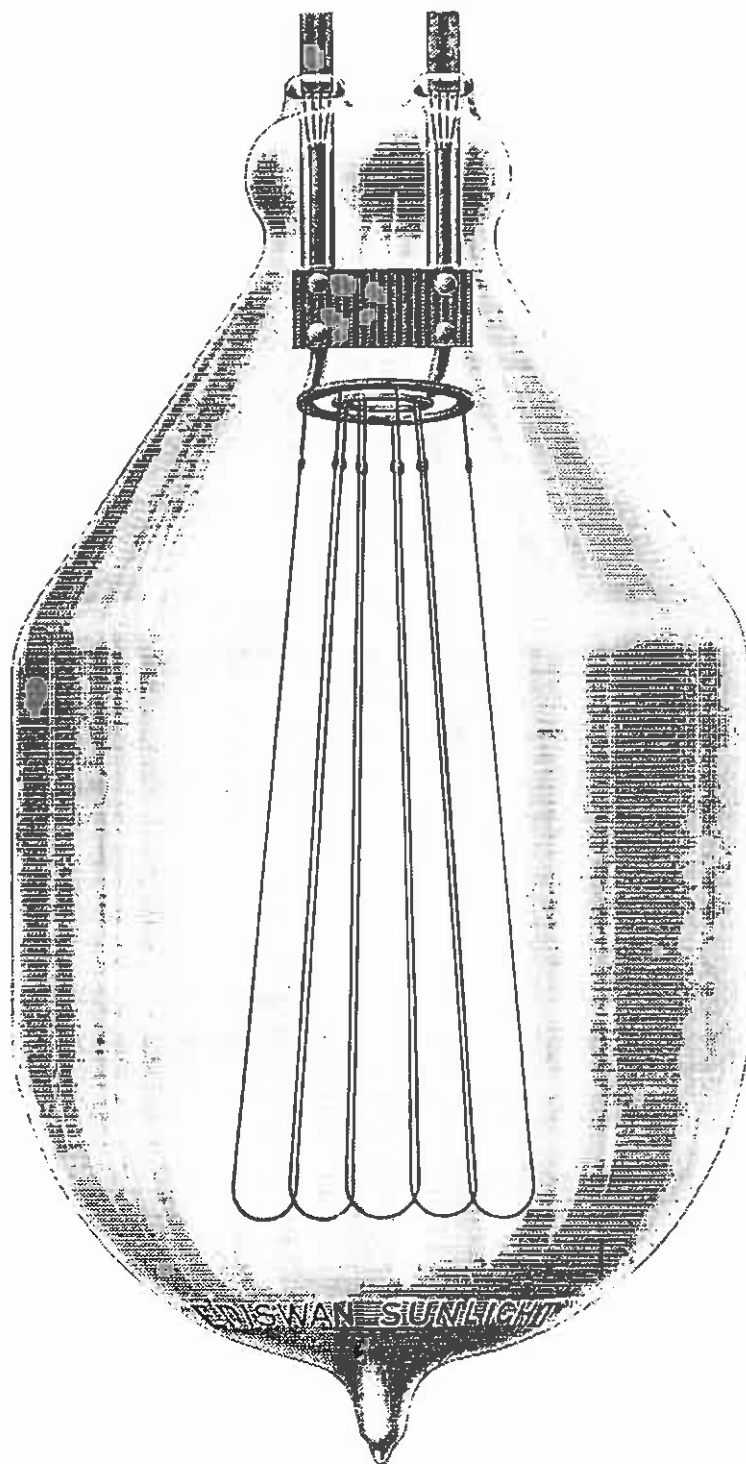


Fig. 13 A

"Ediswan" Terminals.

22

TERMINALS.

The Company fit their Lamps with the Terminals described below in this paragraph, free of charge. As to other Terminals, the Company will endeavour always to meet the requirements of their Customers, and will give estimates of cost of special Terminals on sample being supplied to them.

	ABBREVIATIONS.			
Brass Collars to fit Patent Bayonet-joint Holders	B.C.	see par. 23	Fig. 14.	
Edison Screws for Edison Sockets	E.S.	" "	24 "	15.
Central Contact for Central Pin Bayonet Holders	C.C.	" "	23	similar to Fig. 14.
Side Contacts for Side Attachment Holders ...	S.C.	" "	25	Fig. 16.
Bottom Loop Caps for Spring Holders (strong)	B.L.C.	" "	26 "	17.
Bottom Loop for Spring Holders	B.L.	" "	27 "	18.

MINIATURE TERMINALS.

	ABBREVIATIONS.			
Small Brass Collars to fit Patent Bayonet-joint Holders ...	Small B.C.	see par. 28	Fig. 19.	
Small Flanged Edison Screws to fit Patent Edison Screw Holders	Small Flanged	E.S.	" "	29.
Small Edison Screw to fit Patent Edison Screw Holders	Small E.S.	" "	30	Fig. 20 & 21.
Small Central Contact to fit Patent Central Contact Holders ...	Small C.C.	" "	31.	

When 50 or 100 C.P. Lamps are used, provision should be made for "Bottom Loop" or "Lug" Terminals, as the ordinary Brass Collar is not suitable. A Special B.C., however, will be supplied at 6d. per Lamp extra. (*Illustrated page 21*).

Lamps supplied to order with one form of Terminal will be exchanged for Lamps fitted with another form of Terminal, at a charge of fourpence per Lamp; such Lamps must be returned to the Works, Carriage Paid, and at the Sender's risk. The Company cannot undertake to exchange Lamps with attachments fixed with solder.

Brass Collars and Edison Screws.

23

BRASS COLLAR TERMINAL, B.C.

Fig. 14 illustrates a No. 2 Bulb capped with a Brass Collar Terminal, suitable for Bayonet-joint Holders.

This is an excellent Terminal for all ordinary purposes, more of these being used than any other form.

It is not, however, adapted for Lamps made with Bulbs of a less size than Bulb No. 4 (par. 11).

Contact is made by means of two little Brass Plates (not shown in the Fig.), leaving the Collar insulated.

The Central Contact Terminal is similar, but with only one Brass Plate, the Collar itself forming the other Contact.

For suitable Holders see Fittings Section.

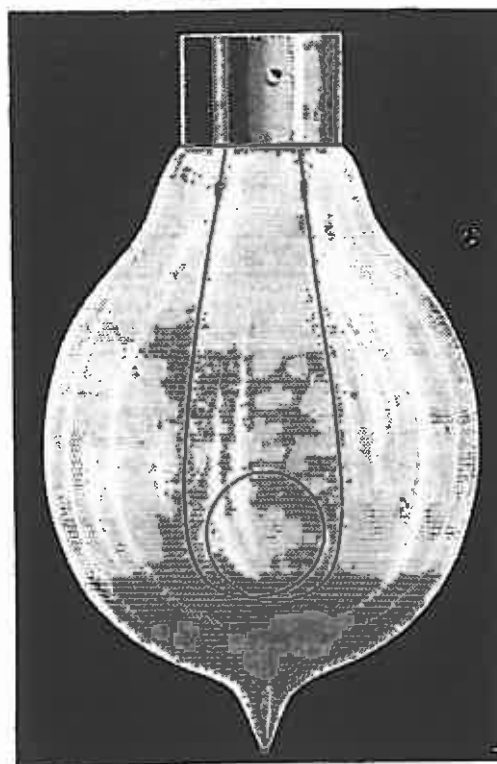


FIG. 14. About Full Size.

24

EDISON SCREW TERMINAL, E.S.

In the accompanying illustration, a Lamp made with No. 2 Bulb is shown fitted with the Edison Screw. This is very largely used, and will be found a most satisfactory Terminal.

It is not a form of Terminal, however, that should be used where there is constant vibration of the Holder.

Acorn Sockets, suitable for Lamps mounted in this manner, will be found described in the Fittings Section of this List.

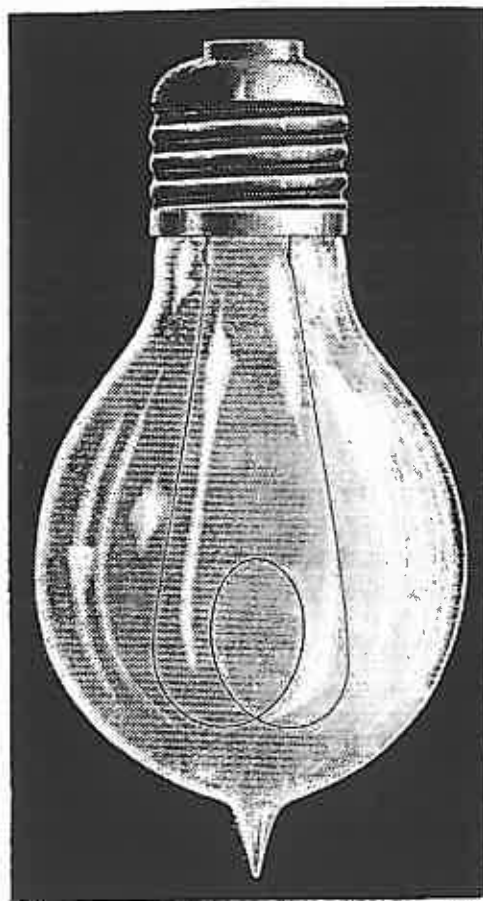


FIG. 15. About Full Size.

Side Contact and Bottom Loop Cap Terminals.

25

SIDE CONTACT TERMINAL, S.C.

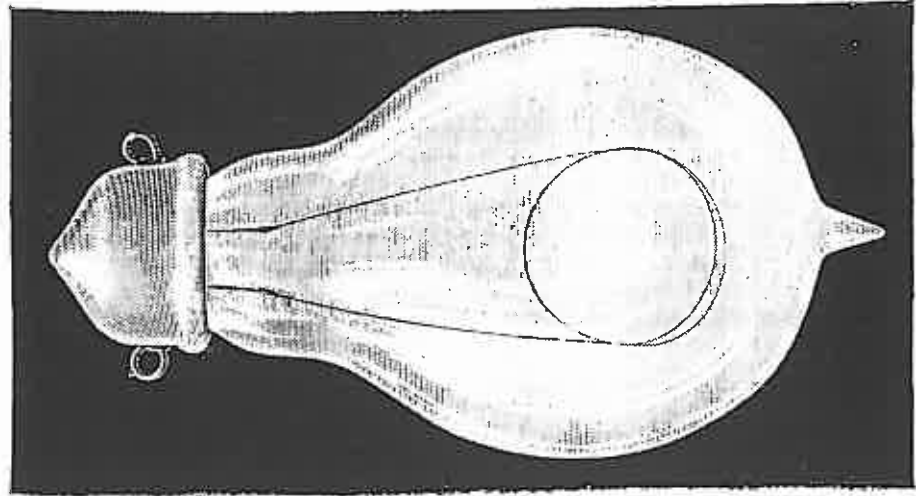


FIG. 16. About Full Size.

The form of Terminal shown in Fig. 16 consists of an Earthenware Cap, through the sides of which project two Loops, Contact being made by the Holder to them.

This style of Terminal is not very convenient, and should never be used unless for a special purpose.

26

BOTTOM LOOP CAP, B.L.C.

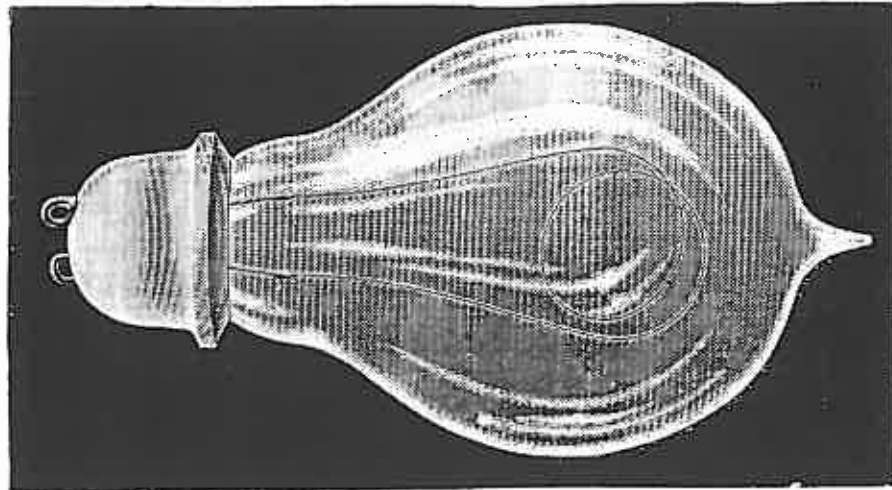


FIG. 17. About Full Size.

This is also an Earthenware Cap, the Loops projecting out at the bottom, in imitation of the ordinary Platinum Bottom Loops.

It will be seen that by the use of this Cap the necessarily frail Platinum Loops of the Lamp will be protected, although the same style of Contact is maintained.

On board Steamers, and wherever there is constant or great vibration, these Terminals will be found most serviceable.

The ordinary Bottom Loop Holders are hardly strong enough for this Cap, but a substantially constructed Holder is shown in the Fittings Section.

Bottom Loop & Small B.C. Terminals.

BOTTOM LOOPS (B.L.)

All Lamps made with Bulb No. 6 (Fairy) and upwards in size are stocked in the condition shown in Fig. 18, viz., with the Platinum Wires formed into small eyes at the bottom of the Lamp—these are termed Bottom Loop Lamps, or shortly, "B.L." Lamps.

See also Lamp with Copper Loops illustrated on page 22.

These Loops are strong enough to support the small-sized Lamps, but they are insufficient for Lamps of the size shown in the illustration.

The Loops to the 50 c.p. Lamps are generally twisted, and therefore fairly strong.

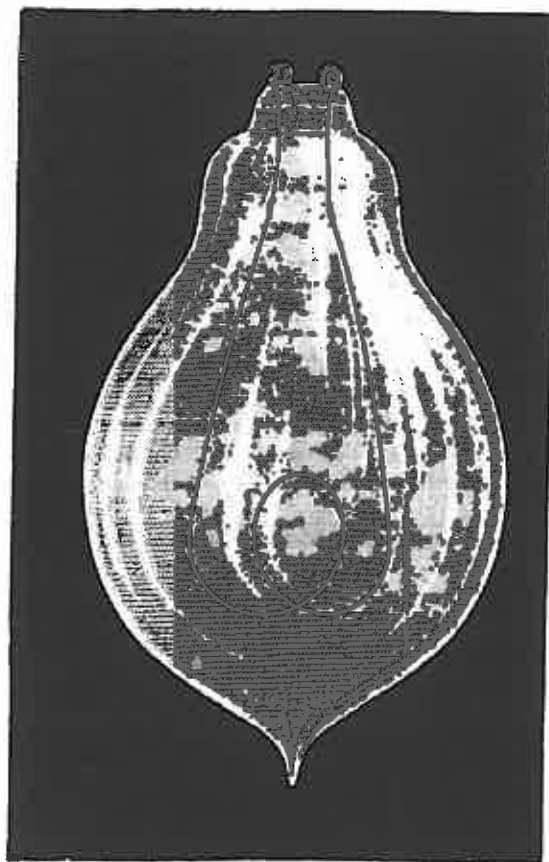


Fig. 18.
ABOUT FULL SIZE.

SMALL BRASS COLLAR (SMALL B.C.)

This is a very useful Terminal of the miniature type for most small sized Lamps, and can be used with safety up to the No. 3 Bulb, as illustrated (Fig. 19.)

It is very generally used for Candle Lamps, and wherever a secure but small Terminal is required.

Holder and Candle Fittings suitable for Lamps mounted with this form of Terminal are shown in Fittings Section.

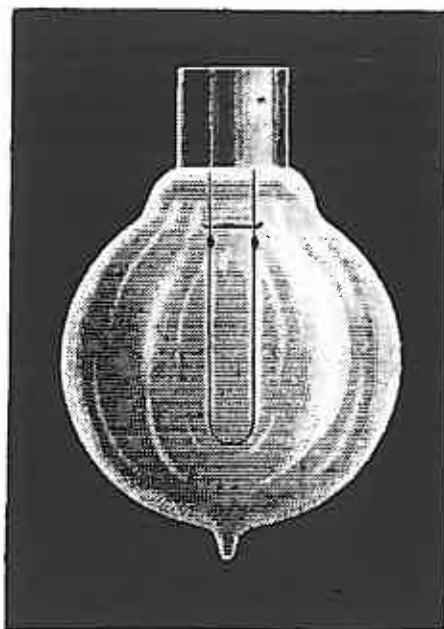


Fig. 19. FULL SIZE.

Miniature Terminals.

29

SMALL FLANGED EDISON SCREW (Small Flanged E.S.)

This form of Miniature Terminal enables its use to be extended to the large sized Bulbs, and it is strongly recommended that, whenever possible, the flanged form of small E.S. Terminal should be used in preference to the Terminal described in next paragraph.

30

SMALL EDISON SCREW (Small E.S.)

The illustrations show two forms of Candle Lamps mounted with the small E.S. Terminal; it is used in these cases without the flanges, in order that the whole Terminal may be hidden within the holder.

Fittings suitable for receiving Lamps mounted with this form of Terminal are shown in Fittings Section.

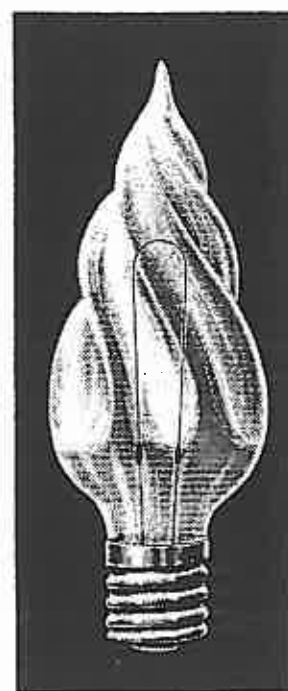
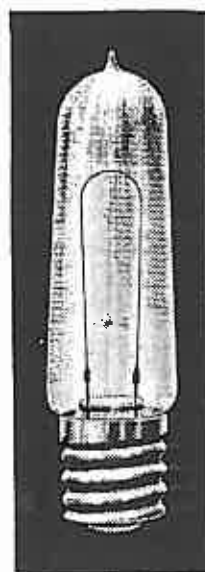


Fig. 20.

Fig. 21

BOTH FULL SIZE.

31

SMALL CENTRAL CONTACT (Small C.C.)

This Terminal is similar to that described in paragraph 28, but with only one little bottom brass plate, the Collar itself forming the other contact.

32

NOTE.—As most of the Terminals described in the foregoing pages are attached to the Lamps by means of plaster, at least four days' notice should be given when ordering Lamps other than B.L., as loose Collars may result from unduly hastening delivery of Lamps mounted with plaster attachments.

Special Brass Collar.

33

SPECIAL BRASS COLLAR.

For 50 C.P. and 100 C.P. Lamps.

The ordinary B.C., mounted with plaster, is entirely unsuitable for use on Lamps such as these. The difficulty is got over by using this form of Collar, which gives thorough ventilation between Terminals and Holder.

Price, 6d. fitted.

