



I HAVE just had the privilege of visiting the home of a friend who is electrically minded. This home is newly built, and in its electrical equipment shows forethought in providing for the full use of electricity in every aspect of home comfort. As I passed through the various rooms, and noted the adequate provision made for utilising electricity, I could not but admire the result achieved and reflect upon the sad lack of foresight being shown in far too many homes now being built. Our builders and architects, in numerous cases, are still five years behind the times, and are making the gross mistake, for the future comfort of their inmates of providing too little electrical facilities. The result of this deficiency of preparation is that, when it is desired to utilise electrical apparatus for greater comfort, considerable difficulty is experienced in providing the points for power and extra lighting.

THE lighting facilities struck me first of all. Gone is the day when a room was considered well lit with only one central light which hurt the eyes wherever one sat. That central light is still required (without glare), but modern comfort demands that each cosy nook shall be provided with a light, that reading lights should be available for the ease of the eye and fullest comfort in posture. In this home, therefore, I was delighted to see that in the big living-room there were, in addition to the large central light, at least six other wall and standard lights round the room, each with its individual control system, so that if the man of the house were spending a quiet evening at home, he could place himself in his pet arm-chair (with his feet in the position of utmost comfort), and enjoy himself to the full with his favourite book and one light cosily placed behind his left shoulder.

THEN in power points a far-seeing architect can do much to provide for the future comfort of his clients. Electricity is responsible now for the control of our gramophone and radio set either separately or in combination, the electric fire in winter and the electric fan in summer, and for sanitary purposes the inevitable cleaner. In the

case of the gramophone and radio and the electric fire, these are frequently wanted at one and the same time. One power point only in the living-room, therefore, is an immediate disability, which restricts the use of electricity and therefore creates annoyance. In the dependence of the modern home upon music the radio and gramophone has first call upon the power point. But what of those evenings when the atmosphere is chilly

Appreciated

THE secretary-manager of an important rural power board writes acknowledging the first issue of the "Radio Record" containing the "Electric Home Journal." He adds: "We feel sure that this section will be very much appreciated, both by your readers and by the electrical supply authorities. I have no doubt at all that certain members of the Board will contribute to the publication individually. The writer himself is placing an order for its supply weekly."

This is only a typical specimen of many such letters received. We are glad that our new departure is meeting with popular approval, and will spare no effort to give further service.

enough to demand an electric fire, and yet not chilly enough to induce the extra trouble of creating a real blaze in the good old-fashioned fire-place, with which most homes still dabble for the psychological effect of watching the play of the flames. Under these conditions the choice must lie between culture and comfort. But that hard choice can be avoided by the simple provision of an extra power point when building the house. In this admirable room, therefore, which was certainly of large size and unusual shape, adequate provision was made with four power points, so that never would the occasion arise when lack of facilities would prevent either comfort or culture being secured.

IT must be confessed that the electrical trade themselves are to blame in some respects for the deficiency of electrical points provided in many homes. While the man of the house, in planning his home, is well seized of the necessity for providing adequate cupboard room, good views, plenty of window space and all other facilities in the home, how often the lighting and power facilities are absolutely ne-

glected. Moreover, as this is generally one of the last items to be provided in a home, it is frequently noticed that a desire for economy is manifested (possibly due to the uncanny habit of prices out-running estimates in other items). The general outcome, therefore, is that a little parsimony is applied in connection with the electrical equipment. This is wholly a mistake. A very few pounds extra in initial outlay will afford untold extra convenience throughout a lifetime of occupancy. I was recently astounded, on inspecting a magnificent set of flats erected in Wellington, to find but two power points in each flat, one in the kitchenette and one in an immense living-room. There was no power point in the bedroom, none in the hall; so that for cleaning purposes a 60ft. flex was required. This in an electrical age is sheer idiocy, and no congratulations are due the architect or the builders of those flats upon their acumen. On the other hand, some blame is attributable to the electrical trade itself for not aggressively educating builders, architects, and the public generally on the need for adequate provision of power points in building homes. Think of the comfort of an electric fire in the bedroom in cold winter nights, even for the few minutes spent in undressing and dressing; and in the case of illness it is absolutely indispensable. Yet in these "modern" flats there is no power point there.

THE remedy lies first with the electrical trade, and secondly with the public. It is the part of the vendors of electrical apparatus to see that adequate provision is made for the full use of the wares they have for sale. This is another illustration of the need for and value of advertising. An educational campaign aimed directly at architects and builders is urgently required, and should be steadily prosecuted.

The Electric Eye

Some Remarkable Properties

THOSE who have studied the structure and functions of the human eye rightly consider it a marvellous construction. A ray of light falls upon it, we see the face of a friend and instantly a chain of memories rushes into our consciousness. Again, we look upon a beautiful picture or a

lovely landscape, and our inner emotions are so stirred that we are perhaps almost moved to tears.

What then shall we say of the electric eye? A ray of light falls upon that and what happens? It seizes the ray and makes it work for us in endless ways. This electric eye—a little glass bulb called a photo-cell—is playing an important part in the world's work to-day. When the cell sees a ray of light, electrons fly from its walls and their passage sets up a current of electricity.

One of the most remarkable properties of the electric eye is that the electric current produced is exactly in proportion to the strength of the light it perceives, so that it can be regulated and measured. It is so sensitive that it can sense a star so feeble and so distant that no human eye can see it. Placed in a telescope instead of the usual lens, the astronomer can by its aid measure the exact brightness of a star by registering just what electric current it is generating. It can register the passage of a star across the heavens.

The mere fact of a man entering a doorway will darken the amount of light falling through the doorway on to the cell, and an electric current can be set up which will ring an alarm bell. In this way the most remarkably trustworthy burglar alarms have been made for banks and other places.

It will register shades of colour and merchandise can be graded by it. Cigars, for instance, of a given brand are largely sold according to colour, and must be uniform. Passed on an endless moving band or belt beneath the electric eye, the moment one either too light or too dark appears, the equilibrium of the electric eye is upset, and it throws into operation a mechanical hand which flicks the offender off the band into a rejection basket. This is only one example of its power to act as guardian of uniformity.

Where light treatments are being taken, too, it can determine the amount and strength that the patient can usefully assimilate. It can send a picture by wireless, will make television possible and helps to make talking pictures.

The heat of a furnace can be measured by it, and it lights up buoys at sea. Certain automatic buoys light up at sunset and go out at dawn, and work for many weeks without attention. The electric eye, which is charged with activity as long as there is daylight, holds open the switch or key which controls the light. When twilight comes, the cell no longer operates because the light is not strong enough, and the local current, which has been holding open the control of the lamp, is cut off.