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LIGHT AND POWER WIRING

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DESCRIPTION.



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Wall Sockets,
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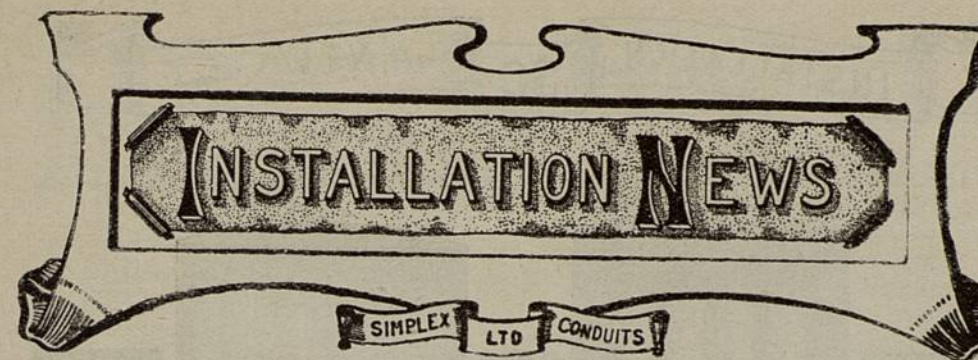
SIMPLEX ACCESSORIES are designed in accordance with the latest developments of electric light and power wiring, based upon our close connection with, and experience of, electric installation work during the last fifteen years.

We have made special arrangements for adapting high class electrical accessories to the requirements of conduit wiring and conduit practice.

Advice on this subject and particulars can be had on application to our nearest branch.

SIMPLEX CONDUITS, LTD.,

Garrison Lane, Birmingham; 118-117, Charing Cross Road, London, W.C.; 16, Corporation Street, Manchester; 51, High Bridge, Newcastle-on-Tyne; 72a, Waterloo Street, Glasgow; 11, Denmark Street, Bristol; 1, Dawson Street, Liverpool. And at Leeds, Swansea, Newport.



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WIRING ESTIMATES.

ATTENTION has frequently been drawn in the technical press to the difference in prices given in public tenders for work and supplies of material, and in no case is the difference so noticeable between the highest and the lowest as with tenders for electric wiring work.

How the divergence arises has caused much discussion. Sometimes it may be that "A" does not want the job, it does not suit his organization, or he may already have on hand as much work as he is able to profitably tackle. On the other hand "B" may be short of work and the job may use

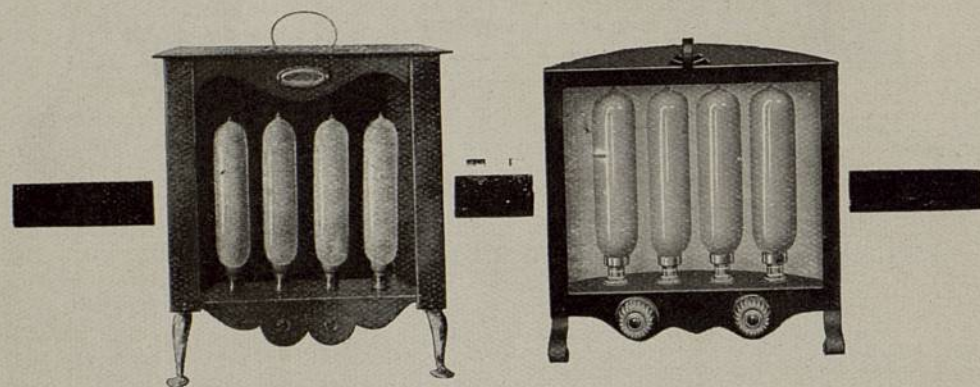
up some quantities of stock material, so he puts in a proportionately low tender.

This may be one explanation, but we are inclined to believe that another cause may be inaccurate estimating of quantities. In any case the latter has often resulted in losses being made upon contracts, and it largely arises through inability of the estimating engineer, in cases where plans are not provided, to collect all his data in convenient form for reference.

The matter appears to us of some importance, and we shall be dealing with it further in a subsequent issue.

PENDING THE ISSUE
OF LEAFLETS ::
DEALING WITH:
SOME OF OUR NEW
IDEAS ON ELECTRIC
HEATING AND ::
COOKING WRITE
TO OUR HEAD:
OFFICE. : : : :

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The "HEATING" SEASON

will shortly be with us, with the chilly mornings and evenings which make the electric radiator and convector irresistibly appeal. Now is the time for you to decide upon your types. It is essential that you should have confidence in the heaters you handle. Simplex "guaranteed" electric heaters have set the standard of design both from an electrical and mechanical standpoint. There are many points in their construction which merit your consideration and which go to make them ready-sellers; besides, each one sold adds to your own reputation. It is only the "best" that will ensure you a wide circle of satisfied customers. From start to finish "Simplex" heaters are made in our own works and therefore, at every stage, are under expert supervision. The range includes both luminous radiators and convectors and is most varied. Whether you require a simple little heater for the bath room, a robust type for the office, or an elaborate "period" design for the drawing room, we can supply the identical type your client wants.