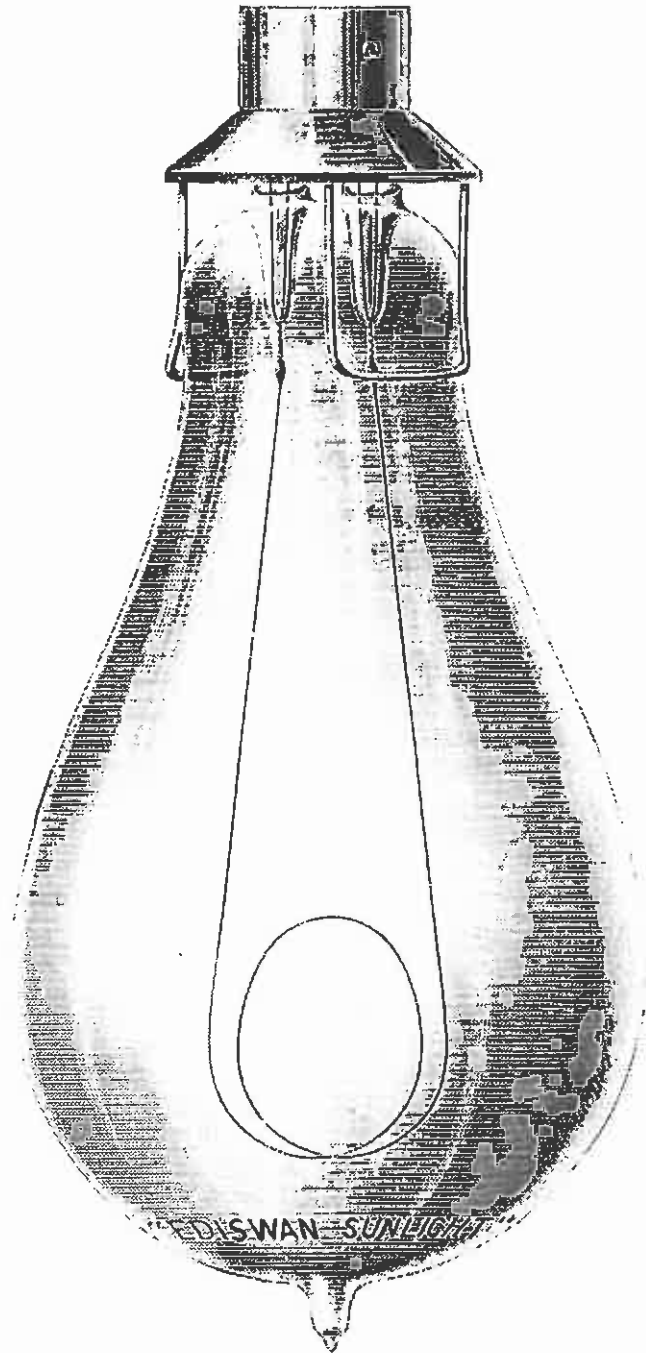


Fig. 22.

Copper Loop Lamp.

34

COPPER LOOP LAMP.

These Lamps have strong Copper Loop Terminals, and are for use with the strong spring Holders, by which the vibration experienced in Ships, Railway Trains, Mills, &c., is minimised.

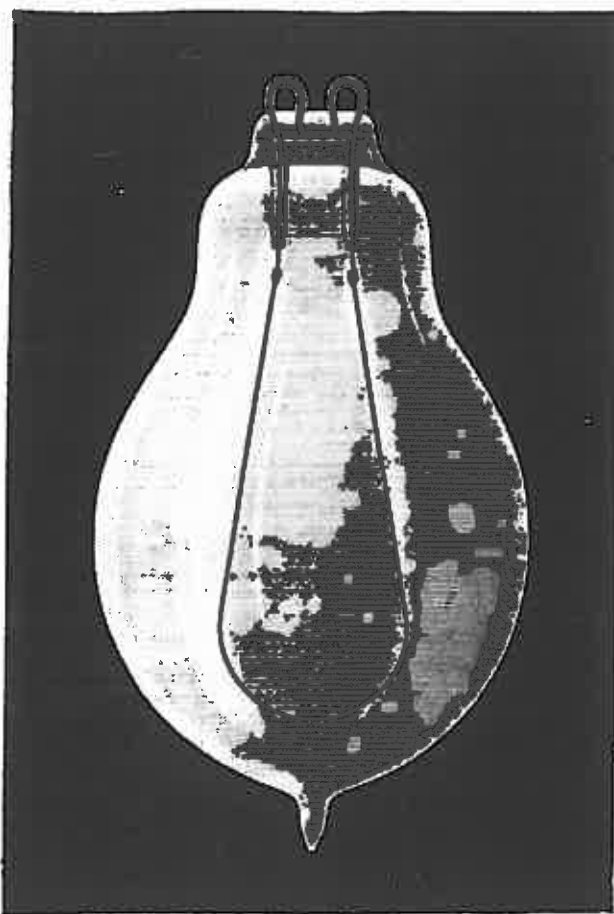


FIG. 20.

Approximate Volts, and Current of the various Classes of "Edison-Swan" Lamps.

35

CURRENTS, &c.

2½ C.P. from about		5 volts and		1.75 ampères to about		25 volts and		4 ampères.			
5	"	"	10	"	1.75	"	"	35	"	.6	"
8	"	"	15	"	1.9	"	"	55	"	.6	"
16	"	"	30	"	1.85	"	"	105	"	.58	"
25	"	"	45	"	2.0	"	"	105	"	.9	"
32	"	"	55	"	2.0	"	"	105	"	1.05	"
50	"	"	80	"	2.3	"	"	105	"	1.6	"

MARKINGS.

All Lamps taking less than .9 ampères are marked at 4 Watts per candle, and all Lamps (except the "Sunlight," which are detailed on next page) taking more than .9 ampères, at 3.5 Watts per candle. It is of course optional for Customers to run the Lamps at higher efficiencies, but the Company do not recommend that this be done, and the entire responsibility of doing so must rest with the Customer.

All Lamps of our standard types supplied at the efficiencies mentioned are marked with the Company's Trade Mark, "The Edison-Swan," underneath which will be found the E.M.F., Reference Letter, and Nominal C.P., thus:—

100. I. 16.

Lamps marked with the same Reference Letter will run in series irrespective of their E.M.F. or C.P. Lamps marked with the same E.M.F. will burn on the same circuit, although the Reference Letter may differ in each. When Lamps are required for series lighting this should be stated when ordering.

Lamps of less than 2½ C.P. are marked with the Trade Mark and E.M.F. only. 2½ C.P. marked with C.P. and E.M.F.

In no case do the Company give any guarantee as to the life of their Lamps.

SERIES LAMPS are marked with Candle Power and Current in addition to the Special Trade Mark—

"EDISWAN-SERIES,"
10 Amp., 30 C.P.

FOCUS LAMPS are marked in addition to the Volts., Letter and Candle-power with the Special Trade Mark—

"EDISWAN-FOCUS."

"SUNLIGHT" LAMPS are marked with the Volts., Candle-power, and Letter (A or B) indicating which class they belong to, and also the Trade Mark—

"EDISWAN-SUNLIGHT."

Approximate Currents of "Sunlight" Lamps.

35

---continued.

Class A.—HIGH EFFICIENCY LAMPS.

Candle Power.	Ampères at 50 Volts.	Ampères at 65 Volts.	Ampères at 80 Volts.	Ampères at 100 Volts.	Ampères at 110 Volts.
100	4.5	3.5	2.75	2.25	2.0
150	6	5	4	3	2.75
200	8	6	5	4	3.75
300	12.5	9.5	8	6	5.5
400	16	12.5	10	8	7
500	—	16	12.5	10	9
600	—	19	16	12	11
800	—	—	20	16	15
1,000	—	—	25	20	18
1,200	—	—	31	25	23
1,500	—	—	—	31	28
2,000	—	—	—	42	38

Class B.—LONGER DURATION LAMPS.

Candle Power.	Ampères at 50 Volts.	Ampères at 65 Volts.	Ampères at 80 Volts.	Ampères at 100 Volts.	Ampères at 110 Volts.
100	5.5	4.25	3.5	2.75	2.5
150	7.5	5.5	5	4	3.5
200	10	7.5	6.5	5	4.5
300	15	11.5	9.5	7.5	7
400	20	15	12.5	10	9
500	—	19	15	12.5	11
600	—	23	19	15	14
800	—	—	25	20	18
1,000	—	—	31	25	22
1,200	—	—	38	30	27
1,500	—	—	—	38	34
2,000	—	—	—	50	45

Running Lamps.

36

OVERRUNNING.

When Lamps blacken or fail after having been in use but a short time, customers not unnaturally put the blame on the Lamps. When such failure or blackening occurs, the Company is always ready to inspect the premises where the Lamps have been used, to test the pressure, and to examine the Lamps which have failed, and to replace any Lamps in which the Company can trace any evidences of defect in manufacture. In the great majority of cases it has been found that where there has been an abnormal breakage of Lamps it has been due to some irregularity of pressure in the supply of the current. The commonest cause of the undue failure of Lamps is undoubtedly "overrunning," due to too great pressure of the current supplied.

It is of great importance that those using Electric Incandescence Lamps should provide themselves with "Voltmeters," to enable them to check the pressure of the current, and such "Voltmeters" should be calibrated from time to time, so that the correctness of the instrument may be ascertained.

When the light is unsteady—when at one time it is abnormally bright, and at another time abnormally dull, such fluctuation, which is sometimes considerable, is due to a variation in the pressure of the current; when this variation is to the extent of four, five or six volts, the life of the lamp is imperilled, and when it reaches, as we find it often does, a variation of ten volts or more, the life of the Lamp will be of short duration.

Voltmeters are made by the Company, and, if purchased from the Company, will be tested when required, to see that the instrument is in perfect working order, FREE OF CHARGE.

For Voltmeters, see Instrument Section of Catalogue.

MILL LIGHTING.

It has been found that the ordinary long Filament Lamps are not suitable for running amongst machine driving belts, owing to the fact that electrification takes place and the filament is attracted to the glass, which is consequently cracked. If possible, low voltage lamps, such as 60 volts, should be used, but if it is necessary to use lamps of higher E.M.F. the Company will supply them with larger bulbs, or special lamps with rigid filaments if customers will kindly communicate with them before installing.

Measurements, Platinum Stems, &c.

37

STANDARDS OF MEASUREMENT.

The Company's standard of electro-motive force is the LEGAL VOLT, as defined by the Paris Congress of 1882.

The Legal Volt is about 1.3 per cent. greater than the B.A. Volt, and the True Volt is about $\frac{1}{4}$ per cent. greater than the Legal Volt. The actual standard for comparison is a Latimer Clark Galvanic Cell, whose electro-motive force at 15° Cent. is 1.438 Legal Volts.

The Company's standard of resistance is the LEGAL OHM.

The "Legal" or Paris Congress Ohm, adopted in 1884, which is the resistance as above of a column of mercury 106 centimetres long. This is the Legal Unit in France.

The Company are prepared to furnish standards of resistance, or LEGAL OHMS, and to issue standard cells for use in calibrating graded galvanometers, and full instructions for setting up the cell and working it will be sent with it. They cannot recognize any standards except those above-mentioned.

For Standard Resistances, &c., see Instrument Section of Catalogue.

38

PLATINUM STEMS OF USED-UP LAMPS.

Customers can practically reduce the cost of their Lamps by saving and returning to the Company Lamp Ends containing Platinum. The Company can estimate with great accuracy the weight of Platinum contained in any consignment of Ends, notwithstanding the fact that the Platinum is mostly covered with glass, and often has brass caps attached by solder and plaster to it as well, and will allow the full weight at the rate of 22/- per ounce. *This allowance is of course subject to market fluctuations.* All packages containing Lamp Ends should be sent with full advice to

THE EDISON & SWAN COMPANY,
THE WORKS,
PONDER'S END,
MIDDLESEX.

Suitable bags to hold small quantities of Ends will be supplied free on application.

INSTRUCTIONS TO CUSTOMERS WHEN ORDERING LAMPS.

39

LAMPS are kept in Stock unmounted, and are fitted with Caps on receipt of Order. They will be sent off as promptly as possible, but cannot be dispatched before one to two days after receipt of Order, even if the Lamps are required with Bottom Loops, and in Stock. If other than B.L., four days at least are required, even when the Lamps are in Stock. During times of great pressure more notice is necessary.

Customers should, when ordering, specify exactly what kind of Lamps are required by giving the following information, viz. :—

CANDLE-POWER, VOLTAGE, & TERMINALS,

as omitting to state these particulars delays the prompt execution of the Order. The full description of the Terminals need not necessarily be stated, if the abbreviations given on page 16, par. 22, are used, it will be sufficient.

When Lamps are required half obscured, or silvered, it should be stated if from terminal end or sealing point, or if they are required to be half obscured or silvered lengthwise, viz. :— from terminal end to sealing point.

Orders for Lamps to be varnished should state "Varnished," and when Coloured Glass Bulbs are required, it should be stated thus :—"Coloured Glass."

Forwarding Lamps.

40

PACKING.

On and after the first of February next, the Company will charge for Packing Cases at cost price, and will not allow for empties returned except in the case of suspended packages used for "Sunlight" Lamps, which will be allowed for in full if returned in good condition, within one month, Carriage Paid, to the Works or any of the Depôts.

As a rule, the following prices will be charged for packing lamps up to 50-c.p. :—

Boxes to hold 1 to 4 Lamps, 3d.	Boxes or Casks to hold 56 to 120 Lamps, 1s. 6d.
" " 5 to 12 " 6d.	" " 121 to 210 " 2s. od.
" " 13 to 24 " 9d.	Casks to hold 211 to 350 Lamps ... 3s. 3d.
" " 25 to 55 " 1s. 3d.	" " 350 to 500 " ... 4s. 3d.

41

DELIVERY.

The Company deliver from the Provincial Depôts, carriage free, and carriage will be paid from the Works, Ponder's End and Newcastle-on-Tyne, on orders of £10 and upwards, to any part of the United Kingdom.

The Lamps should be examined immediately on arrival, and the Company will not entertain any claim for Lamps alleged to have been received defective unless such claim be made within one week of delivery.

To prevent breakage in unpacking Lamps, the end of the cask bearing the address card should be carefully raised, but on no account forced in.

NOTE.—The Manchester Edison and Swan Company, Limited, have the exclusive right to sell and use the Company's Lamps and Holders within the area of their district, and Lamps or Holders purchased from this Company can only be introduced into the Manchester Company's district by arrangement with that Company.

42

FORWARDING.

Orders for 100 Lamps or under to be delivered in London, and for 50 Lamps or under to be delivered out of London, are always sent by Passenger Train unless other instructions are given. Larger Orders by Goods Train.

Discounts and Payments.

43

TERMS.

A discount of five (5) per cent. will be allowed on all orders for Lamps of any description amounting in value to £9 7s. 6d. (the price of fifty Lamps at 3/9) or upwards, but not on any order for Lamps of less value.

All Invoices dated up to the 20th of the month, inclusive, are due for payment on the 20th of the following month, and the Discount will not be allowed unless payment is made on or before that date.

TRADE DISCOUNT.

A Special Discount is allowed to the trade, and full particulars of the Company's terms and arrangements for the trade may be had on application.

44

RETURNED LAMPS & EMPTIES.

If Lamps fail prematurely, they will, upon their being returned "Carriage Paid" to the Factory, Ponder's End, be examined, and if, in the opinion of the Company, there was any defect in manufacture, they will be credited to the Customers. An Advice Note, giving the reasons for returning Lamps, should accompany each return of Lamps, otherwise they may be broken up.

Customers are specially requested to advise the Factory at Ponder's End of all returns of Empties, Lamps and Stems. When returning Empties the Address Card should be reversed, as the Company's address is printed at back.

Lamps for Special Purposes.

45

SPECIAL LAMPS.

The Company beg to inform their numerous Customers that they are prepared to undertake the manufacture of Special Lamps of any practicable pattern, also to design Lamps for any specific purpose upon having the requirements made known to them. The prices will, of course, vary according to the pattern desired and the demand.

The following illustrations represent a few of the Lamps which already have been supplied.

Particulars of the voltage, candle-powers, and prices, appear with the Lamps in the same paragraph, and may be traced by means of the number which is placed under each illustration.

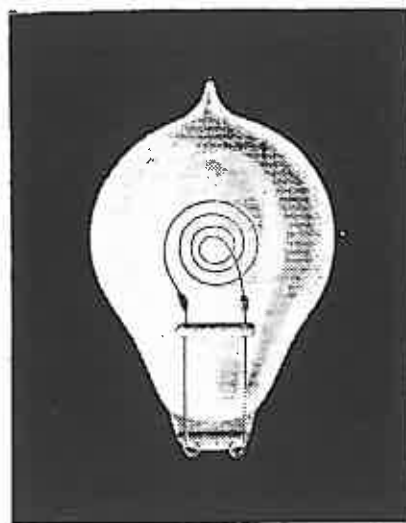
Customers in choosing any of the following Lamps should adopt, if possible, the voltage and candle-powers given for the particular Lamps they choose, as these will be the most suitable for the special form of Lamp, and it will be easily understood that the range of voltage, &c., must necessarily be very limited.

When ordering Lamps, with the help of the illustrations and descriptions, care should be taken to first quote the number of the Lamps, and then follow with instructions concerning voltage, candle-power, terminals, whether the bulb is to be coloured, silvered, or obscured, &c.

Electric Focus Lamps for Optical Lanterns, &c.

FOCUS LAMPS.

These Lamps have been designed to overcome a difficulty experienced hitherto when using Glow Lamps as a source of light for Optical Lanterns, and generally in the focus of lenses and mirrors.



LAMP No. 100.
FULL SIZE.

Lamp No. 100... 8 C.P. ...20 to 50 Volts...10/- each.

This special form is particularly suited for Lamps of low C.P. and voltage.

Lamp No. 120... 8 & 16 C.P. 25 to 105 volts...10/- each

„ „ ... 25 & 32 C.P. 50 to 105 „ ...10/- „

„ No. 125... 50 C.P. ...80 to 105 „ ...10/- „

Not illustrated. Same size as No. 120.

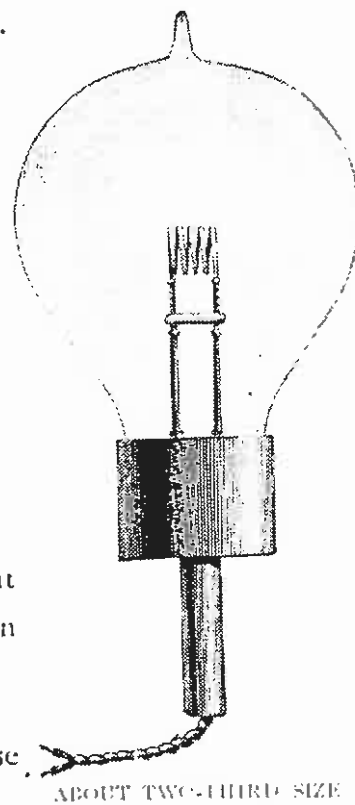
„ No. 130...100 C.P. ...80 to 105 „ ...12/6 „

„ No. 135. 200 C.P. ...80 to 105 „ ...17/6 „

The above prices include the special form of mount shown attached to accompanying illustration, and in Fittings Section.

A special adjustable holder, suitable for these mounts, is shown in Fittings Section.

Illustration shows mount used for 8, 16, 25, and 32 C.P. Focus Lamps.



