a marked achievement of industrial chemical research. A. R. Bennett and H. Hartley described an instrument for measuring the radiation from heating appliances, which should be serviceable for other uses.

Air-Conditioned Flats

EATON HOUSE, Upper Grosvenor Street, London, W.1, has been converted into a building containing thirty luxury flats. They are equipped for electric cooking and refrigeration, and hot water is supplied from a central hot water plant in the basement. We learn from the *Electrician* of November 6 that each tenant has an air-conditioning plant completely under his own control. Both the temperature and humidity of the air can be adjusted by the tenant to any value he pleases. In each flat there is a condensing unit working in conjunction with an air-conditioner, consisting of a slow-speed fan and motor, heating coils, cooling and dehumidifying coils, air filter and humidifying spray for winter use. The air-conditioners are housed in cupboards in the kitchens of each flat and cleverly concealed. Each conditioner passes approximately 1,300 cub. ft. of air per minute. About twelve complete changes of air per hour are provided in the rooms. It is essential that the plants be practically inaudible as they are in operation twenty-four hours a day. This has been effected by mounting the units in pedestal anti-vibrators. The filtered fresh air enters through grilles in the walls, and as there is no need to open windows street noises, grime and dust can be kept out. A small wall panel in the hall of each flat carries the temperature and humidity control apparatus. It consists of a thermostat, humidistat and change-over rotary switch. An advantage of individual control is that if a flat be left empty, the entire plant can be switched off and thus save running costs. The equipment was designed and installed by York, Shipley, Ltd. of North Circular Road, London, N.W.2. For the electricity the tenants pay a small quarterly fixed charge and ½*d*. per unit.

Testing Switchgear

THE safety of every electricity supply system depends on its switchgear always being ready to operate. The main switches (circuit-breakers) must always be capable of making and breaking the current, and still remain fit for use. The development of the grid system has proved the necessity of being able to 'clear' a fault even when fed by enormous currents. For many years, the firms now constituting Associated Electrical Industries have had extensive experience of short-circuit tests made with generators having capacities up to 80,000 kilovolt amperes. In an article in *Electrical Industries* of October 14, a description is given of a testing station having a generator capable of giving 2,500,000 k.v.a. on short circuit. In order to meet the demand for more tests and for tests at higher powers, the companies interested combined to form a separate company known as the Switchgear Testing Co., Ltd., which now owns and operates the plant on their behalf. The testing station is situated at Trafford Park, Manchester. Ample space had to be provided to ensure personal safety, and, when 'testing to destruction', to avoid damage to property by explosion and fire. The station has three testing areas; two are covered over and used for testing up to 33 kv., and one is an open area, testing up to the grid voltage of 132 kv. The station has a complete equipment for measuring and recording phenomena. Its electromagnetic oscillograph has sixteen elements and is probably the only oscillograph of this kind in the world. It is satisfactory to know that these companies have taken a leading part in conjunction with other firms both in Great Britain and abroad in producing a standard specification for procedure in testing circuit breakers which is recognized internationally.

Marine Work in Ceylon

THE Administration Report of the Marine Biologist, Mr. A. H. Malpas, for 1935 (Part IV—Education, Science and Art (G), Marine Biology: published May 1936) shows that the inspection of the pearl banks again reveals an absence of sufficient spatfalls of both southern and northern paars to provide fisheries within the next three years, despite the presence of sexually mature oysters in sufficient quantity to repopulate the banks. Although conditions of the kind have always been attributed to adverse currents carrying away the free-swimming larvæ into deep water where they are lost, there seems to be some justification for the belief that hydrobiological conditions in the Gulf of Manaar are the more important factors in so far that adult pearl oysters can be stimulated to maximum spawning only under particular conditions of salinity and temperature, which are the exception, rather than the rule, and therefore the pelagic larvæ are not developed in sufficient numbers to produce spatfalls except when these conditions obtain. The scheme referred to in last year's report for the establishment of a Fisheries Research Station at Colombo combined with an aquarium has been modified, and the suggested aquarium available for the public abandoned, a more comprehensive scheme with experimental aquaria and provision for a fish hatchery on a fairly large scale being substituted. This will provide not only for facilities for investigating the bionomics of marine and freshwater animals of economic importance but also for experiments in hatching and rearing the more important freshwater food fishes.

The London School of Hygiene and Tropical Medicine

A REPORT by Sir Austen Chamberlain, chairman of the Court of Governors, giving a short account in non-technical terms of the work of the London School of Hygiene and Tropical Medicine (incorporating the Ross Institute) for the information of those who contribute to its maintenance, has been issued to subscribers. Commencing with a short history of the establishment of the London Tropical School in the hospital of the Seamen's Hospital Society at the Royal Albert Dock, its removal to Endsleigh Gardens, and finally its incorporation in the London