**SIMPLEX
ELECTRIC
HEATERS**
GUARANTEED
FOR FIVE YEARS

A Journal for Electrical Engineers.

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NOTES.

SIGNS OF PROGRESS

On another page we publish some notes especially appealing to electrical contractors upon the advisability of their developing a business in Electrical Signs. It will be fairly obvious to anyone who has studied this question that this very important use of electricity has by no means been developed to its fullest extent and this is largely attributable to the fact that the problem has not been tackled in a proper manner. That the number of electrical signs which have been patented and marketed from time to time is legion will be generally admitted, but a mistake is often made in presuming that one particular class of electrical sign will appeal to all and sundry traders who might possibly employ signs in advertising their business. Progress has been frequently hindered because an entirely unsuitable type of sign has been offered to a certain firm and on its being refused, the contractor has become disheartened in the whole subject.

As the writer of the notes referred to points out, it is very necessary

to use considerable discretion in the selection of the sign offered to any firm making a speciality, and what will meet the requirements of one class may by no means suit another. It is in this particular direction that we can be of great assistance. With the exception of "freak" signs, we are makers of practically every class of electrically illuminated sign, and provided we have the fullest information given us when the enquiry is sent, we can recommend to our clients that type which is most likely to suit the particular business for which it is intended to be used. It is, however, of the greatest importance that we should have *all* particulars, many opportunities for business have been lost through the omission of seemingly insignificant details.

We have now developed a special department dealing with this class of work, and all our signs are manufactured actually on our own premises. We have devoted considerable care and attention to the problem, particularly in the production of signs for special purposes and businesses.

The accumulated experience which has now extended over a number of years is at the disposal of our customers for the asking. If any electrical contractor has any potential business in view and will send us all the information he possibly can regarding it, we shall only be too pleased to submit special drawings, specifications and prices in such a manner that he will have the greatest possible aid towards bringing off the deal. A point we should like to emphasize is that we are just as keen in assisting our customers in securing the small jobs as the large ones, as our experience has shewn that in the case of electrical advertising

NOTES—cont.

signs, owing to their undoubted effectiveness, a small order very frequently leads to repeats and to ones of a much larger nature.

CONDUIT WIRING

We are now engaged in the preparation of a further edition of this popular little handbook. This will be the fourth edition, and we hope to make it as much an improvement on the last as the previous editions have been upon the first. No doubt most of our customers have copies in their possession, and in our mutual interests we should value any suggestions of a practical nature for its betterment.

EXHIBITIONITIS

The exhibition season will have commenced in full blast by the time this number of "Installation News" appears. Of the many that are being held those which are of most interest to electrical traders are the "Daily Mail" Ideal Home Exhibition at Olympia, at which the Electricity Supply Company Committee are erecting a model Electrical Home, and the National Gas Exhibition at the White City. The latter will be a model of what co-operative exhibiting should be, and it is almost as important for electrical engineers to visit it, as it would be were it of an electrical nature. The whole of the exhibition will comprise one large exhibit worked on co-operative lines attended to by independent representatives, each in control of one particular section in which he has been especially coached; manufacturers being allotted a certain

quota of space for their own particular manufactures, according to their contribution toward the common fund for running the exhibition.

The whole matter is in the hands of the British Commercial Gas Association, who have had a special committee working for some considerable time past and many of the arrangements and methods of organizing the show will be an object lesson in the co-operative working. It will be interesting to compare the display which is being made by gas at the White City with the last Electrical Exhibition held at Olympia, and we sincerely hope that the Executive Committee of the B.E.A.M.A. will spend some considerable time there; they should be able to obtain some useful hints and information as to the conduct of future electrical exhibitions.

The National Gas Exhibition, however, is mainly intended to appeal to the consumer. A regular programme of interesting lectures by well-known publicists on the subject of gas used for various purposes is being arranged. These lectures cover everything from the evolution of gas from the coal field to the burner, down to the question as to how it is possible to prepare one's own meals whilst "Cook" is away. Looking through the programme that has been arranged, we cannot help comparing it with the inadequate preparations, not to mention puerile competitions, which were a feature of the last Electrical Exhibition.

Later in October we have the Exhibition which is being held in Glasgow under the auspices of the Electricity Supply Dept., and which we are promised is to be even a greater success than the previous exhibitions which have been held in this town.

SOME NOTES ON VACUUM CLEANERS.

By H. F. McLoughlin.

IN this article we do not propose to discuss the merits of the various methods of cleaning, but to give a brief outline of the more important factors which should be considered when buying a Vacuum Cleaner. We do this, because it has been demonstrated conclusively, that not only is vacuum cleaning more hygienic and effective, but that it is more economical also. The problem which confronts the dealer is to select from among the many makes of machines on the market that type which will give the greatest satisfaction throughout its life, for only by handling a really satisfactory machine can sales be maintained.