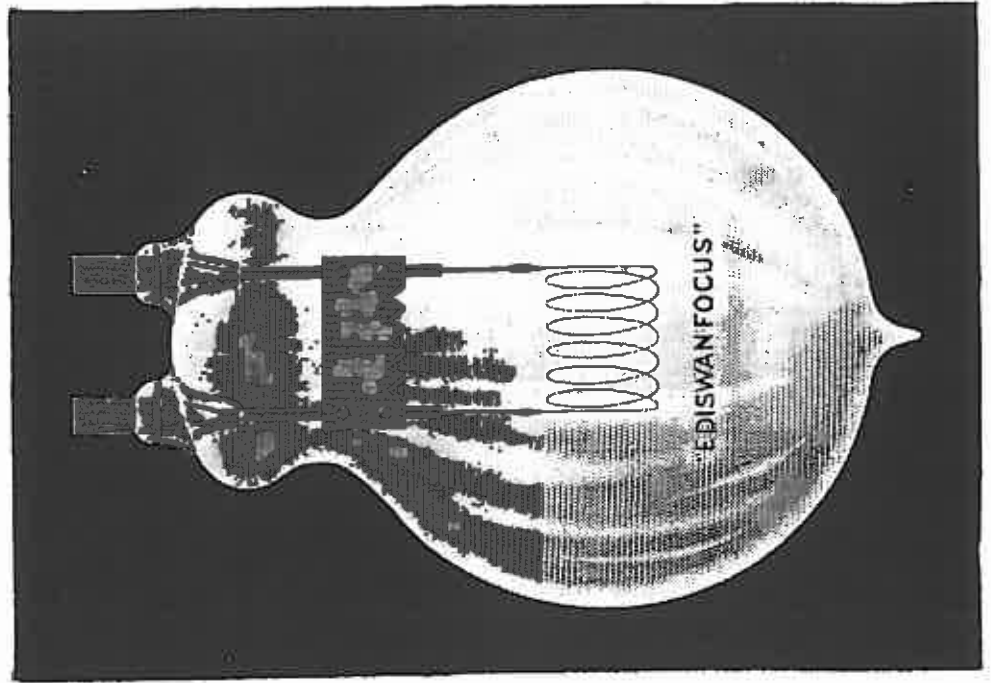
ABOUT TWO-THIRD SIZE

Electric Focus Lamps for Optical Lanterns, &c.

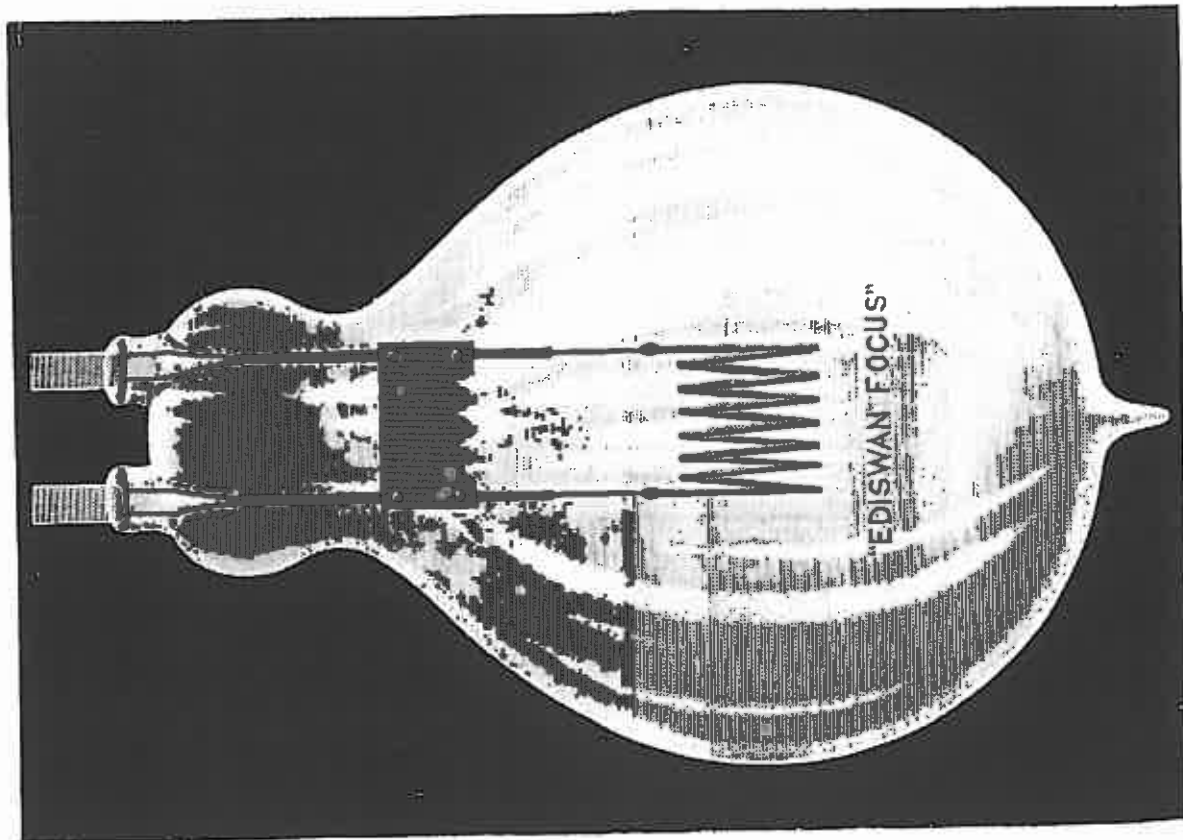
8, 16, 25, 32, 50 and 100 C.P. FOCUS LAMPS.

46

—continued.



LAMP No. 120

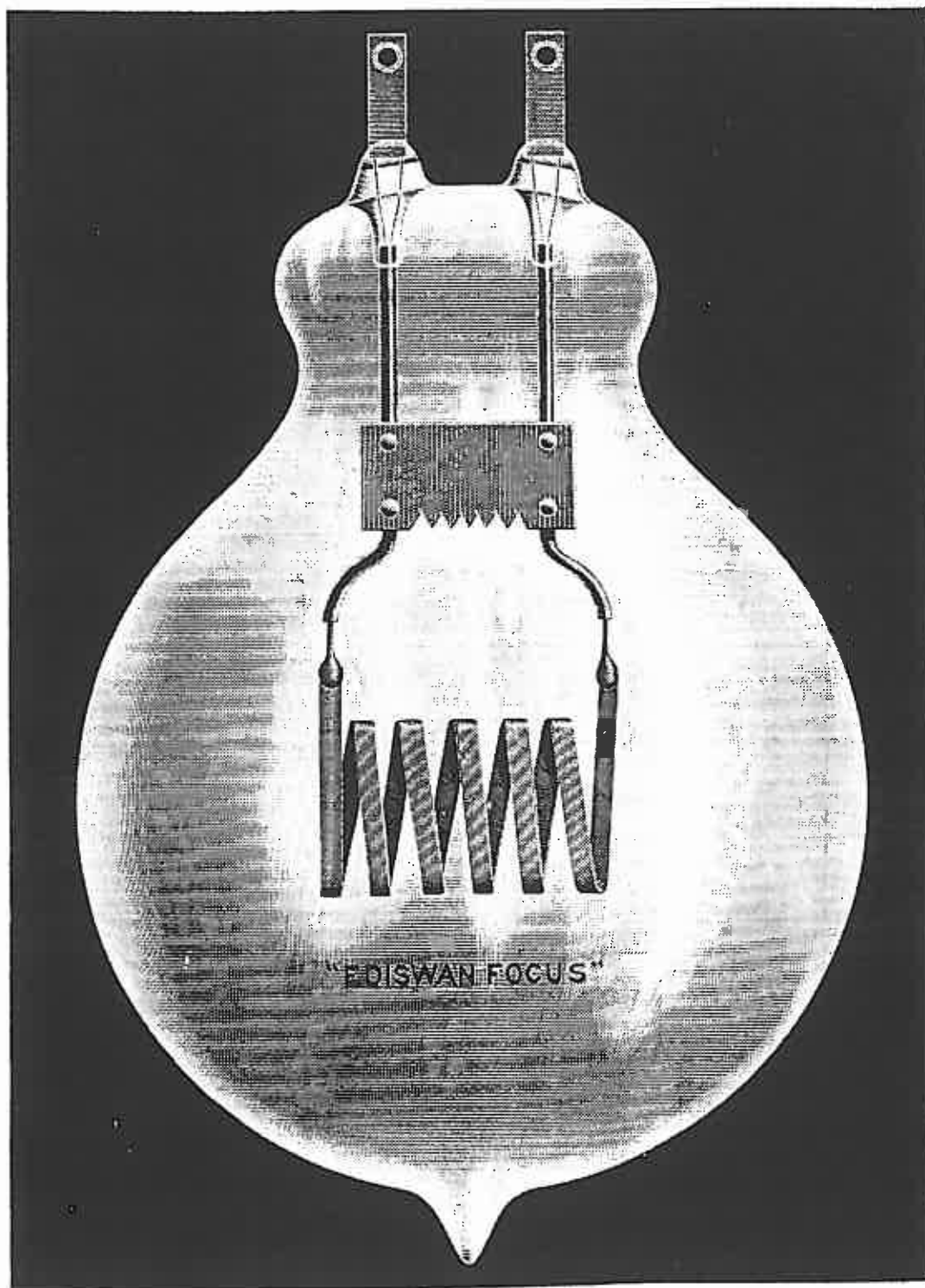


Electric Focus Lamps for Optical Lanterns, &c.

46

continued.

200 C.P. FOCUS LAMP.



Lamp No. 135.
FULL SIZE.

Lamps for Special Purposes.

47

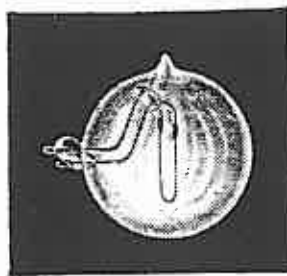
PROJECTED FILAMENT AND FLAT LAMPS.

In these Lamps it will be seen that the bulb is made with a flat or oval side, or the filament is projected forward in the bulb, and, in some cases, both methods are adopted.

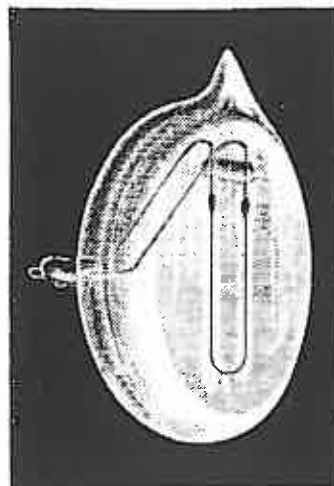
The Lamps are therefore useful in cases where it is necessary to have the source of light in a given plane, or close to the point of application.

Lamp No. 153*	2½ C.P., and from	5 to	8 volts,	Price	4/9 each.
" 155 {	1 " "	3 " 8	" " " }	4/9	"
" 158*	5 " "	10 " 15	" " " }	5/9	"
" 160	5 " "	15 " 25	" " " }	9/-	"
" 165	5 " "	15 " 25	" " " }	5/9	"
" 170	32 " "	65 volts,	" " "	7/6	"
" 175	50 " "	65 " "	" " "	7/6	"
" 180	16 " "	and from 40 to 60 volts,	" " "	5/9	"
" 185	32 " "	80 " 105 "	" " "	12/6	"

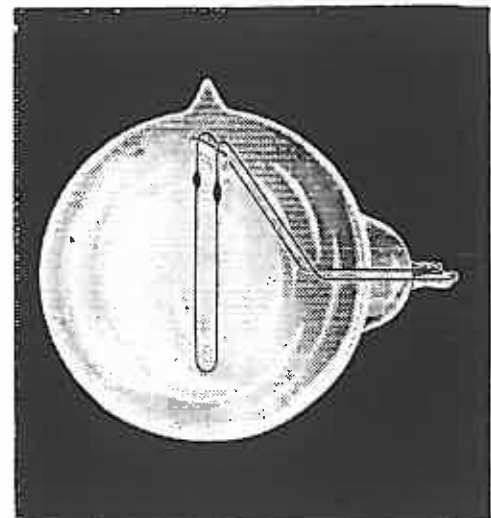
* Lamp Nos. marked thus (*) not illustrated.



Lamp No. 155.



Lamp No. 160.



Lamp No. 165.

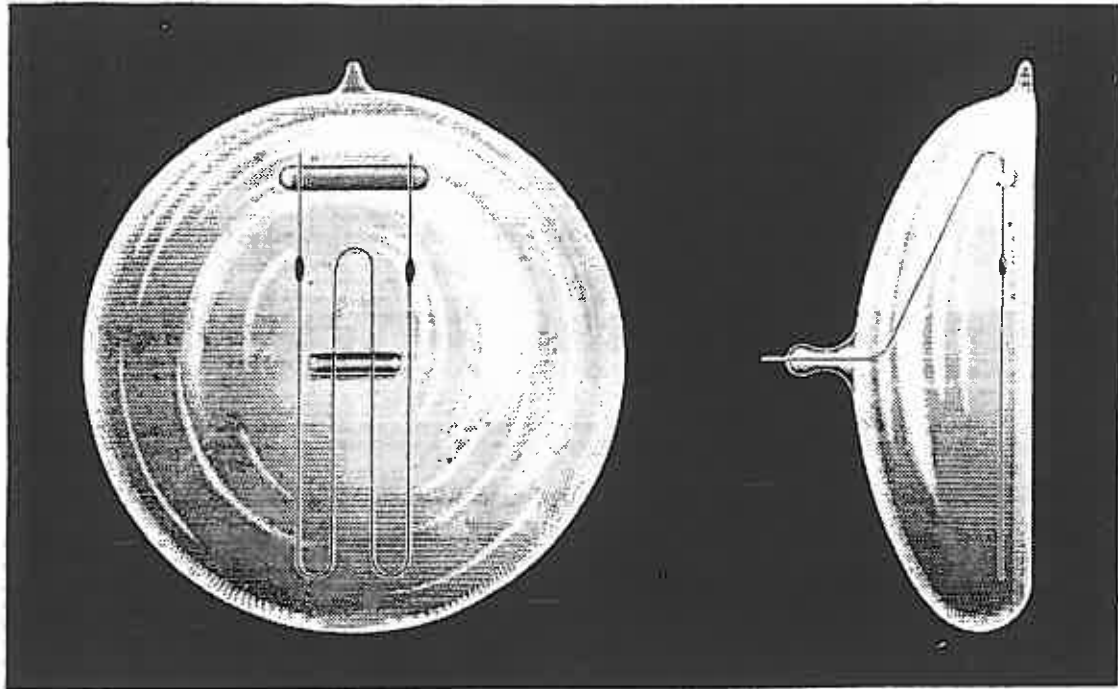
ALL FULL SIZE.

Lamps for Special Purposes.

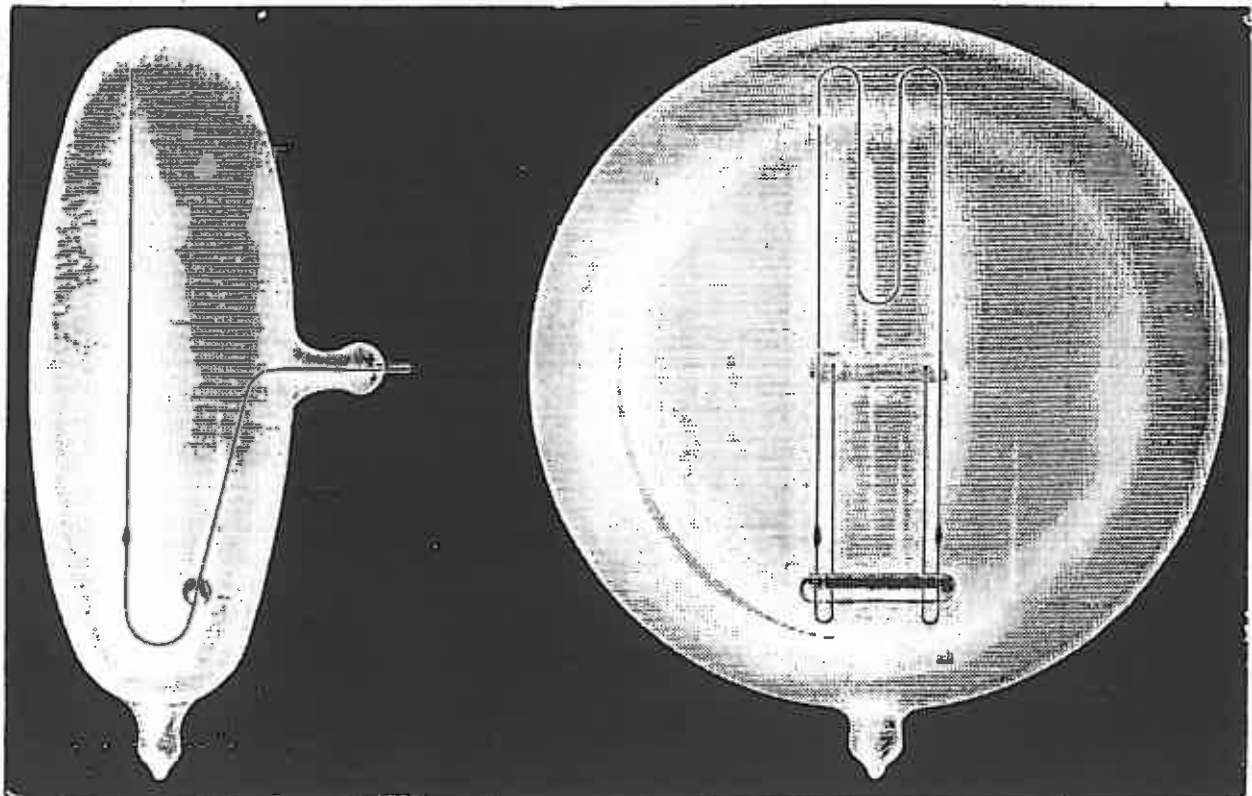
47

inued.

FLAT LAMPS.



LAMP No. 170.



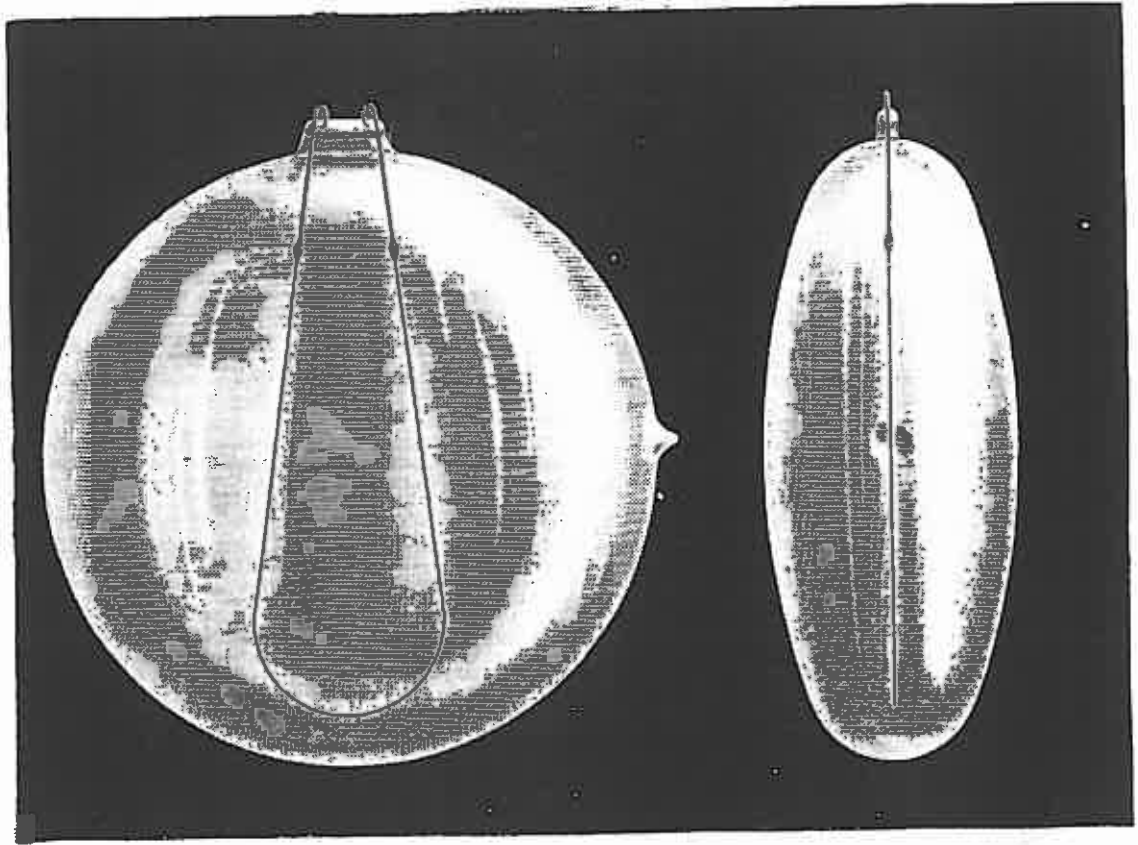
LAMP No. 175. BOTH FULL SIZE.

Lamps for Special Purposes.

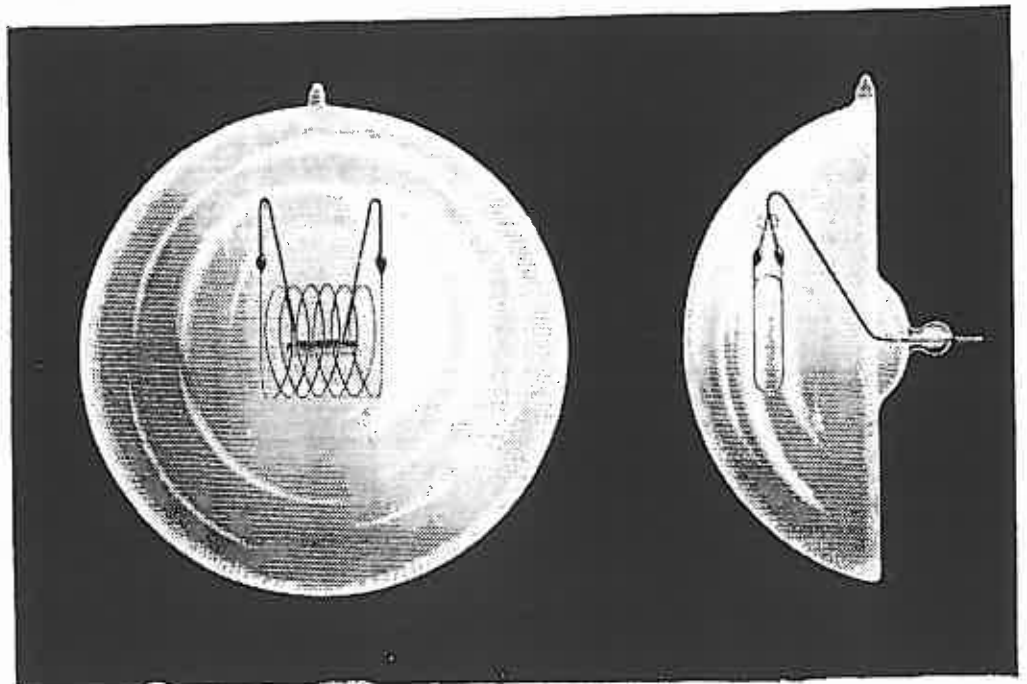
47

—continued.

FLAT LAMPS.



LAMP No. 180. FULL SIZE.



LAMP No. 185. FULL SIZE.

Railway Carriage Lamps.

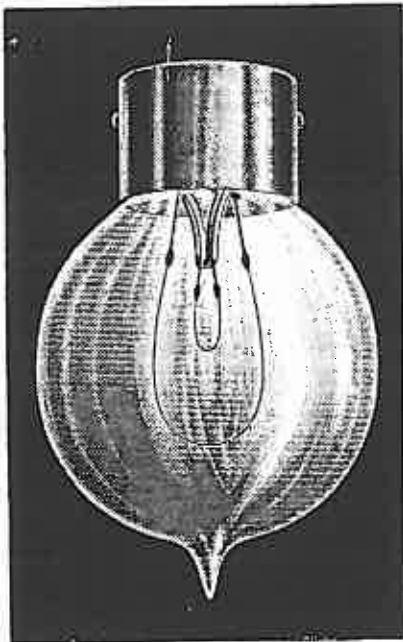
48

LAMPS FOR TRAIN LIGHTING.

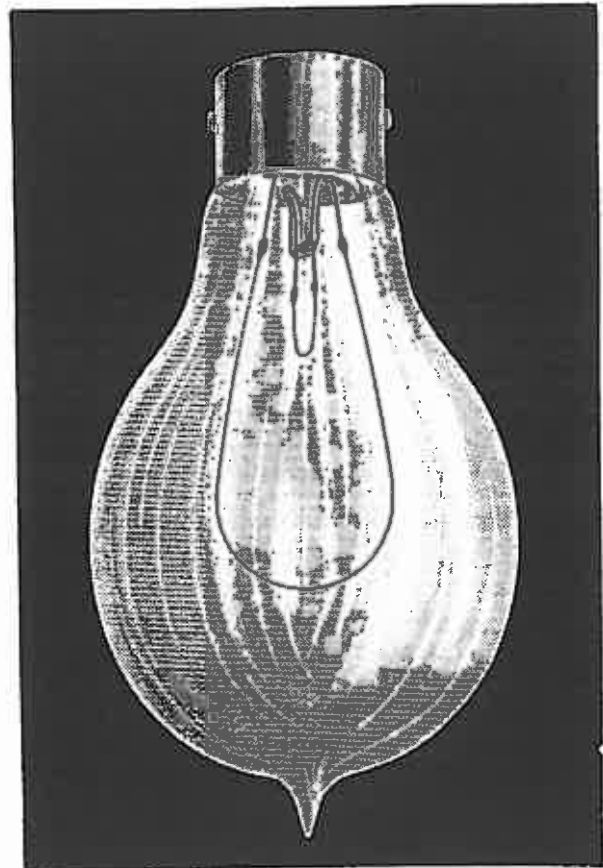
These Double Filament Lamps are specially designed for use with Train Lighting Systems where the E.M.F. drops when the Train is not in motion, &c.

The current is conveyed by means of the Brass Collar, forming one common Terminal, and the two Brass Plates, as in the ordinary Brass Collar, forming the other contacts.

Lamp No. 190	...	...	8 C.P. and 25 volts.	} 7/6 each.
" "	...	...	2½ C.P. and 8 "	
Lamp No. 192	...	...	8 C.P. and 50 volts.	} 7/6 each.
" "	...	...	2½ C.P. and 8 "	



LAMP No. 190.



LAMP No. 192.

BOTH FULL SIZE.

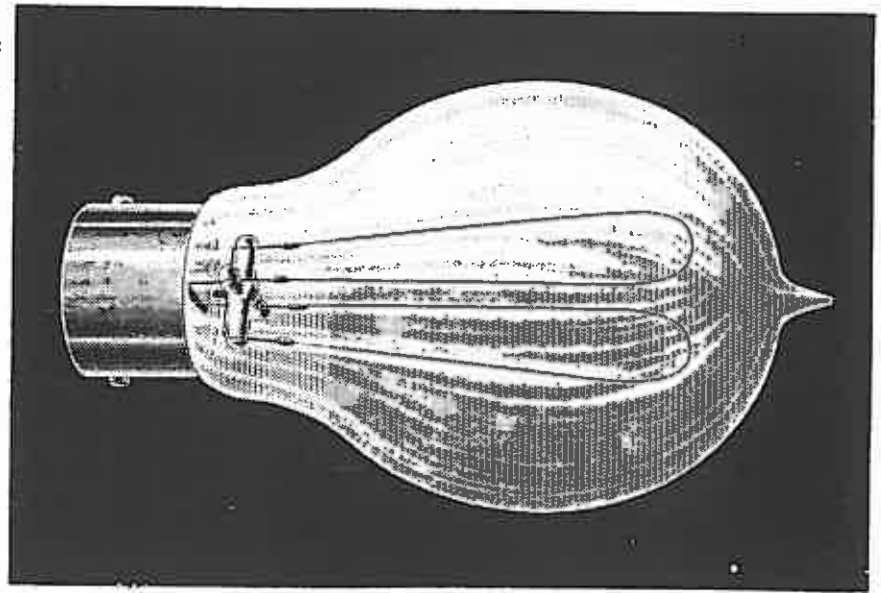
Lamps for Special Purposes.

49

LAMPS FOR HORIZONTAL RUNNING

Wherever Lamps are used in a horizontal position, and the Voltage of the Circuit compels the use of long thin filaments, Lamps made after the style shown in Lamp 194 should be installed in preference to Lamps made with the Loop Carbon.

It will be seen by the Figure that two separate Carbons are joined in series in the same Bulb.



LAMP No. 194. FULL SIZE.

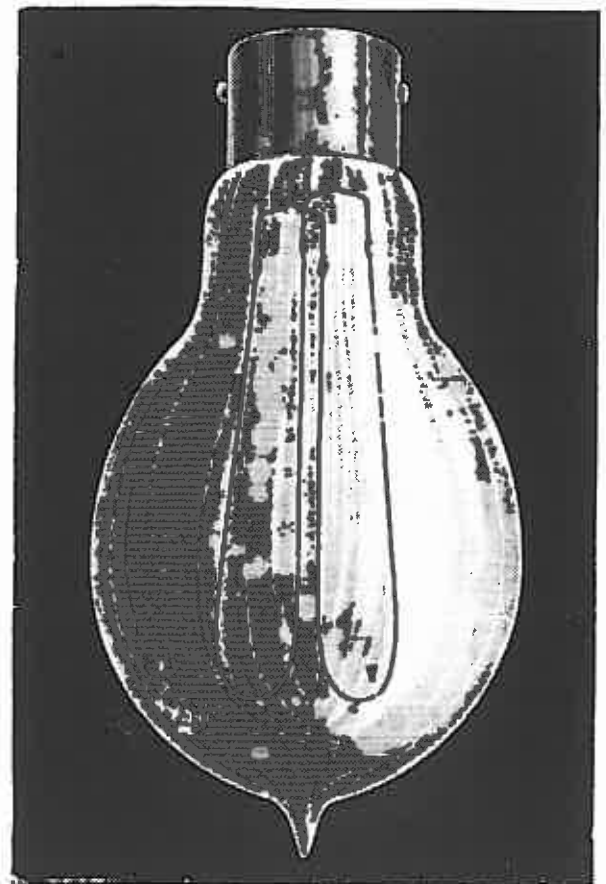
50

SIDE LIGHTS.

Lamps No. 196 and 198 are made with two filaments, in parallel, forming a very safe type of Lamp for use as side lights aboard ship, or wherever it is important that the light does not depend on one filament for its continuance.

Lamp No. 196, 40 to 65 volts, 8 and 16 C.P., 7.6 each.

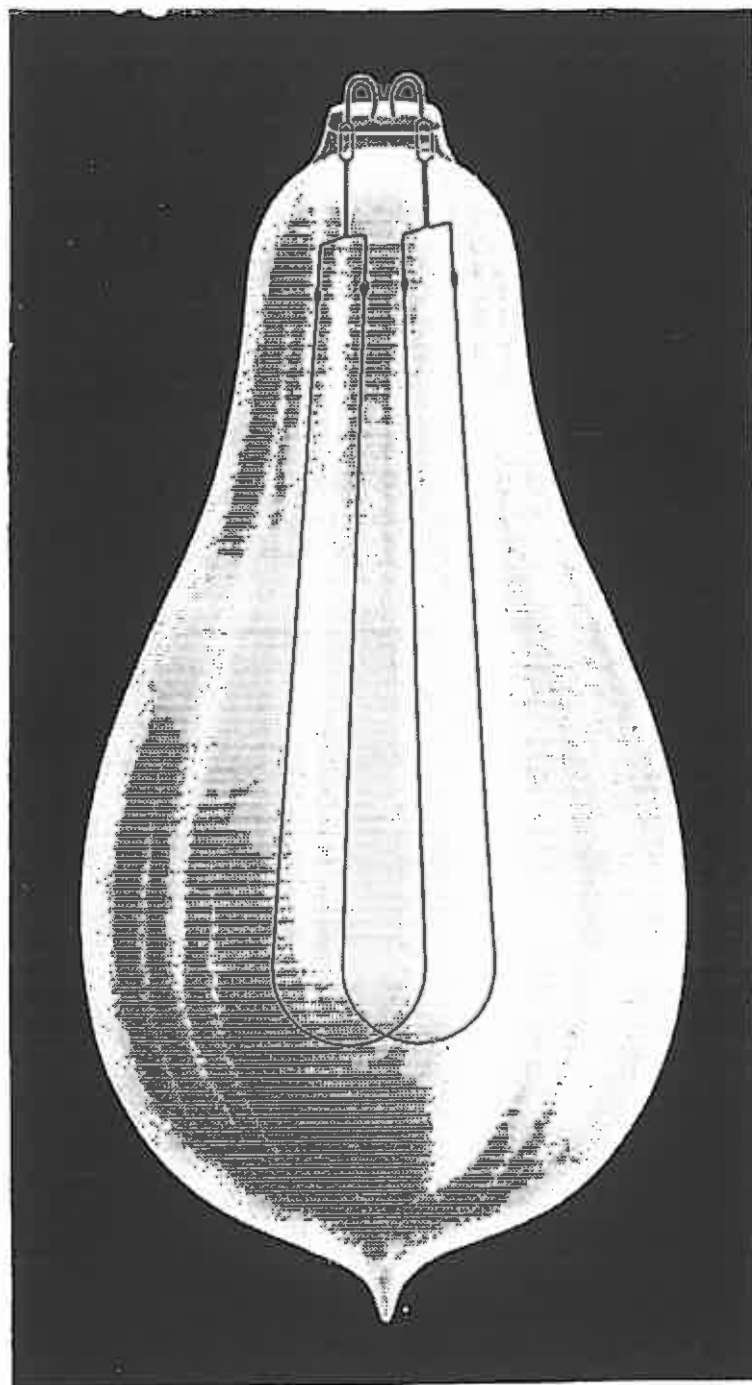
Lamp No. 198, 70 to 105 volts, 8 and 16 C.P., 7.6 each.



LAMP No. 196. FULL SIZE.

Side Light Lamp for Ships, &c.

50
continued.



LAMP No. 196.
FULL SIZE.

Lamps for Special Purposes.

51

LOW C.P. LAMPS.

The following illustrations represent Lamps made for special purposes, such as the internal inspection of Guns, Night Sights, Miners' Lamps, and for use in Surgical Operations.

Lamp No.	200	about	1	C.P	and from	2	to	4	volts.	Price	4/9	each.
"	205	"	1	"	"	2	"	4	"	"	4/9	"
"	210	"	1	"	"	3	"	8	"	"	4/9	"
"	215	"	1	"	"	3	"	8	"	"	4/9	"
"	217*	"	1	"	"	3	"	8	"	"	4/9	"
"	220	"	1	"	"	3	"	8	"	"	4/9	"
"	225	"	1	"	"	3	"	8	"	"	4/9	"
"	230	"	2½	"	"	50	"	65	"	"	10/-	"
"	240	"	1	"	"	3	"	8	"	"	4/9	"
"	242*	"	1	"	"	3	"	8	"	"	4/9	"
"	244*	"	1	"	"	3	"	8	"	"	4/9	"
"	245	"	{	1	"	3	"	8	}	"	4/9	"
			{	2½	"	5	"	8	}	"		
"	247*	"	1	"	"	10	"	20	"	"	4/9	"
"	250	"	1	"	"	3	"	8	"	"	4/9	"
"	255	"	1	"	"	3	"	8	"	"	4/9	"
"	260	"	2½	"	"	{	3	"	8	}	4/9	"
			{			{	5	"	8	}		
"	265	"	2½	"	"	5	"	8	"	"	4/0	"
"	270	"	2½	"	"	8	"	12	"	"	5/9	"

* Lamp Nos. marked thus (*) not illustrated.

Lamps for Special Purposes.

51

tinued.

LOW C.P. LAMPS.



Lamp No. 200.



Lamp No. 205.



Lamp No. 210.



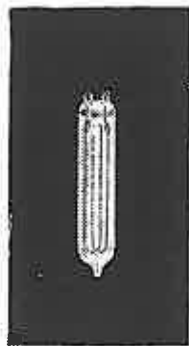
Lamp No. 215.



Lamp No. 220.



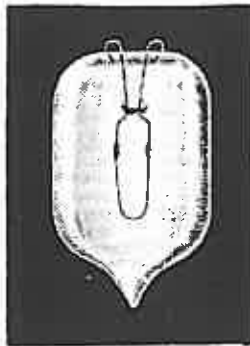
Lamp No. 225.



Lamp No. 230.



Lamp No. 240.



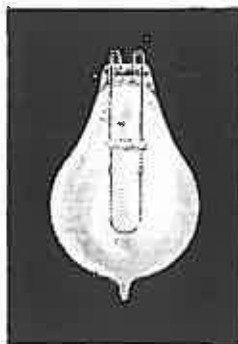
Lamp No. 245.



Lamp No. 250



Lump No. 255.



Lamp No. 260.



Lamp No. 265.



Lamp No. 270.

Lamps for Special Purposes.

52

PLAIN BULBS, SPECIAL SHAPE.

These Lamps are used with Special Fittings where space is limited, and for various other purposes.

Lamp No.	290*	...	2½ C.P.	10 to 20 volts.	...	Price	4/9 each.
..	292*	...	5 ..	10 .. 20 ..	...	..	4/9 ..
..	295*	{	2½ ..	10 .. 25 ..	}	...	.. 4/9 ..
			5 ..	10 .. 20 ..			
..	300	...	5 ..	... 45 ..	...	..	4/9 ..
..	305	...	8 ..	... 60 ..	...	..	4/9 ..
..	310	...	16 ..	... 50 ..	...	..	4/9 ..
..	315	...	16 ..	... 50 ..	...	..	4/9 ..
..	320	...	16 ..	... 100 ..	...	..	4/9 ..
..	325	...	16 ..	... 100 ..	...	..	4/9 ..
..	330	...	16 ..	40 to 105 ..	...	..	6/- ..
							<i>(For running under water.)</i>
..	332	{	8 ..	41 .. 110 ..	}	...	.. 5/9 ..
			16 ..	41 .. 110 ..			
							<i>(For Chemical factories.)</i>
..	335	...	8 C.P.	... 80 ..	...	..	4/9 ..
..	340	...	100 ..	... 80 ..	...	..	9/- ..
..	345	...	200 ..	... 100 ..	...	..	17/6 ..

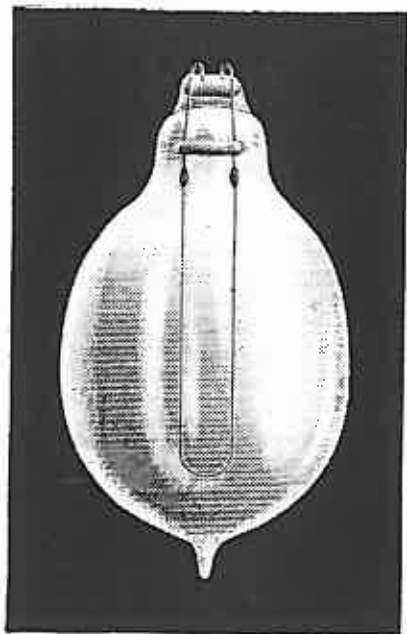
* Lamps marked thus (*) are not illustrated.

Lamps for Special Purposes.

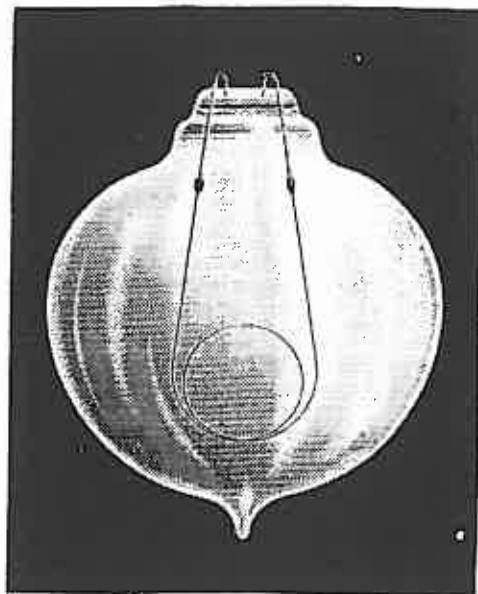
52

continued.