Obviously, then, it is necessary to see the machine at work before purchasing—or, better still, see more than one machine, thoroughly examine the action and mechanism and note the merits of each; it is only by seeing the machine at work performing all those duties that it will be expected to perform, that it is possible to arrive at a reliable conclusion as to its efficiency, durability and economy. To aid in coming to a right decision we will briefly discuss the elements of vacuum cleaning. The term "vacuum cleaning" here, is used in its broadest sense, and is applied to any method of cleaning carried out by air set in motion by suction.

Now there are two distinct types of vacuum cleaners: there is the Pump type which produces a high vacuum either by means of pumps or bellows, and there is the Fan type which produces a comparatively low suction, yet is capable of displacing a much greater volume of air than the Pump type.

It is a fallacy to believe that the effectiveness of cleaning depends upon suction alone, for it depends to an equal, if not greater degree, upon the volume of air in rapid motion. The velocity with which this air is moved affects the utility of the cleaner.

A gentle breeze blowing down a road will not disturb even the dust; but a good stiff wind will sweep the road clean, whilst a hurricane will cause some damage. Taking this analogy, makers of vacuum cleaners are confronted with the problem of producing a machine that will *at all times* produce the equivalent of a strong wind. It is impossible to arrange for this in the pump type of machine, as we shall see by studying the action of the pump itself. The volume of air displaced depends upon the capacity of the pump or bellows and upon the frequency of the strokes. The high vacuum produced will cause the air displacement to be fairly constant under working conditions. The machines are so designed and adjusted to give the best results when working on a carpet or a floor and where say a 10 in. nozzle is fitted; but when a smaller nozzle is attached for cleaning curtains, tapestry and the like, the velocity of the air is enormously increased because the air displacement is constant. In fact, it more nearly approaches the hurricane in our analogy, and becomes positively destructive to the materials being cleaned.

Pump machines, in addition, are heavy and complicated in construction. A pronounced vibration is felt at every stroke and even though silence and vibration

damping may be obtained by mounting the moving parts on rubber or felt cushions, yet this does not eliminate the cause, and in no way prevents wear of the moving parts.

When worn, the pump machine is particularly inefficient, and being complicated in construction, it requires careful and constant attention or signs of wear and decreased efficiency will soon be evident.

Rotary pumps have nearly all the above mentioned defects; the air displacement is just as constant and there is precisely the same difficulty about adjusting the velocity of the flow of air to the various sizes of nozzle used in the different classes of work in which the machine is employed. Most makers of pump cleaners demonstrate the powerful suction of their own make of machine by closing up the orifice of the nozzle. The high suction is exerted when no air is flowing, and this is a condition which never obtains when cleaning. It is erroneous to believe that the machine which creates the highest vacuum is the most efficient. The efficiency depends upon the suction exerted when sufficient air is flowing to accomplish thorough cleaning.

The Fan type of machine possesses practically none of the disadvantages found in the Pump cleaners, and all the time there is a good, steady and ample flow of air, quite sufficient to do the work properly. No dangerous high vacuum is ever created, and provided the attachments are correctly designed, damage to material is impossible.

By mentioning the suction test referred to above, the charge may

be brought against us that we demonstrate the powerful suction of the "Diamond" cleaner by placing a sheet of paper over the "Diamond" shoe and challenging any other maker of fan type suction cleaners to detach the paper by using his machine. The "Diamond," of course, wins every time, proving that the suction of the "Diamond" is greater than the other, but then this same test can also be applied to prove that the suction exerted by the "Diamond," when sufficient air is flowing to accomplish thorough cleaning, is also greater than the suction exerted by any other fan machine, and this is of vital importance. The sheet of paper placed across the orifice of the shoe of any other machine entirely closes the slot. Now, in the "Diamond" there are five slots, and if even all the slots are not covered when the the paper is placed in position, it is found that the "Diamond" still exerts the greater suction.

Thus, for the best service, a vacuum cleaner should maintain at all times a suction sufficient to draw air through the material with a velocity high enough to extract all the dust and dirt from the fabric without injuring it, and at the same time, move a sufficient volume of air to carry this dust and dirt through into the container without allowing it to settle.

This is just what the "Diamond" does, and we invite you to test it in any way you please against any other similar suction cleaner. The more you test it the more convinced you will be as to the superiority of the "Diamond," and you cannot fail to decide that such an excellent, useful and satisfaction-giving appliance will find a ready and steadily increasing sale.

A FEW WORDS TO ELECTRICAL CONTRACTORS ON ELECTRIC SIGNS.

By T. BIRKETT.

VISITORS to our shores from the United States, Canada, Germany and France, frequently tell us that we are very far behind those countries in the use of Electric Signs. It would be interesting to know the reason of this. It cannot be that the English do not advertise, they do. It cannot be that we have no designers and manufacturers capable of dealing with this special business, there are such. The reason is more likely to be found in the fact that those responsible for the actual selling to the public (and who more responsible than the Electrical Contractor?) have not yet realized what a huge un-exploited field there is here for their activities. With the approach of

realize that an increasing effort must be made to attract the attention of the buying public.