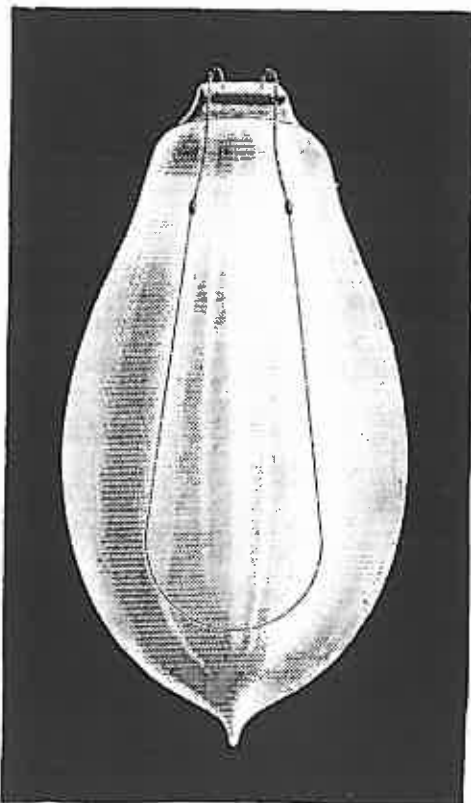
PLAIN BULBS, SPECIAL SHAPE.



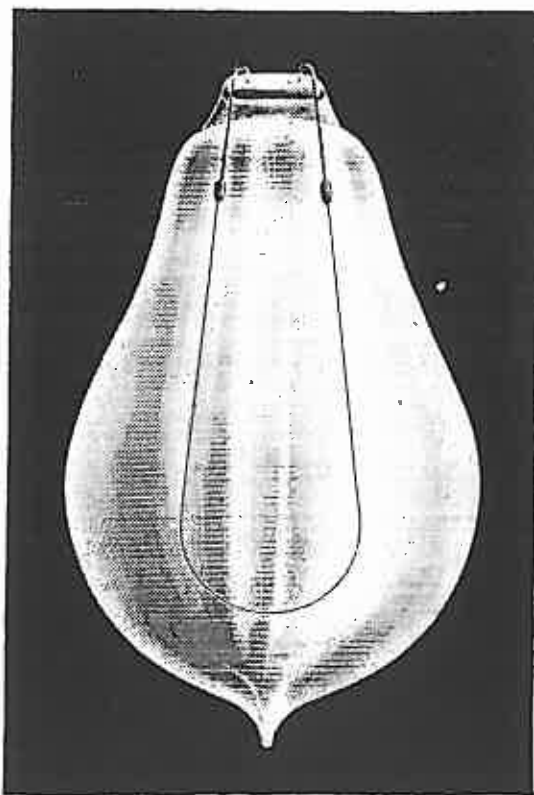
Lamp No. 300.



Lamp No. 305.



Lamp No. 310.



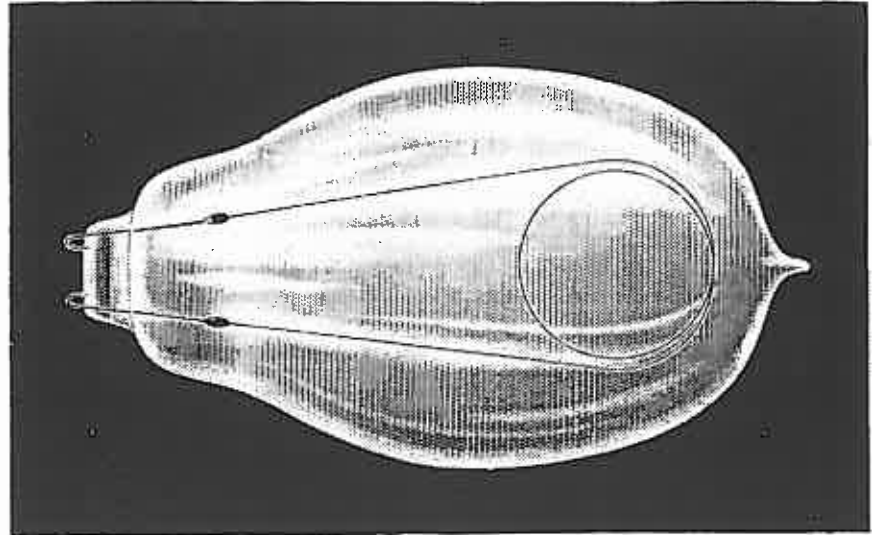
Lamp No. 315.

Lamps for Special Purposes.

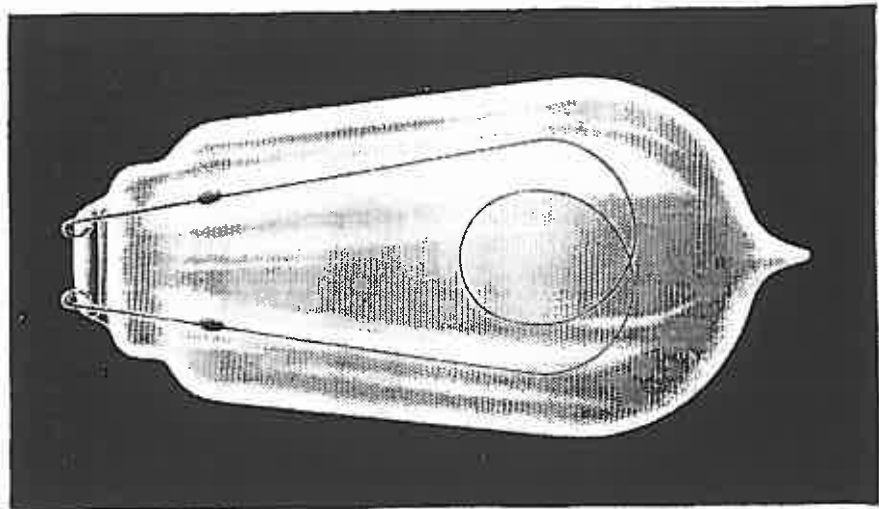
52

—continued.

PLAIN BULBS, SPECIAL SHAPE.



Lamp No. 325.



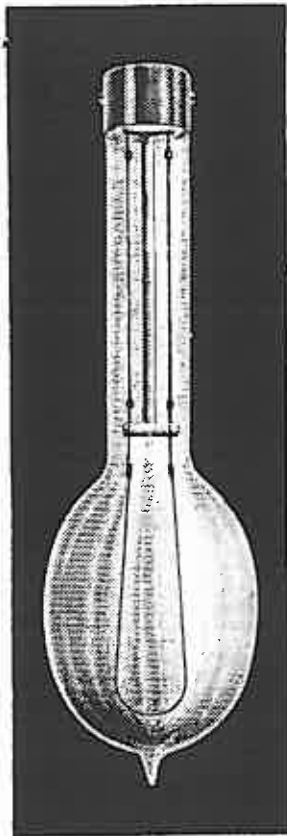
Lamp No. 320.

BOTH FULL SIZE.

Lamps for Special Purposes.

52
inued.

FOR EXPLOSIVES, CHEMICAL FACTORIES, &c.



Lamp No. 330.
HALF ACTUAL SIZE.



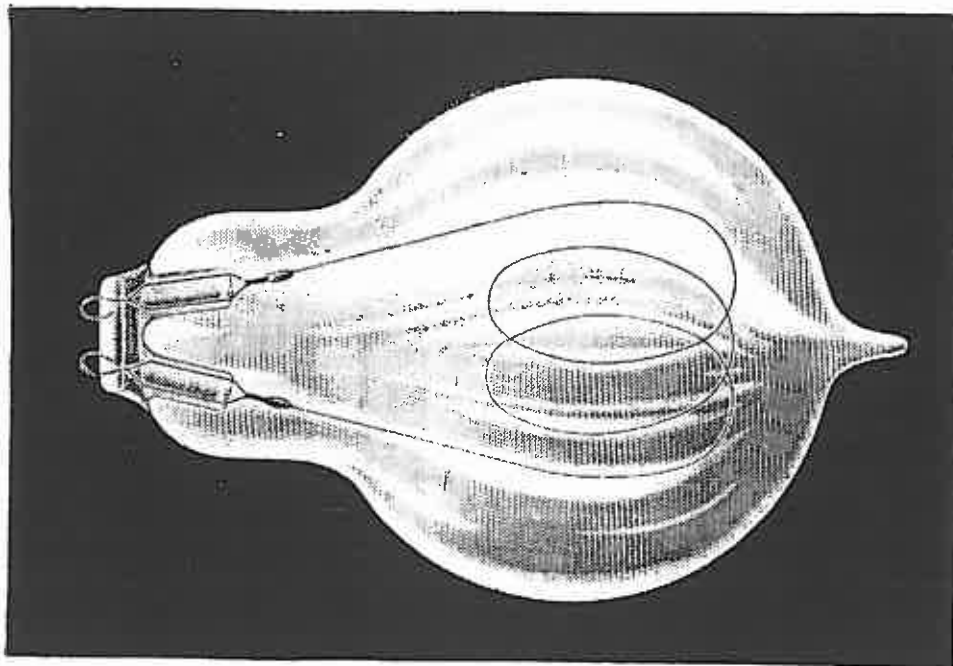
Lamp No. 332.
FULL SIZE.

Lamps for Special Purposes.

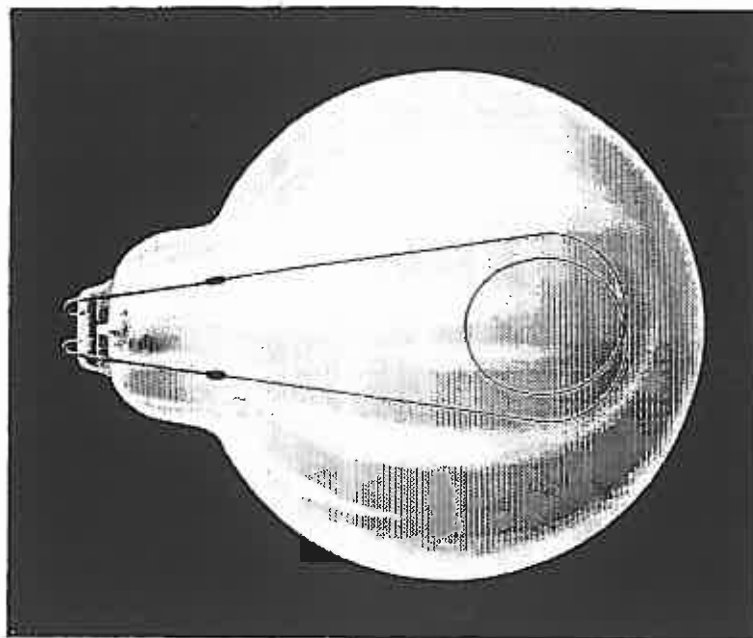
52

—continued.

PLAIN BULBS, SPECIAL SHAPE.



Lamp No. 340.



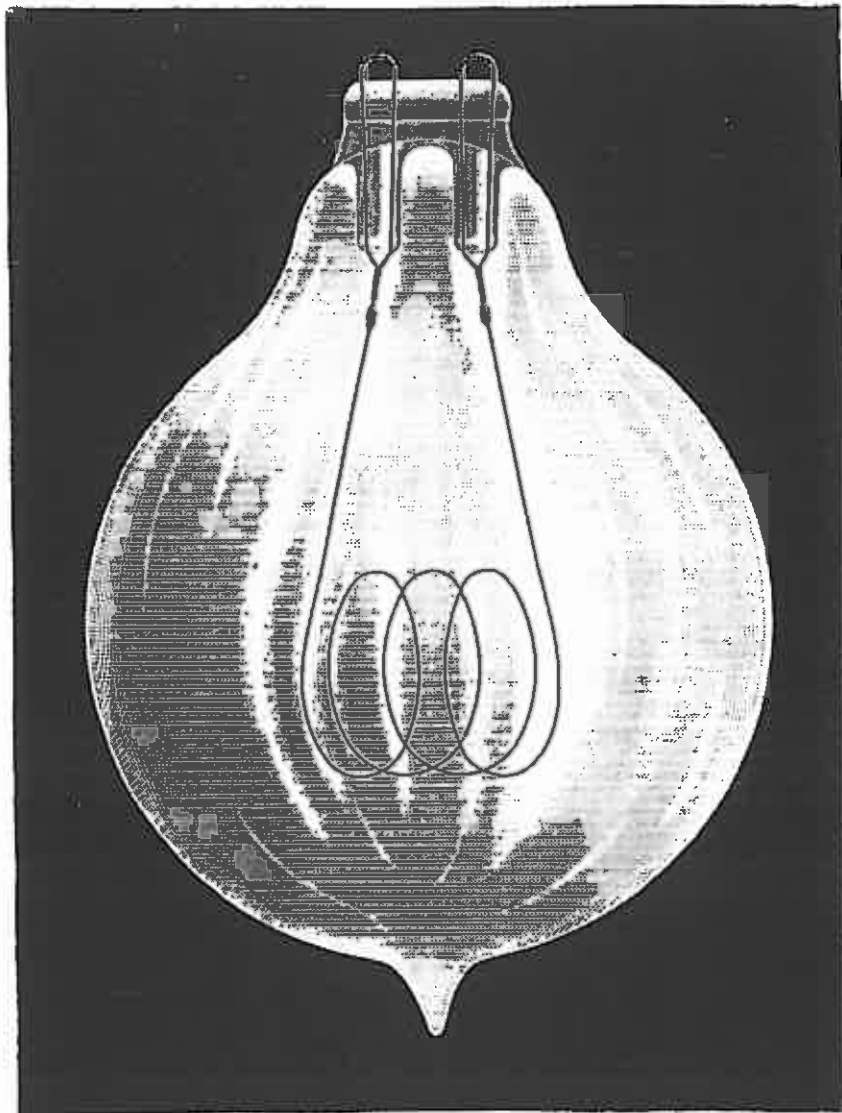
Lamp No. 335.

BOTH FULL SIZE.

Lamps for Special Purposes.

52
inued.

PLAIN BULBS, SPECIAL SHAPE.



Lamp No. 945.

FULL SIZE.

Lamps for Special Purposes.

53

"TUBULAR."

The Lamps as detailed on the next page, and illustrated in the subsequent illustrations, are specially designed to suit ornamental purposes, the examination of narrow openings and the illumination of confined spaces, where the larger bulb lamps would not be admissible.

LAMP No. 470, page 53, as also No. 330, page 45,

Have been specially designed for running under water, for use in gunpowder mills, and for such other places as would be dangerous if naked lamps were used.

LAMP No. 490, page 54.

Special attention is drawn to this Lamp, which has been designed for the purpose of viewing accumulator plates. It is made with a long flat tubular bulb, enabling it to be placed easily between the plates while the terminals are well out of the liquid.

Lamps for Special Purposes.

"TUBULAR" —continued.

Lamp No.	C.P.	8 volts.	Price 5/2 each.
400	5 C.P.	8 volts.	Price 5/2 each.
403*	1 "	3 to 12 "	4/9 "
404*	1 "	3 " 12 "	4/9 "
405	1 "	15 "	4/9 "
410	2½ "	15 to 25 "	4/9 "
	5 "	10 " 15 "	
415	5 "	20 " 35 "	4/9 "
	8 "	20 " 25 "	
416*	5 "	40 " 50 "	4/9 "
420	5 "	20 " 35 "	4/9 "
	8 and 16 "	20 " 25 "	
425	1 "	10 "	4/9 "
427*	2½ "	7 9 "	4/9 "
430	5 "	40 to 50 "	4/9 "
	8 and 16 "	30 " 35 "	
432*	8 "	40 " 50 "	4/9 "
435	5 "	40 " 50 "	4/9 "
	8 and 16 "	30 " 35 "	
440	8 "	40 " 50 "	4/9 "
445	5 "	20 " 50 "	5/3 "
449*	8 "	60 " 80 "	4/9 "
450	8 "	50 " 80 "	4/9 "
452*	8 "	60 " 80 "	4/9 "
455	8 "	80 " 105 "	4/9 "
460	16 "	80 " 105 "	4/9 "
465	5 "	80 " 105 "	4/9 "
	8 and 16 "	40 " 65 "	
470	8 " 16 "	40 " 65 "	6/- "
475	8 "	50 "	7/6 "
480	8 and 16 "	80 to 105 "	5/3 "
490	1 "	3 " 8 "	7/6 "
495	500 "	50 " 70 "	19/6 "

* Lamp Nos. marked thus (*) not illustrated.

53
tinued.

Lamps for Special Purposes.

53

—continued.

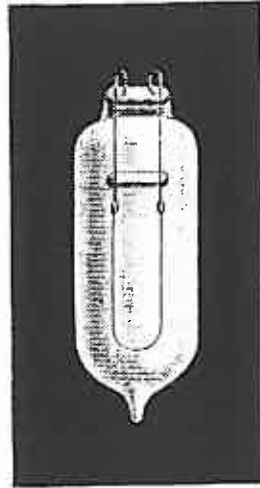
TUBULAR LAMPS.



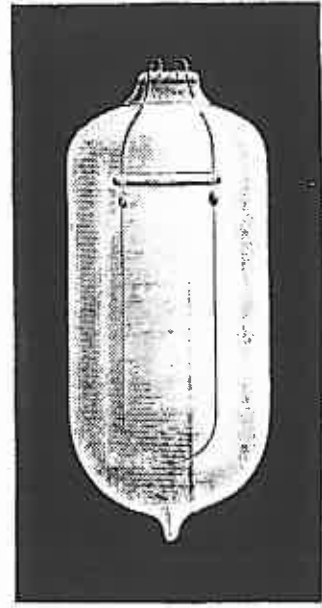
Lamp No. 400.



Lamp No. 405.



Lamp No. 410.



Lamp No. 415.



Lamp No. 420.



Lamp No. 425.



Lamp No. 430.



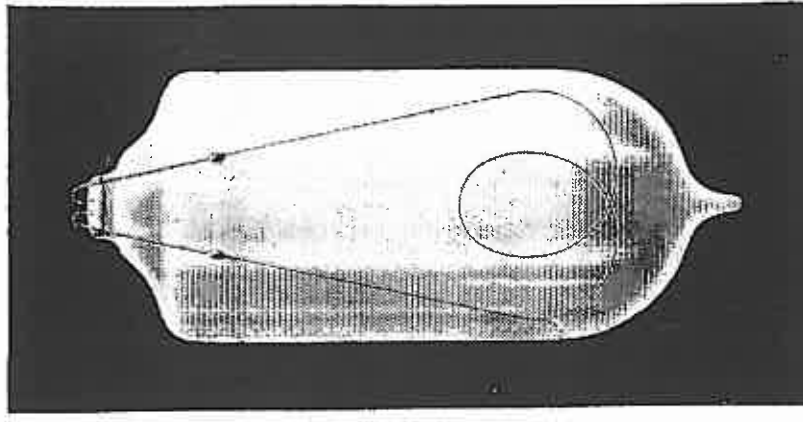
Lamp No. 435.

ALL FULL SIZE.

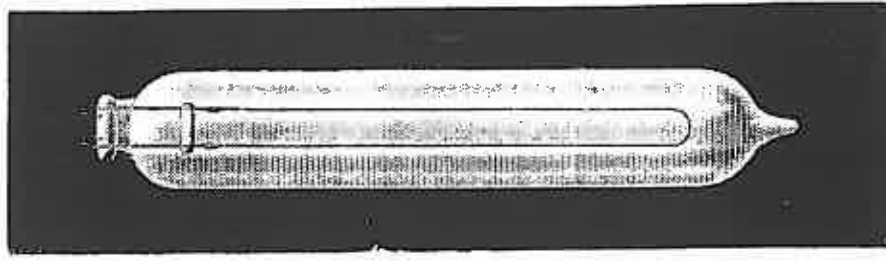
Lamps for Special Purposes.

53
tinued.

TUBULAR LAMPS—continued.

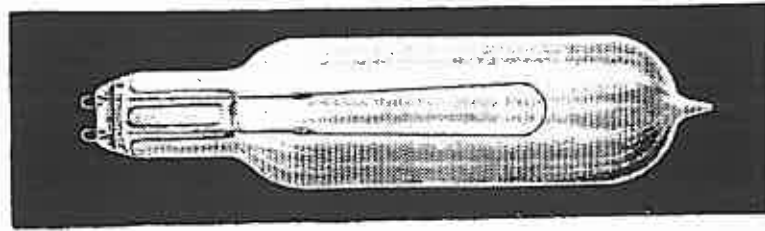


Lamp No. 455.

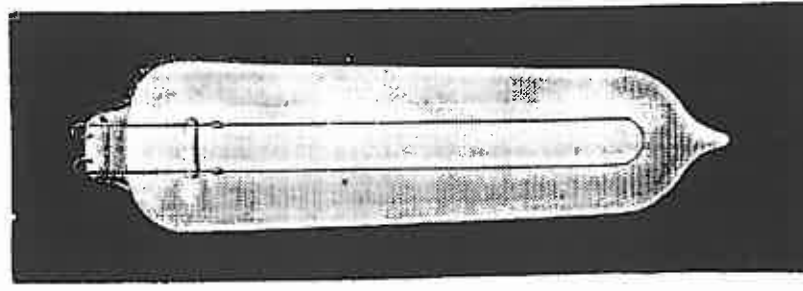


Lamp No. 450

ALL FULL SIZE.



Lamp No. 445.



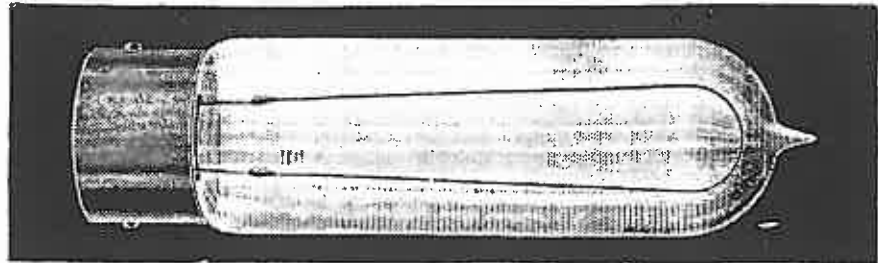
Lamp No. 440.

Lamps for Special Purposes.

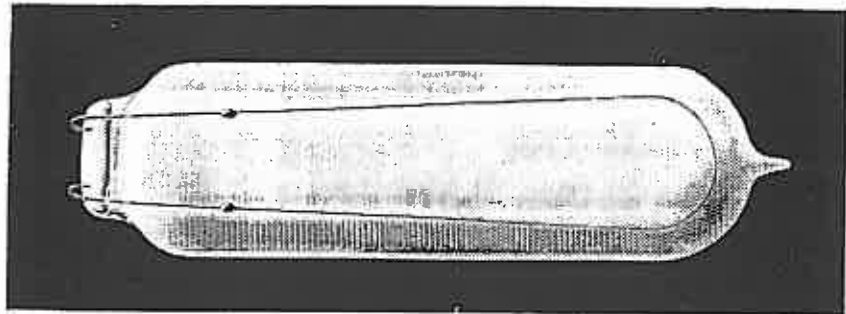
53

—continued.

TUBULAR LAMPS—continued.

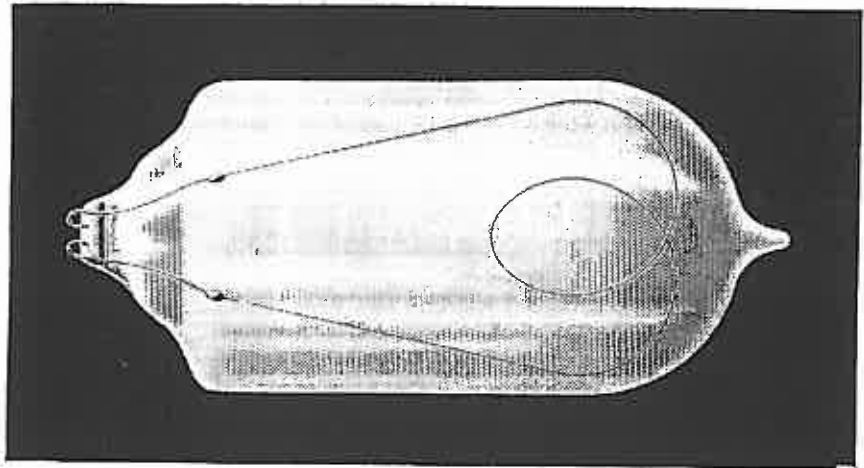


Lamp No. 485.
B.C. TERMINAL.

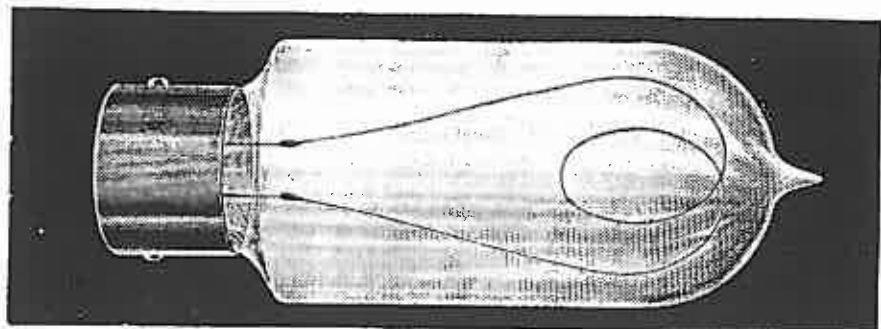


Lamp No. 486.

ALL FULL SIZE.



Lamp No. 480.

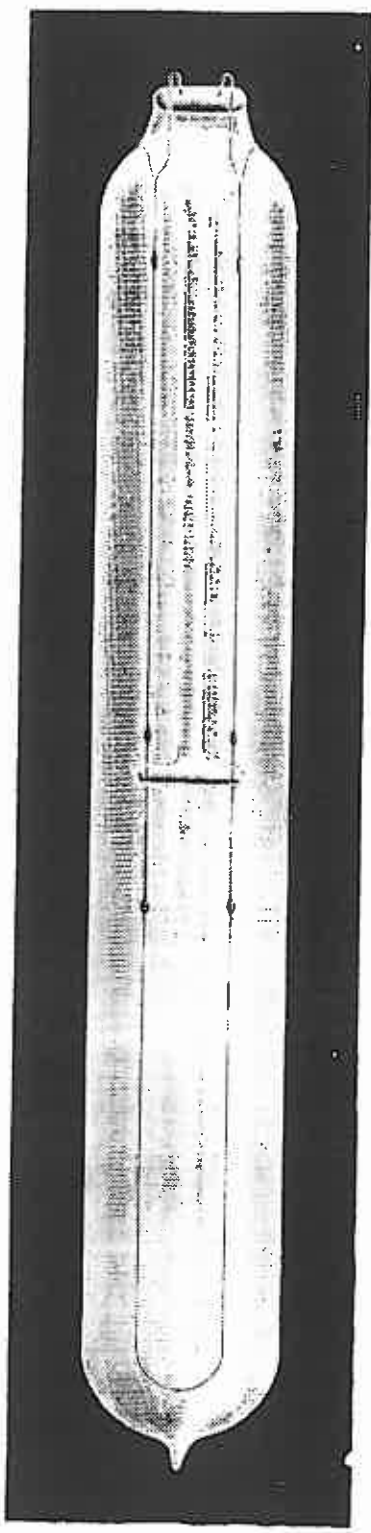


Lamp No. 455.
B.C. TERMINAL.

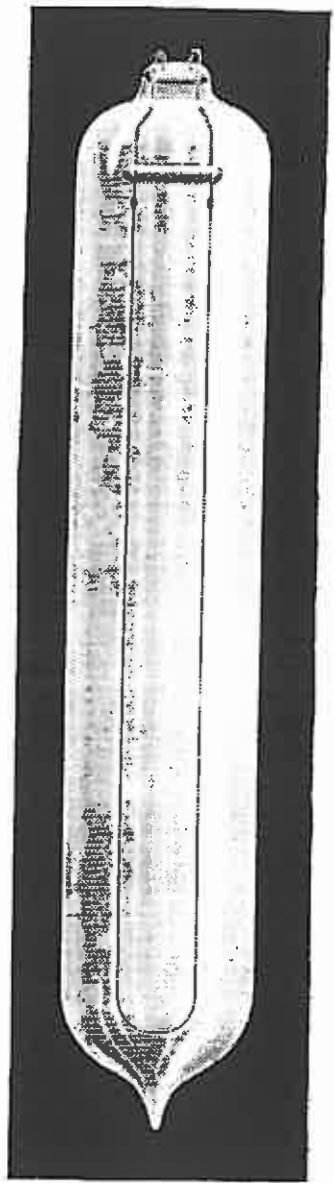
Lamps for Special Purposes.

53
inued.

TUBULAR LAMPS—continued.



Lamp No. 470



Lamp No. 480.
ALL FULL SIZE.



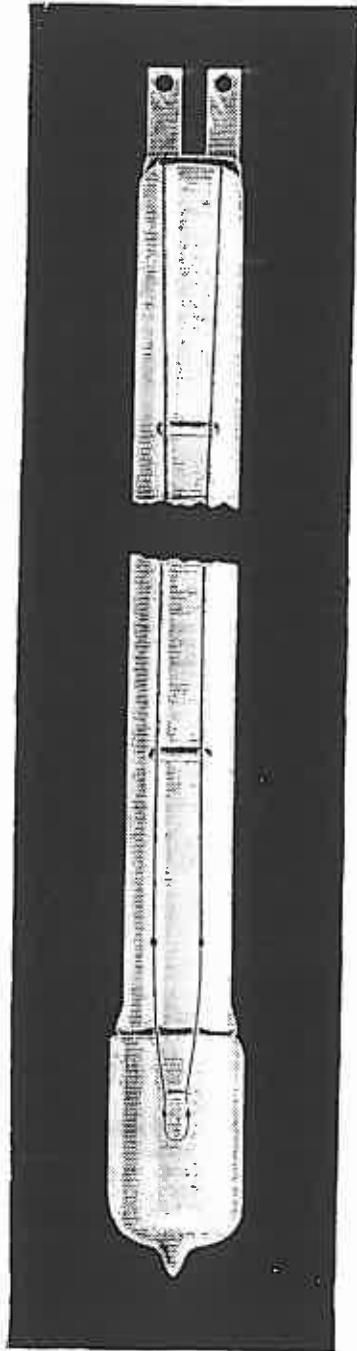
Lamp No 475.

Lamps for Special Purposes.

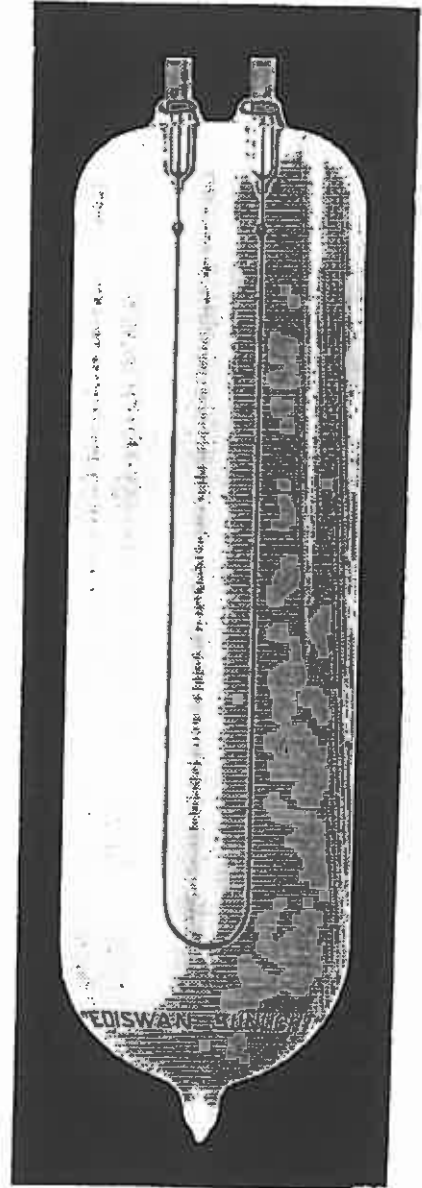
53

—continued.

CELL VIEWING AND HIGH C.P. TUBULAR.



Lamp No. 490.
FULL SIZE.
Total length about 18 in.



Lamp No. 495.
HALF FULL SIZE.

Advertisement.



FOR
"EDISWAN"
DECORATED & COLORED BULBS,
SEE PAGE 66 OF THIS LIST.

FOR DECORATED & ORNAMENTAL FITTINGS,
SEE FITTINGS SECTION OF CATALOGUE.

FOR INSTRUMENTS AND RESISTANCES,
SEE INSTRUMENT SECTION OF CATALOGUE.

FOR ELECTROLIERS AND BRACKETS,
SEE ELECTROLIER SECTION OF CATALOGUE.

FOR CABLES AND WIRES,
SEE CABLE SECTION OF
CATALOGUE.



Fancy Lamps.

54

Very pretty lighting effects may be obtained by the use of Glow Lamps with specially formed Bulbs of a more or less ornamental character. These are produced by varying the shape, colour and surface of the Bulbs. The Company have already manufactured a great variety of patterns, a few of which are illustrated in Paragraphs 54 to 56.

CRINKLED LAMPS.

Lamp No. 500	...	1	C.P.	...	3 to 8	volts.	...	Price 5/3	each.
" 505*	...	2½	"	...	5	" 15	"	" 5/3	"
" 510	...	{ 5	"	...	20	" 35	"	" 5/3	"
		{ 8	"	...	20	" 25	"	" 5/3	"
" 511*	...	{ 5	"	...	20	" 35	"	" 5/9	"
		{ 8	"	...	20	" 25	"	" 5/9	"
" 515*	...	5	"	...	40	" 50	"	" 5/3	"
" 516	...	5	"	...	40	" 50	"	" 5/9	"
" 520*	8 and 16		"	...	30	" 35	"	" 4/9	"
" 525*	8 " 16		"	...	40	" 65	"	" 5/3	"
" 530	8 " 16		"	...	80	" 105	"	" 5/9	"

CONICAL LAMPS.

Lamp No. 535	...	2½	C.P.	...	17	volts.	...	Price 4/9	each.
" 540	...	2½	"	...	20	"	...	" 4/9	"
" 545*	...	5	"	...	20 to 25	"	...	" 4/9	"
" 550	...	{ 5	"	...	20	" 50	"	" 4/9	"
		{ 8	"	...	20	" 35	"	" 4/9	"
" 555*	...	8	"	...	40	" 50	"	" 4/9	"
" 560	...	8	"	...	80	" 105	"	" 4/9	"
" 565	...	16	"	...	80	" 105	"	" 4/9	"
" 569	8 and 16		"	...	80	" 105	"	" 10/-	"

SPIROLA LAMPS.

Lamp No. 570	...	{ 5	C.P.	...	20 to 50	volts.	...	Price 5/9	each.
		{ 8	"	...	20	" 35	"	" 5/9	"
" 575	...	8	"	...	40	" 105	"	" 5/9	"
" 580	...	16	"	...	40	" 105	"	" 5/9	"
" 582	...	32	"	...	80	" 105	"	" 6/-	"
" 584	8 and 16		"	...	40	" 105	"	" 5/9	"
" 586*	...	100	"	...	80	" 105	"	" 10/-	"

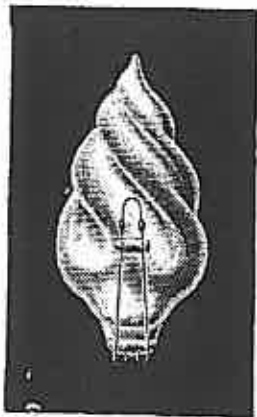
* Lamp Nos. marked thus (*) not illustrated.

Fancy Lamps.

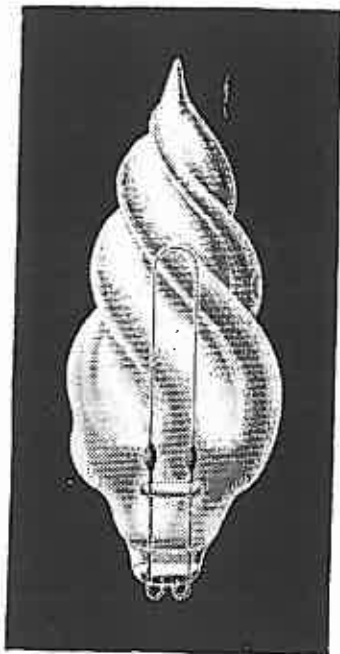
4

ued.

CRINKLED LAMPS.



Lamp No. 500.



Lamp No. 510.

ALL FULL SIZE.



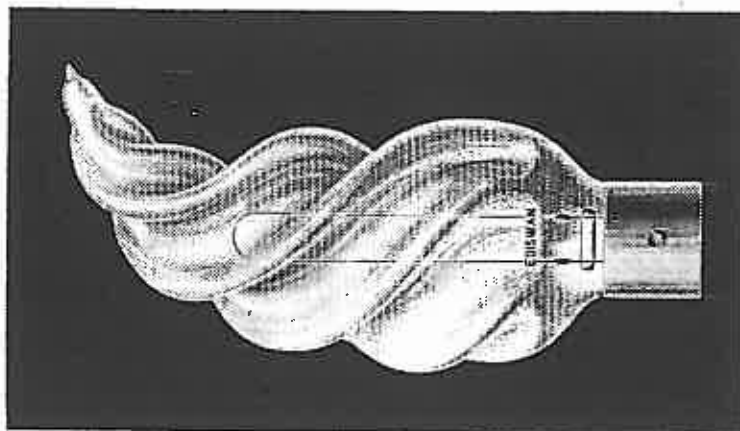
Lamp No. 530.

Fancy Lamps.

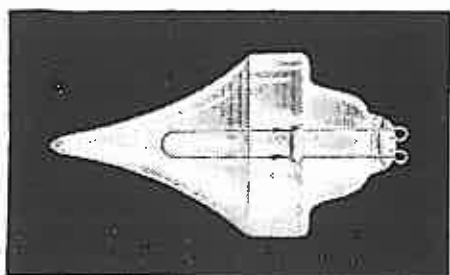
54

—continued.

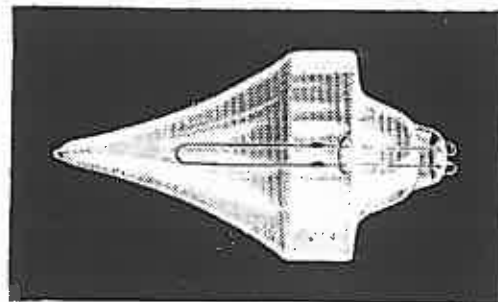
BENT CRINKLED AND CONICAL LAMPS.



Lamp No. 516.



Lamp No. 535.