The desire to advertise is there, and it is for us, in the Electrical Trade to prove that the Electric Sign can be made the most paying investment in the advertising world. Consider the outside lantern, artistically made in wrought iron, with a carefully designed device such as the one shewn here. By day the sign is attractive, legible and dignified. By night the device can be read a street's length. Like a first-class poster, a well-designed advertising lantern is in itself a thing of beauty and attracts public attention, by this very reason; but note the difference.

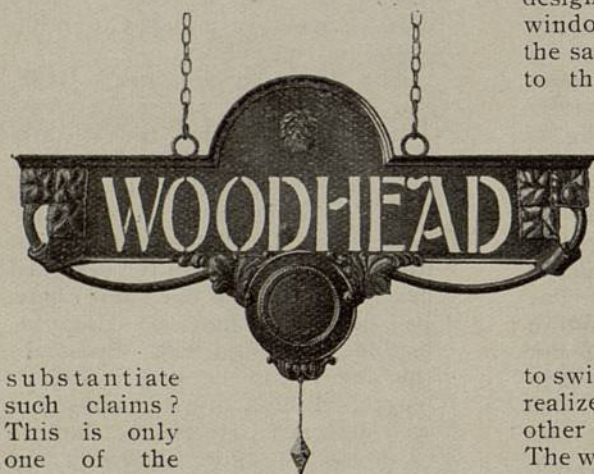
The artistic poster may cost hundreds of pounds to produce; an annual rent must be paid for its posting on the walls, where it is only seen in conjunction with many others, and sometimes the comparison is not entirely in its favour; the walls upon which it is posted are for the most part in



the half-watt lamp, Central Station engineers also might well look to Electrical Advertising for an easily extended source of revenue. Judging from the hoardings, the newspapers, and the Technical Press, advertisers are spending money more freely now than ever. The large manufacturers of Cocoa or Tobacco, the departmental store, and the small shopkeeper all

back streets and out-of-the-way places, whereas the electric sign is on one's own shop, which is probably in a main and busy thoroughfare. There is no rent to pay for its position. Its first cost is probably its only cost, for in these days of Metallic Filament lamps the cost of illumination is almost negligible. For an outlay of anywhere between £5 and £20

there is a permanent advertisement which will outlast a healthy man's lifetime, and be as attractive by night as by day. Is there any other means of attracting public attention which can make and



substantiate such claims? This is only one of the many devices in the field. From the small illuminated window ticket costing as low as 10/-, appealing to the small shopkeeper, to the large illuminated sign with complicated flashing devices costing hundreds of pounds, appealing to the great advertiser, the whole advertising world is open to us. London certainly has done something in this direction, but I have never yet visited a provincial town where the fringe of the matter has been touched. Who is at fault? Surely every electrical contractor

in every town must take some of the blame to himself. May I suggest an easy beginning. A shop window must be lighted, why not induce your shopkeeping clients to use a window sign, which can be designed to not only light the window well, but which also, with the same light, will draw attention to their name, or to the special claims of their wares. Introduce to him the virtues of a Time Switch, so that the sign can be automatically switched off at a predetermined time, thus leaving the sign illuminated after the shop is closed, without any trouble with regard to switching off. Once an advertiser realizes what an electric sign can do, other uses will suggest themselves. The window sign has often led to the elaborate outside sign on the front



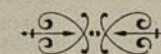
of the building, but this requires more special consideration, and it would be wise to investigate carefully the many forms of sign available. Manufacturers are always pleased to help a contractor to secure an order, but it is only fair

to them that they should be provided with the fullest information, as to site, local conditions, and as far as possible, the amount of money available.

To get the best value for money is the problem of every buyer, and, in the long run, the seller who gives this is the "stayer"; in the advertising world this "best value" is a complicated problem. For every position in which an electrically illuminated sign can be fixed, there is one, and one only, exactly right design. For instance, a Bond Street jeweller would consider a flashing window device undignified, however suitable it might be for a more pushful dealer in cheaper jewellery in a less favoured thoroughfare. This does not at all prove that there is not a suitable electric sign for the Bond Street jeweller. There is. It is quite possible to design one which would add dignity to the most exclusive shop. In the same way the large illuminated letters with flashing devices of an elaborate order, over

the front of a building devoted to the sale of, say, ready-made clothing, should be quite differently treated from the one calling attention to the virtues of a sedate Insurance office, but the publicity afforded by the electric sign is equally important to both. It is just here that the art of selling lies. The contractor who tries to sell the unsuitable sign, or who thinks that all electric signs are alike, will fail.

Provided electric current is available, there is no shop so small but there is an electrical advertising device suitable, and at a suitable price, and there is no vast corporation, however wealthy and ambitious, for whom a profitable electrical publicity scheme could not be devised. There being so great a range for selection, it would be useful to consider shortly, a few of the more easily sold forms of electric signs, and with the editor's permission I will, in the next number, endeavour to explain a few of them and to examine their special advantages for individual purposes.