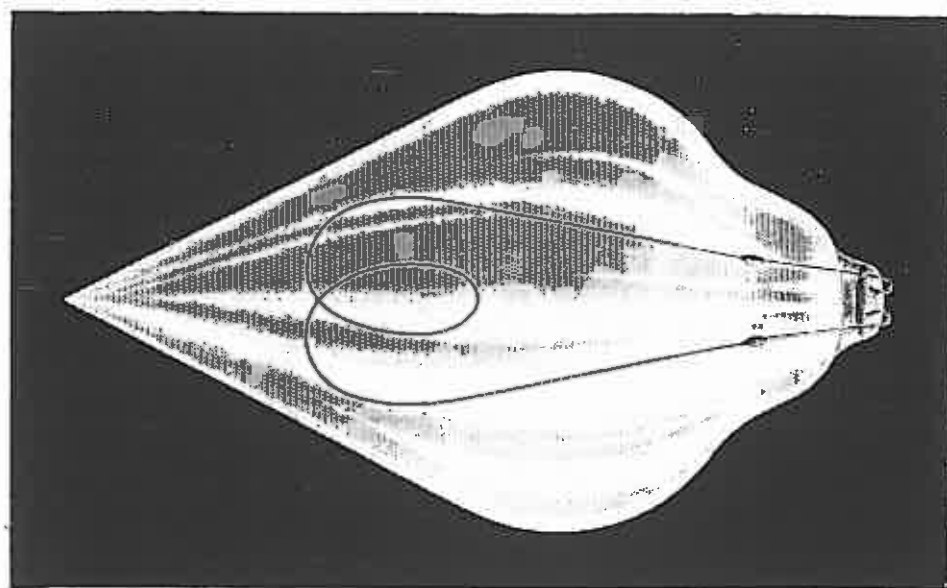
Lamp No. 540

ALL PAT. NZL.

Fancy Lamps.

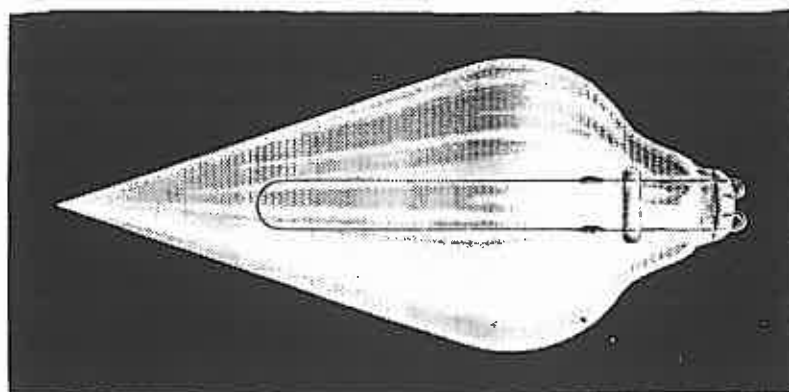
54
continued.

CONICAL LAMPS — *continued.*



Lamp No. 560

BOTH FULL SIZE



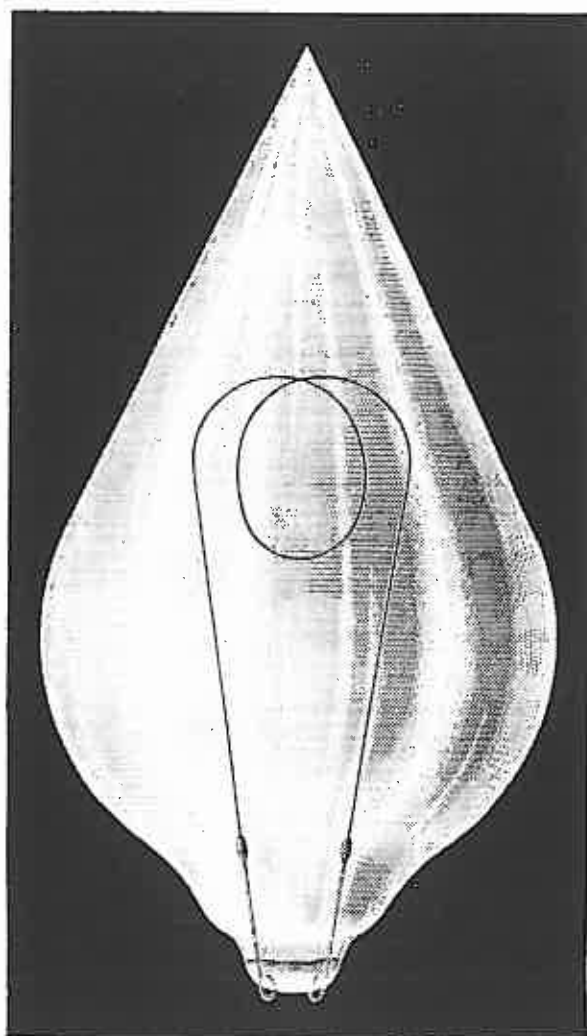
Lamp No. 550

Fancy Lamps.

54

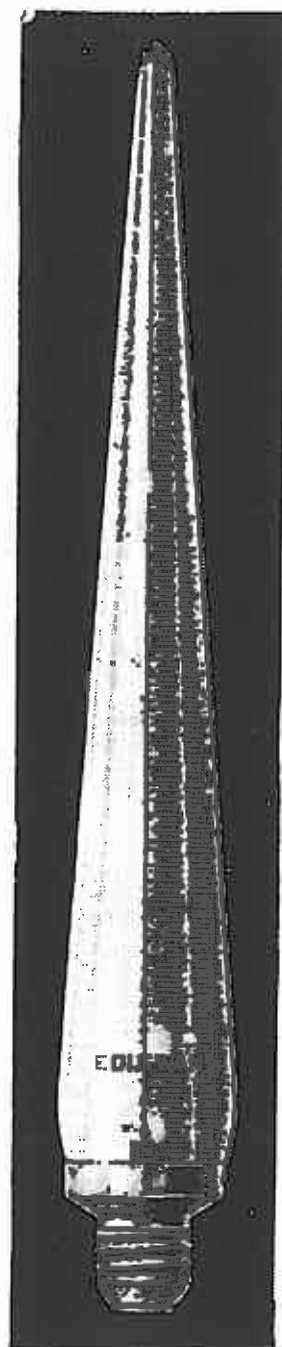
—continued.

CONICAL LAMPS—continued.



Lamp No. 565

FULL SIZE.



Lamp No. 569.
HALF FULL SIZE.

Advertisement.



FOR "EDISWAN"
CANDLE STANDS
AND CANDLE FITTINGS,
To take Crinkled, Conical, Spirola, and Colored Lamps,
SEE FITTINGS SECTION OF CATALOGUE.

FOR INCANDESCENCE LAMP HOLDERS, FITTINGS,
SWITCHES, SWITCHBOARDS, &C.,
SEE FITTINGS SECTION OF CATALOGUE.

FOR INSTRUMENTS, ELECTROLIERS, BRACKETS,
CABLES AND WIRES,
SEE SEPARATE SECTIONS OF CATALOGUE.

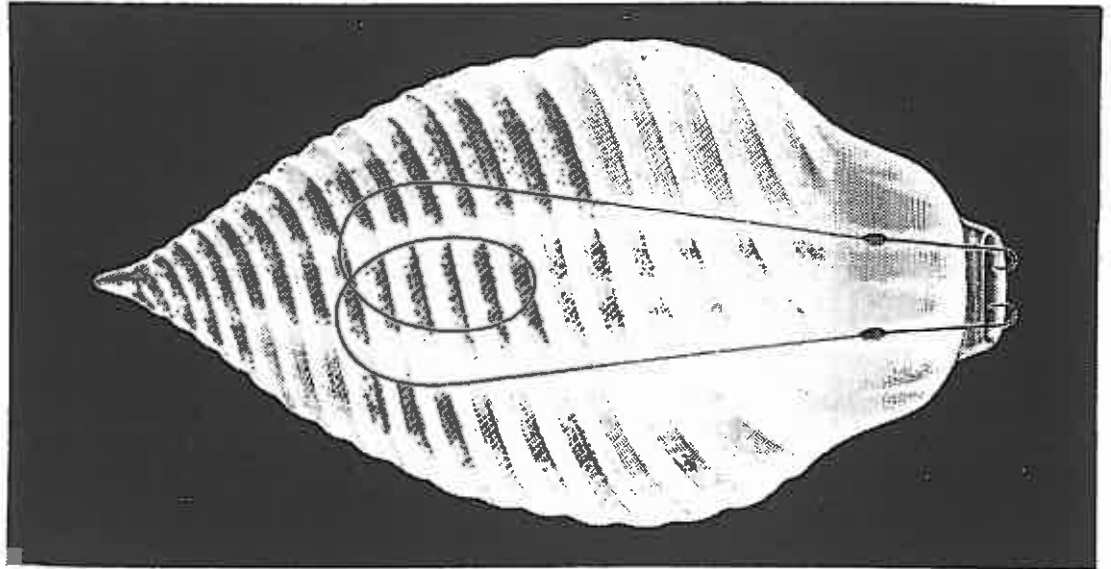
SEND SPECIFICATION OF REQUIREMENTS.
ENQUIRIES INVITED.



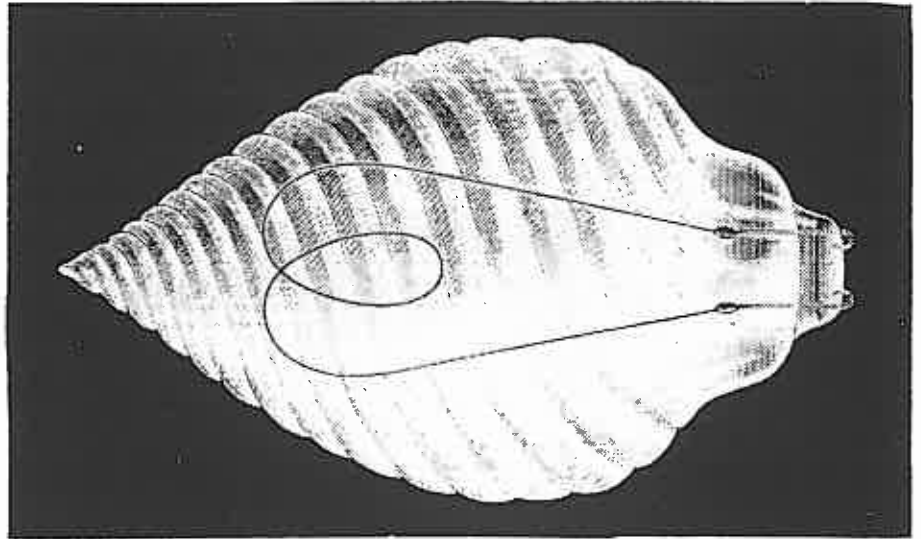
Fancy Lamps.

54

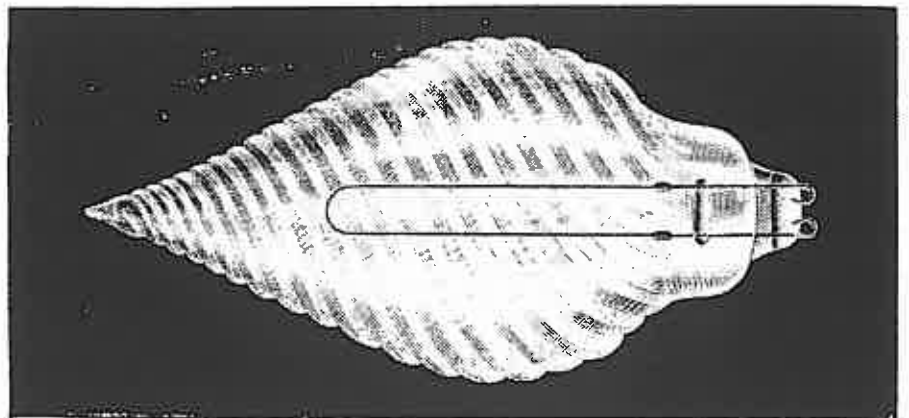
—continued.



Lamp No. 580.



Lamp No. 575.
ALL FULL SIZE.



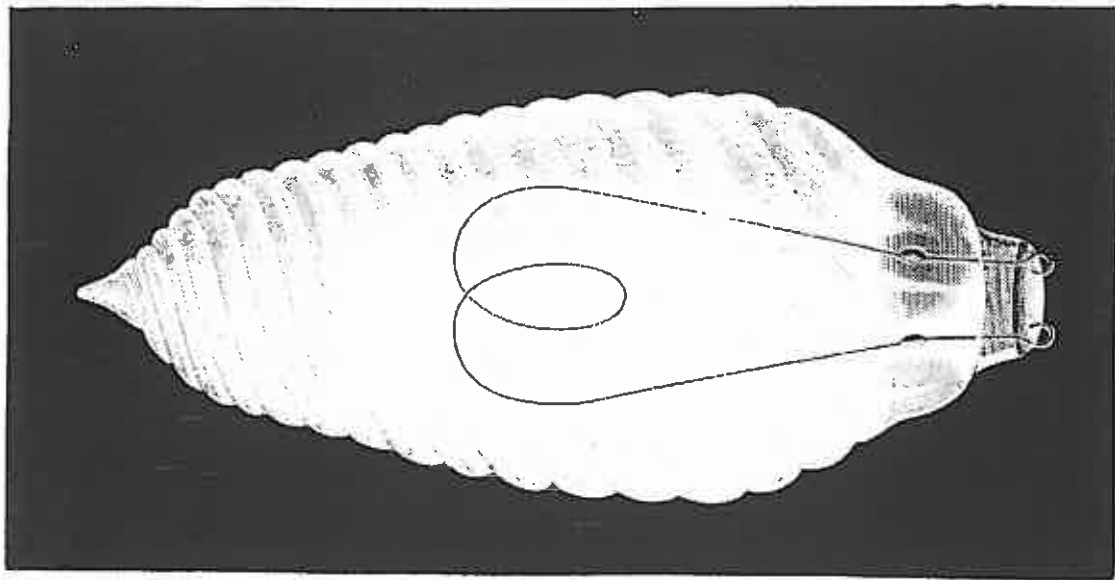
Lamp No. 570

SPIROLA LAMPS.

Fancy Lamps.

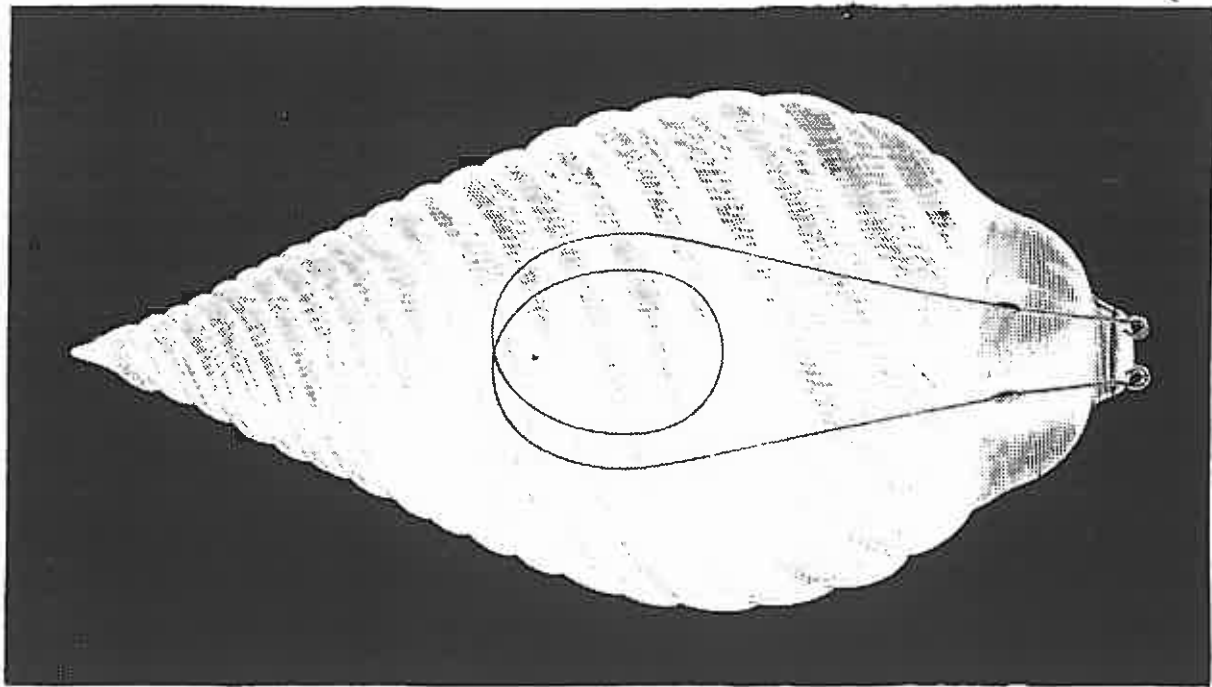
54
mud.

SPIROLA LAMPS.



Lamp No. 584.

BOTH FULL SIZE



Lamp No. 582

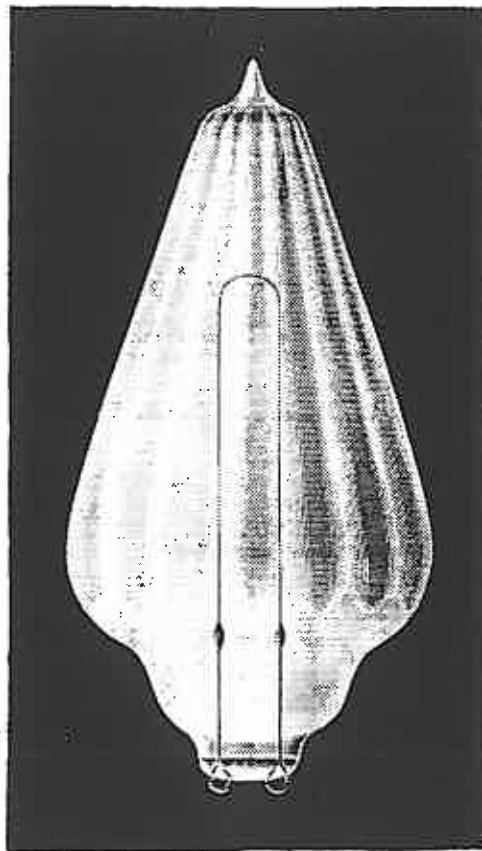
Fancy Lamps.

55

CONICAL FLUTED LAMPS.

Lamp No. 590	...	{ 5 C.P. ...	20 to 50 volts.	} Price 5.9 each.
		{ 8	20 ,, 35 ,,	
.. 592*	8 & 16	..	40 ,, 65 ,,	5.9 ,,

(*Not illustrated.)



Lamp No. 600.
FULL SIZE J

Fancy Lamps.

56

CUT GLASS BULBS, &c.

Lamp No. 650—8, 16, 25, 32 C.P. 30 to 65 volts.

Price, 20 and upwards, 7/6 each.

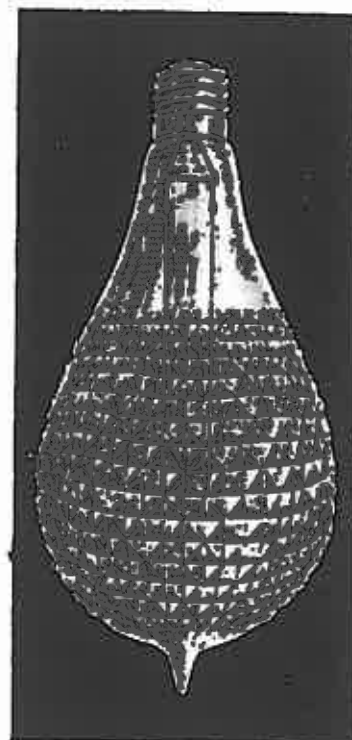
„ smaller quantities, 8/- „

Lamp No. 655.—8, 16, 25, 32 C.P. 80 to 105 volts.

Price, 20 and upwards, 8/- each.

„ smaller quantities, 8/6 „

(Not illustrated; a little larger than Lamp No. 650.)



Lamp No. 650.
THREE-QUARTER FULL SIZE.

The following are not illustrated:—

Lamp No. 660. No. 1 and 2 Bulbs, Diamond Marked ... Price 1/- per Lamp extra.

„ 665. „ „ Circular Ribbed „ 1/- „

„ 670. „ „ Iced Glass „ 2/6 „

Lamps Nos. 660, 665 and 670, can be supplied of any C.P. and voltage for which No. 1 and No. 2 Bulbs are used—*vide* paragraph 4.

Lamp No. 675. Acorn Bulbs Price 2/6 per Lamp extra.

C.P. and voltage same as supplied with No. 2 Bulbs.

Fancy Lamps.

57

COLOURED BULBS.

No. 1 and No. 2 Sizes.

C.P. and Voltage same as supplied with No. 1 and No. 2 Bulbs, *vide* paragraph 4.

Lamp No.	DESCRIPTION OF COLOUR.	
700	Dark Ruby (for photographic purposes)	} Price 2/6 per Lamp extra.
705	Ruby	
	Ruby, Iced	} Price 3/9 per Lamp extra.
710	Pale Pink	} Price 1/- per Lamp extra. <i>Most of these can be had in Iced Glass at 3/- extra</i>
715	Dark "	
720	Sage Green	
725	Peacock "	
730	Dark "	
735	Ultramarine Blue	
740	Azure "	
745	Pale Amber	
750	Dark "	
755	Smoked "	
760	Straw Opalescent	
765	Turquoise	
770	Transparent Opal	
775	Dead "	
780	Lavender "		} Price 1/6 per Lamp extra.
785	Gold "	
790	Green "	
795	Cream "	
800	Azure Blue "	
805	Orange "	} Price 2/- per Lamp extra.

Any of the above Diamond Marked and Circular Ribbed Bulbs 6d. per Lamp extra.

BULBS NO. 4, 5, & 6, HALF THE ABOVE PRICES.

820	Opal Striped with Ruby	} Price 2/6 per Lamp extra.
825	" " Blue	
830	" " Green	
835	Flint " Opal	
840	" Circular, striped with Opal	
845	" Variegated " "	
Lamps Obscured (ordinarily)	...	Price 3d. extra.
" " Fancy Patterns	(See Illustrations on next page.)	" on application.
" Varnished in Colours	...	" 3d. extra.
" Silvered	...	" from 1/3 extra.

Fancy Lamps.

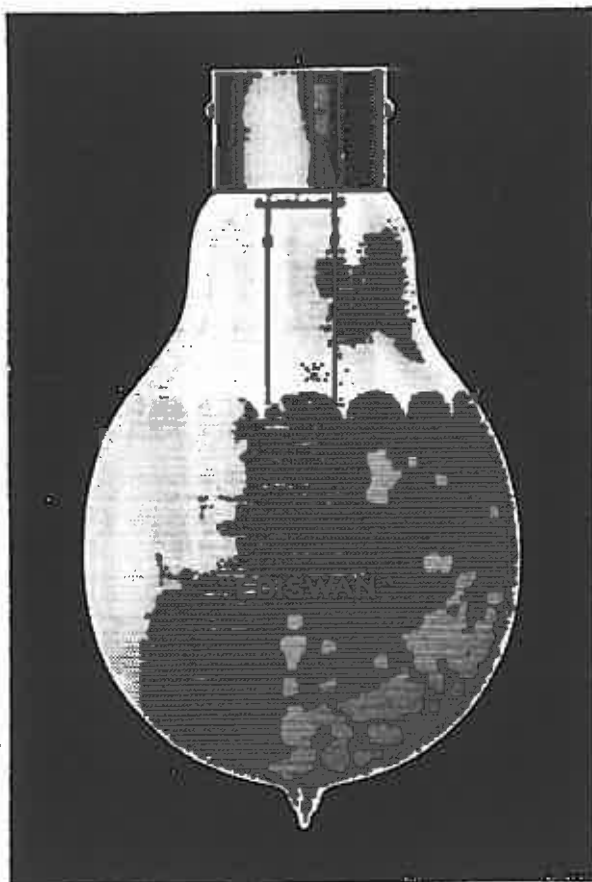
57

continued.

SPECIALLY OBSCURED LAMPS.

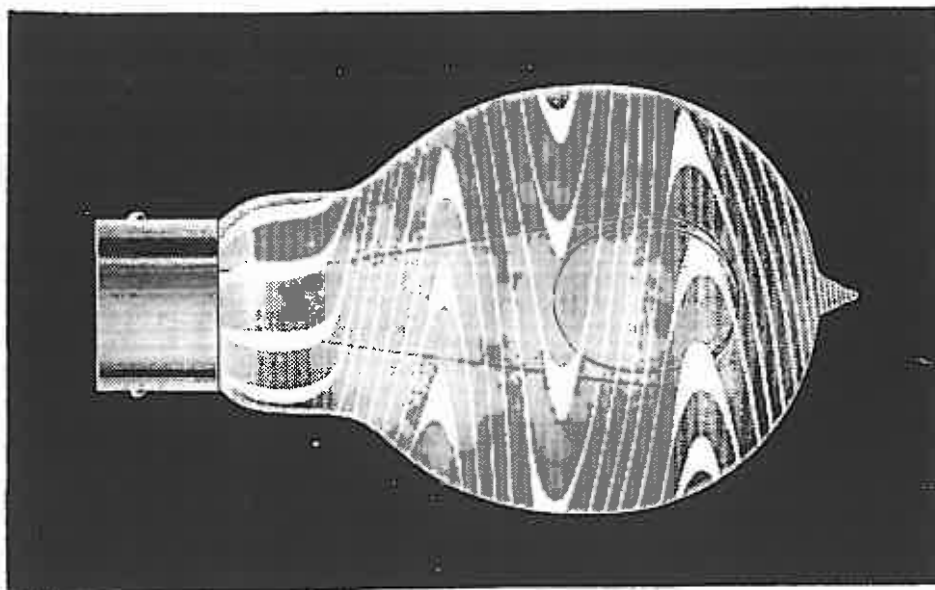


Lamp No. 900.

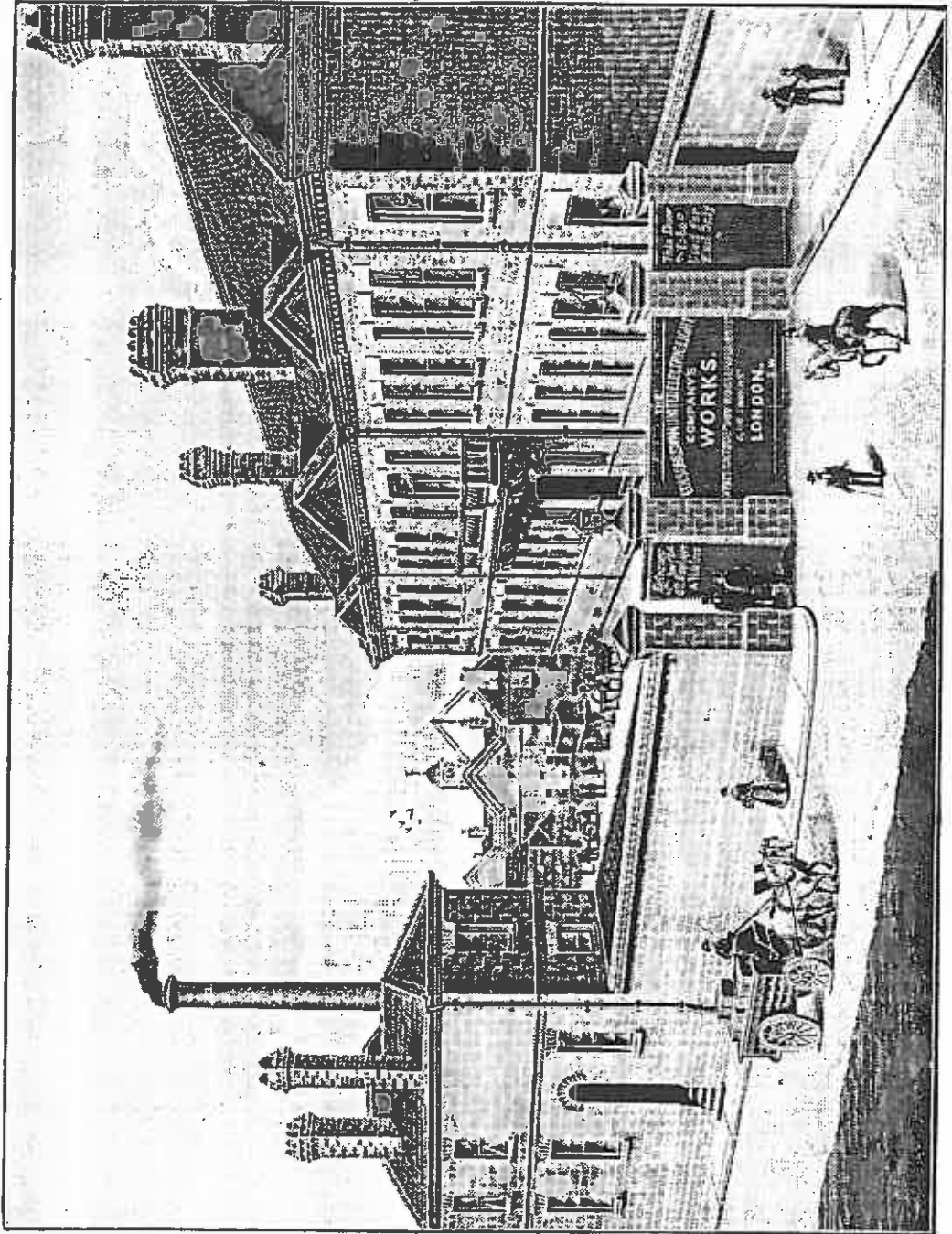


Lamp No. 905

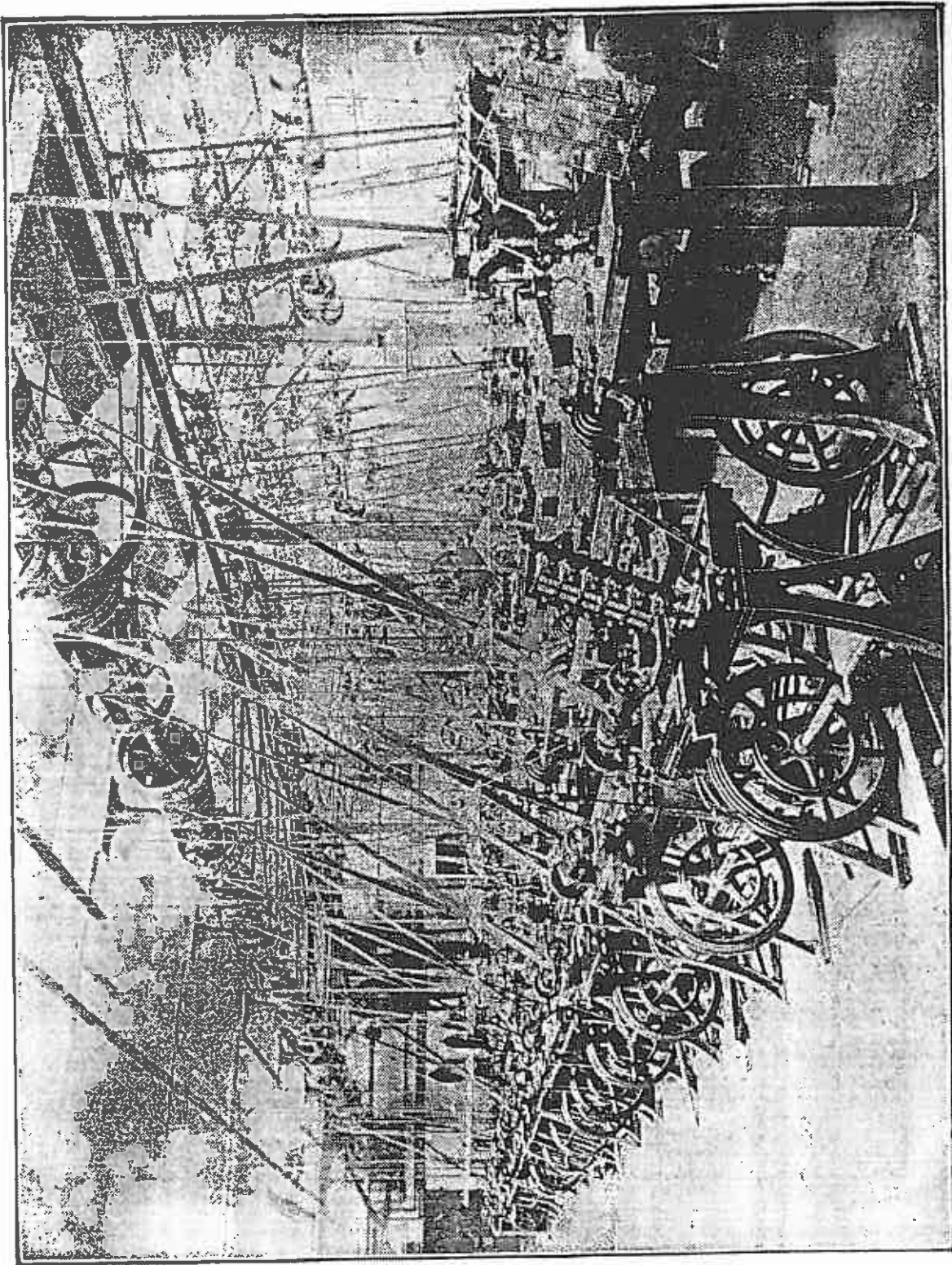
VARIEGATED LAMP.



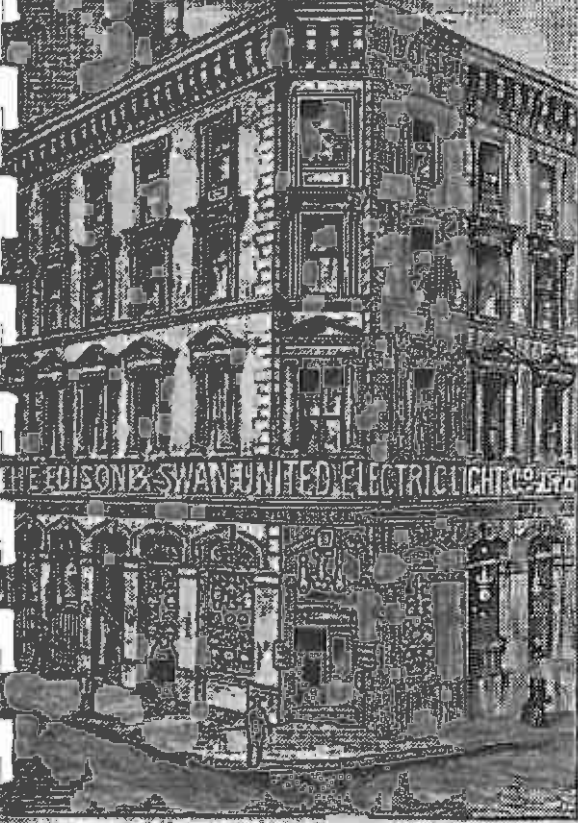
Lamp No. 845.
FLINT VARIEGATED, STRIPED OPAL.



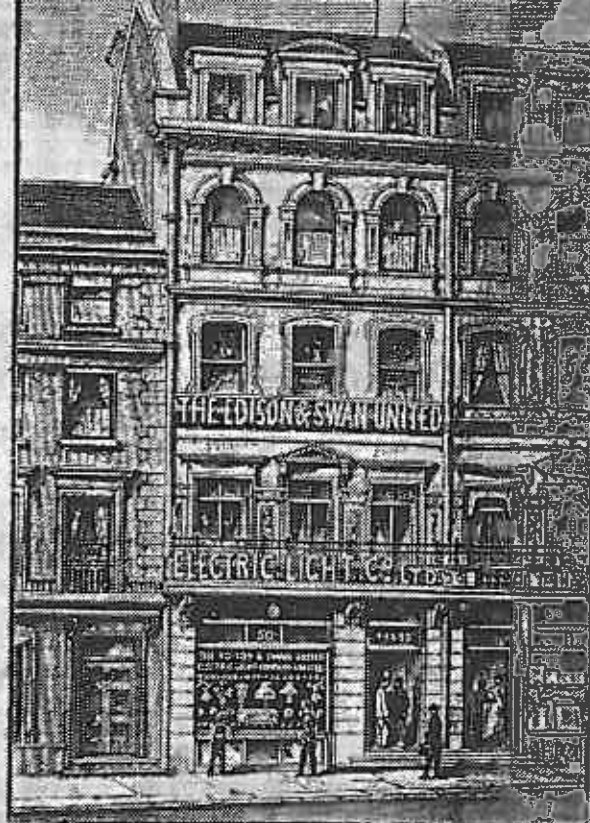
THE OFFICES, PONDER'S END, MIDDLESEX.



ONE OF THE FITTING SHOPS—PONDEN'S END WORKS.



Manufacturers
OF
ELECTRIC
LIGHT
APPLIANCES
OF EVERY
DESCRIPTION
AND TO ANY
SPECIFICATION.

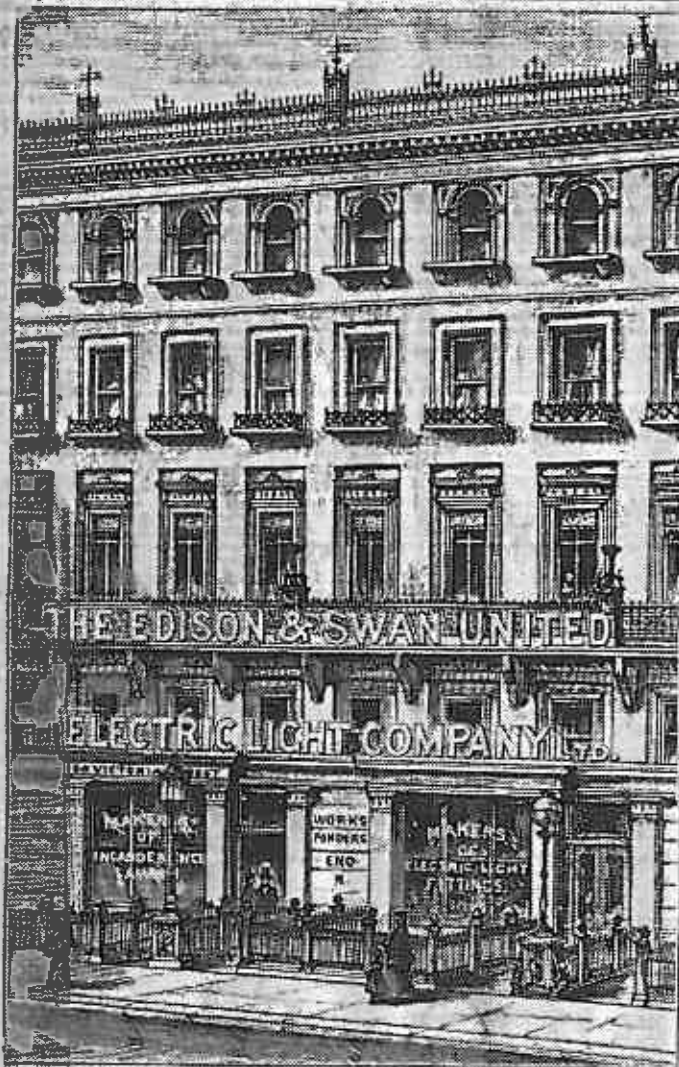


Head Office:
10, VICTORIA ST., S.W.

City Show Rooms:
10, CANNON ST., E.C.

West End Depot:
10, PARLIAMENT ST.

Works:
PONDER'S END,
MIDDLESEX,
AND
SOUTH BENWELL,
NEWCASTLE-ON-TYNE.



INCANDESCENCE
LAMPS.
PATENT
INCANDESCENCE
LAMP HOLDERS
SWITCHES.
CUT-OUTS.
SWITCH-BOARDS.
ELECTROLIERS,
BRACKETS, GLOBES,
SHADES, ETC.