OLYMPIC GAMES OF THE BATTI-WALLAHS.

WE have received from "Dry Bob" the following communication, accompanied by a certificate of veracity of somewhat ancient date:—

On Saturday last the flower of the Batti-Wallahs undertook a Marathon race. The course was from London to Southampton, 78½ miles; over the White Star liner *Olympic*, about 11 miles; and back again to London. An excellent start was effected at 10.15 a.m., and the competitors reached the Southampton control in

a bunch, comparatively fresh. The time, 1 hour 45 minutes, has never been equalled or even approached at any previous athletic meeting. The secretarial Pooley got there earlier, but then he gave himself a liberal start and travelled by train; he was not, therefore, timed. After a breathing space a search was made for the *Olympic*.

The policeman did not know any public-house of that name; another native directed us to a picture palace; on the third time of asking

OLYMPIC GAMES OF THE BATTI-WALLAHS—cont.

the longshoreman said she was out shrimping, and that he had a better boat, with four oars, which we could have for a shilling an hour. Ultimately we quartered the docks, and the lynx-eyed Collis spotted her behind a coal barge. Luckily he is tall, and knew what sort of craft he was looking for, being a sea-faring man and having once seen her—on a picture postcard.

She is appreciably larger than the *Alde*, and, indeed, compares not unfavourably in size with even the bigger craft to be found plying above Kew Bridge. Her stability was tested by Mr. Septimus Felix Beevor. As his fairy foot alighted on deck the vessel gave a shudder, but developed no dangerous list.

There are nine or ten decks, or storeys, to the ship, thus she cannot be called a sky-scraper, and the eleven-mile course was only accomplished by traversing every deck and pursuing a cat's-cradle path in the engine-room.

Before going on board we were confronted by a notice warning us to KEEP CLEAR OF THE SCREWS. Down below we saw three long shafts, and, naturally, asked to see the screws, so that we might avoid them as requested. But no satisfactory answer was vouchsafed to our courteous queries, nor could any of the staff tell us whether they were cut to Whitworth or B.A. standard gauge. We were expected to believe that these screws drove the ship. Now that sort of fable may serve for first-class passengers and the Marines, but every Batti-Wallah, and indeed every person who has handled a screw-driver,

knows that a screw does not drive but is driven. Why should those in authority make a mystery of a simple process?

It was quite different with the funnels. The man said there were four funnels, and when we asked to see them he willingly showed them to us. They looked like sections of a tube railway up-ended, and the man told us their function was to remind people in the vicinity not to stub their toes against the ship. Also that they were, in fact, odd lengths bought from the Central London Railway. Why couldn't he be equally frank and straightforward about the screws?

Anyone with a knowledge of hydrostatics could tell for himself how the vessel moves. Her front end or nose is quite sharp, and her latter part or abaft superficies is broad; the hydraulic pressure *per square foot* is identical at the same level all round, this being a well-known property of water; therefore the aggregate pressure behind is greater than the total pressure in front. Thus we have a resultant force constantly acting on the mass of the vessel in the direction of its nose. Now, when a force acts on a mass it produces acceleration, and gradually a velocity is reached at which the acceleration is precisely equal to the friction losses. That is why these ships always take time to reach full speed. This is a perfectly obvious and incontrovertible explanation, and renders the screw legend not only superfluous but ridiculous. If there is anything in the screw myth, why do they tie her up to the dock with ropes? They do it to counteract the force of acceleration, not because they think she might be stolen. It wouldn't be worth a thief's while to steal her.

There is a swimming bath and a

OLYMPIC GAMES OF THE BATTI-WALLAHS—cont.

Turkish bath on board, but the absence of golf links is somewhat astonishing in view of the popularity which golf now enjoys. Also the facilities for fox-hunting, and even polo, are almost negligible, and the coverts are hardly worth shooting over. In these respects the White Star Company has made little progress from the ideas of marine architecture current at the date of Noah's Ark; indeed, in Noah's time passengers could get big game hunting in profusion if they wanted.

In lighting there has been an advance, the metallic filament as well as the arc is now available, and some 13,000 electric lamps are installed. Electric radiators are freely used, electric hot-plates and subsidiary apparatus less freely. A special line is electric toasting of bread. Electric motors are employed for hoists, winches, and miscellaneous applications of power; and, of course, the telephone, telegraph, and wireless have it all their own way for communication. The generating plant consists of four 400 kw. Allen sets, producing c.e. at 100 volts. There is also an emergency set up in the belfry.

Apparently there is a brisk export trade in collapsible and other boats just now: the *Olympic* was carrying a big deck cargo of these. She also carried an enormous quantity of furniture and fittings, much of it extremely elaborate. The furniture was rather loosely packed; in fact, most of it was spread about as if in showrooms. By scientific packing it could be made to occupy much less space. Anyone with half an eye could see that. The vessel is in

reality a cargo boat specializing in the woodwork freight market; ostensibly she caters for passengers, but it is significant that no passengers were to be seen.

There was only one man in the engine-room; he must have a lot to do to keep that cathedral-full of machinery going day and night, making believe to twiddle non-existent screws. But perhaps he has a boy to help him at busy times. The builders have been generous to him in the matter of steel ladders. He has more steel ladders than any man I have met for a long time. There are tiers of them, and if he is fond of ladders then he must be a happy man. If they were put end to end he might reach Heaven with them, like Jacob's ladder—anyhow, he would reach somewhere pretty promptly if he fell off the top rung.

It was a footsore party that shook the *Olympic* dust from their shoes. Also it was depleted in numbers. A few lost Batti-Wallahs are probably dying of starvation in unsuspected recesses of the engine-room. The survivors solaced themselves with tea and other cheering beverages, but sustained further casualties before they left Southampton. Others dropped out on the way to London, and only a fragment of the gallant band that had toed the line that morning won through to the tape. It was a strenuous performance that will live in the files of the *Batti-Wallahs' Journal*, and the tale should bring the blush of shame to those cravens who refused to face the starter's pistol. The courtesy of the White Star officials in allowing the party to visit their magnificent liner was very highly appreciated, and the function was one of the most enjoyable and impressive in the Batti-Wallahs' variegated record.

(*Electrical Times*.)

SOME NEW TYPES OF SEMI-INDIRECT LIGHTING FITTINGS.—*continued.*

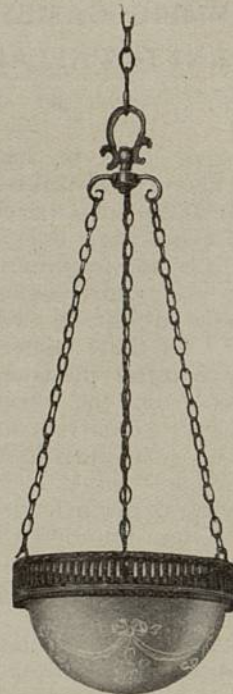
"LUXURO."—A pure white glass of particular luminosity; it is satin finished, and produce a very restful lighting effect to the eyes.

"INTAGLIO."—A similar class of glassware but incorporating pleasing designs embossed on the surface of the glass.

"ONYX."—A similar white glass to those previously described, but of higher quality, having an ivory finish.

"ALABASTER."—A glass of great richness, incorporating the distinctive marking of real alabaster, but more luminous and less expensive.

All the above glass is made in predetermined standard sizes—a considerable advantage in case of accidental breakage.



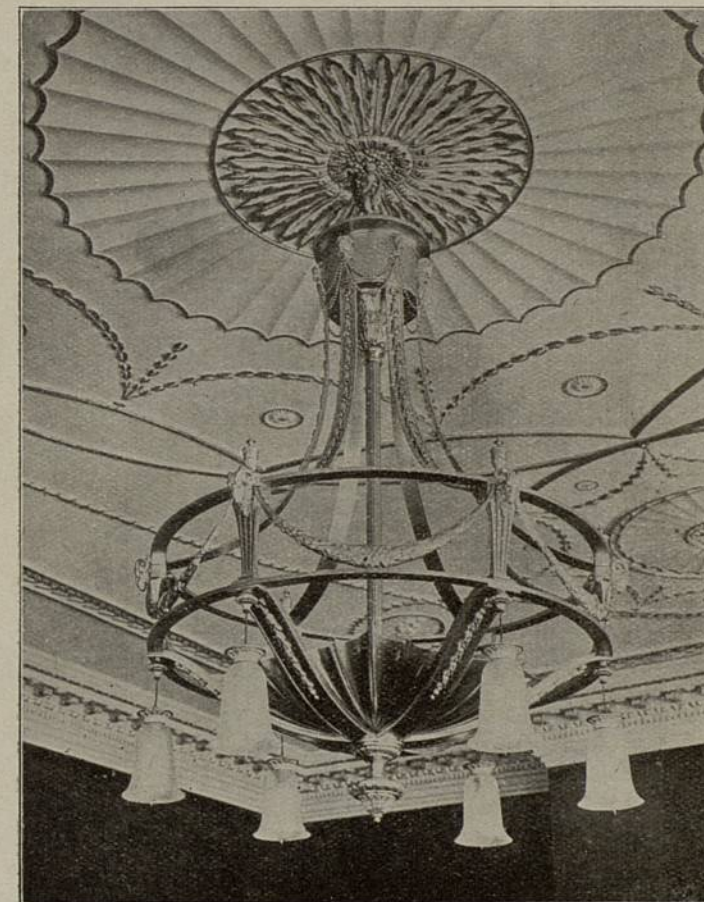
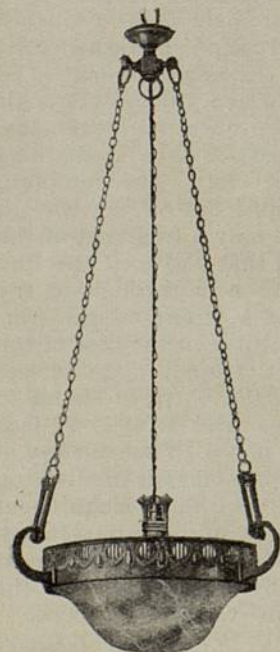
We reproduce herewith two illustrations of semi-indirect lighting fittings listed in the new catalogue.

In order to meet the requirements of those of our clients who desire to make use of the Holophane glassware, we have arranged the sizes of glass and the fittings designed for use with them so that they are interchangeable with the "inverted dish" type of Holophane, intended for semi-indirect lighting.

Prices for the latter are also contained in the catalogue, copies of which can be had upon application to any of our branches.

Extensions are continually being made to the Fittings and Art Metal departments at our factory, necessary on account of the increased demand for this class of work.

The large number of expensive fittings for important buildings which we have recently made is ample testimony in support of our claim that



the range we are able to cover includes the more elaborate "architectural" fittings as well as the simple stock lines of electroliers for small residential installations.

The above illustration shows an example of the former class, which it will be agreed is a very tasteful and truthful representation of the "period style" to which it belongs, and is worthy of the somewhat ornate decorative details of its surroundings.

In this particular we would again draw attention to the facilities which we offer in the way of special designs.

No matter how comprehensive a fittings catalogue may be—and we claim that ours is one of the best in the trade—it is not possible to include every type which will meet customers' requirements. Many new patterns and designs are continually being produced, and



photos of these can be seen at any of the Company's branches.

We have always been well known for our designs of "Holophane" fittings, and the same remarks apply as to new types being added from time to time.

The illustration herewith gives one example of the more elaborate patterns in which the well-known

type of Holophane reflector bowl is combined with ordinary globes, giving a very pleasing design and an excellent effect from a lighting point of view.

We hope that clients will bear in mind these photographs, and we hope they will take an opportunity of inspecting them whenever electric lighting fixtures are required.

THE WASTER.

LET us hymn with joy the praises of the cheerful idiot
Who synchronises upside down and sends the lights to pot;
Let us shout a loud hosanna, and likewise a hip-hooray,
For the ass who shorts the switchboard in a most improper way.

Let us post a putty medal to the jovial jointer's mate
Who cuts a working cable when the day is growing late;
Let us shake the hand with fervour of the silly goat who tries
To switch a generator on to loads three times its size.

Let us clasp unto our bosom in an unaffected way
The Councillor whose object is to make the station pay
By sacking every qualified and hence expensive man,
For those whose previous experience was with a bathing van.

For these, and other blighters who make a fuse to stand
By using up old hairpins (though how these came to hand
We do not know) will fill us up with orders for repairs;
And this is profit unto us, so who the devil cares?

(Glover's Almanac.)

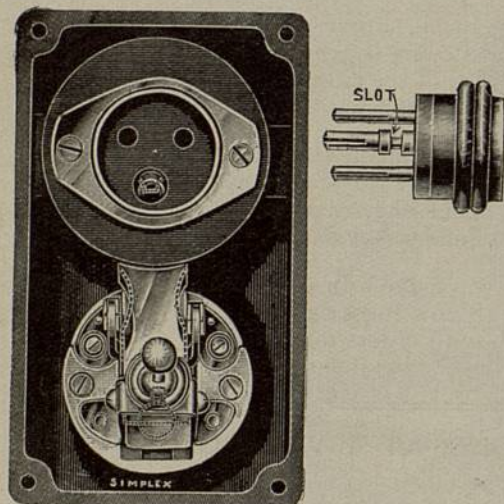
CORDIAL RELATIONS AT LIVERPOOL.

MEMBERS of the Liverpool Branch of the Electrical Contractors' Association have nobly maintained the traditions of their organization by remaining silent concerning a very interesting co-operative effort of their's at the Liverpool Exhibition. I hear that while the exhibition was being organized, the City Electrical Engineer at Liverpool, Mr. H. Dickinson, and the chairman of the electricity committee, Alderman F. Smith, approached the local branch of the E.C.A. with a view to running a co-operative electrical display thereat, and, the idea being very cordially supported by local contractors, an excellent stand representative of small power and domestic applications was arranged and has proved of the greatest possible benefit to all concerned. The incident is of striking interest

inasmuch as it demonstrates once again that it is possible for local private traders and their electricity department to work together to their mutual advantage. Some fourteen firms in Liverpool joined hands with the Corporation, and the whole effort worked perfectly smoothly. The Corporation secured the space and erected the stand, local contractors providing for its electrical equipment and supplying the necessary stock of apparatus for exhibition—several manufacturers assisting this process by coming forward with plant and equipment on a sale or return basis. Current was supplied to the stand by the Corporation at one penny per unit, and the contractors appointed an independent manager to run the whole effort on behalf of those in the agreement.

Electrical Industries.

A NEW Interlocking Switch Plug



WE have just placed on the market a useful addition to the Simplex Conduit System in the form of an interlocking switch plug mounted in cast iron box.

This, we know, fills a long-felt want for such a device which will prevent an extension circuit being broken at the plug. The mechanism is most simple, and positive.

The act of switching on the current effectively and firmly locks the plug in the socket, and the plug cannot be withdrawn until the switch dolly is moved to the "off" position.

The device is made in two sizes, and each box is fitted with a polished brass cover.

List Prices.

5 amp. Interlocking Switch and Plug fitting	
with brass cover and rings	... 15s. 0d.
10 amp. ditto ditto	... 21s. 0d.

Printed for the Proprietors, SIMPLEX CONDUITS LTD., 116, Charing Cross Road, London, W.C., by THOS. BUSHILL & SONS, LTD., Coventry.

SIMPLEX ELECTRIC LIGHT FITTINGS



Whether you require a simple single light Pendant for an unimportant room or a 40-light Electrolier for a public building, our fittings department is in a position to fulfil your requirements.

We are just as keen on the small jobs as on the bigger ones, we know by satisfying your requirements we can secure a large share of your business.

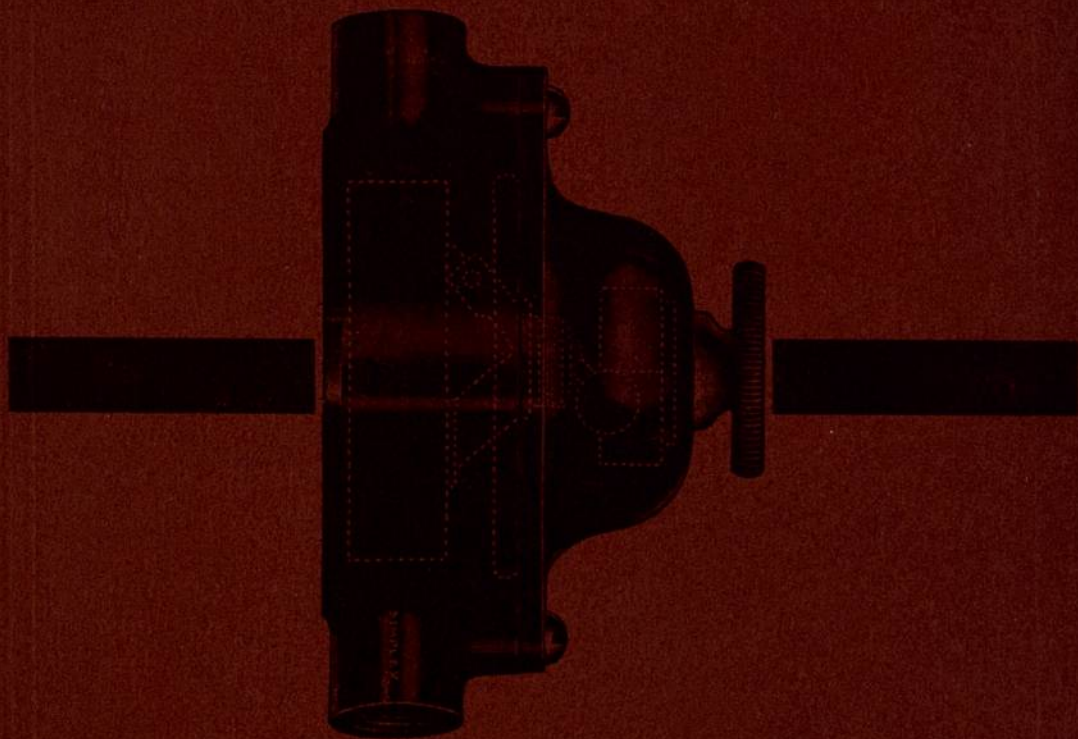
We are at all times pleased to submit special designs to suit any particular period of furnishing or class of decoration, in fact we are desirous of helping you in every possible way to increase your fittings turnover.

We have from the earliest made a speciality of fittings for Holophane Glass, whilst we have just issued a comprehensive catalogue dealing with semi-indirect lighting fittings. May we send you a copy?

SIMPLEX CONDUITS Ltd.,

GARRISON LANE,
BIRMINGHAM.

Simplex Conduits, Ltd., have for the last 15 years been manufacturing electric light and power supplies of every description suitable for factory, shop and mining installations. To-day the name "SIMPLEX" is the hall mark of excellence for electric light and power supplies. All our designs and manufactures are backed by this 15 years' reputation, and our productions have been awarded nine gold medals for excellence at various international exhibitions.



NEW PATTERN WATERTIGHT SWITCH.

An extensive portion of our factory is devoted to the manufacture of light and power distribution boards, their design represents the most up-to-date practice, whilst they are as nearly as possible perfect in every electrical and mechanical detail.

We manufacture also enclosed fuses, which from the point of view of safety and accuracy of working are now being almost universally adopted. We make fuses to the English or American standards, or to your own special designs.

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