

out by unskilled personnel after perhaps half an hour's training in the routine. Further, as the liquid used is self-regenerating and waste is reduced to the absolute minimum, the cost of the process is moderate; an example given was the case of a production run of 1,600 articles each having a superficial area of 2.1 sq. ft., in which the operating cost, including energy, drag-out losses and labour at standard rates, was 0.08*d.* per sq. ft. The makers of the plant are High Grade Metal Tests, Ltd., 24 Marshalsea Road, London, S.E.1.

Subnormal Factors in Human Personality

IN his presidential address before the Section of Psychology and Educational Science at the thirtieth Indian Science Congress at Calcutta in January 1943, Dr. B. L. Atreya spoke on the "Supernormal Factors in Human Personality". In a rapid review of his chosen field, Dr. Atreya sketched in broad outline the history of the subject as it was known in the West and pointed out the work that had been done since the early days of the Society for Psychological Research, when investigation was hindered by lack of means and by the slight development of those statistical methods whereby results might be quantitatively analysed.

Although Dr. Atreya appears not to have seen fit carefully to distinguish the wheat grains from the mountain of tares, his outline of the mass of material will perhaps fulfil the purpose of dissuading future students from tackling the subject unless they are prepared, not only to face some of the most formidable of psycho-philosophical questions, but also to make themselves acquainted with almost the whole range of studies dealing with the psychology of deception, testimony and so on. Competent investigators are rare and urgently wanted, and it is to be hoped that Dr. Atreya's address will stimulate Oriental students to apply Western methods to the abundant material available in their own lands.

Prawn Fisheries of India

DR. B. CHOPRA, in his presidential address to the thirtieth Indian Science Congress, Calcutta, 1943, has gathered together interesting information concerning the various Indian prawns of economic importance and their fisheries. There are many species of edible prawns in India, the most important and largest being the so-called sea-prawns or Penæids. These apparently breed in the sea, the young migrating to the lower salinities of backwaters, lagoons and estuaries to return again at maturity to the sea to hatch their eggs. Among the freshwater prawns the members of the Palæmonidæ occur in enormous numbers with extensive migrations from fresh to brackish waters, presumably for breeding. The tiny Sergestid *Acetes*, rarely more than an inch in length, makes up for its small size by its abundance and occurs in estuaries and backwaters, but rarely penetrates beyond tidal influence. Not a single complete life-history of any of these prawns is known, and there is here a great opportunity for research which should yield good results. Methods of fishing and curing are mostly very primitive although in certain parts, notably Madras, much progress has been made in improving methods, gear and boats. More research is necessary in every direction, and Dr. Chopra's address indicates the special needs of the industry.

Folk-Lore of Epilepsy

IN a recent paper on this subject (*Med. Press and Circ.*, 1, 154; 1943) Dr. J. D. Rolleston directs attention to the large number of synonyms for epilepsy, many of which are popular terms, alike in Ancient Rome, the Middle Ages, and Bavaria in recent times. The English term 'falling evil' or 'falling sickness', which corresponded to the Latin *morbus caducus*, was for a long time prevalent but has now become obsolete. The chief folk-lore cause for epilepsy, which is still held by primitive races, was demoniac possession. Many examples of this belief have been found not only in the ancient Babylonian and Assyrian texts and the literature of ancient Greece and Rome, the Bible and the Talmud, but also in the West Indies, West Africa, Patagonia, Siberia, India, Ceylon, China and elsewhere (Tylor and Frazer). Another factor in the folk-lore causation of epilepsy was an astrological origin and the moon in particular. Moreover, the state of the moon was responsible in popular estimation not only for the occurrence of epilepsy but also for the efficiency of treatment.

As regards prophylaxis of epilepsy, in accordance with the rule in medical folk-lore, preventive methods in epilepsy were much rarer than curative treatment, and can be classified into external and internal applications derived from animals or plants. Treatment consisted in remedies of human origin such as blood, umbilical cord or placenta by mouth. Animal remedies took the form of their flesh, blood, milk, rennet, bile, lung, urine, testes or dung and were administered most frequently by mouth, but were sometimes made up into a plaster, liniment or amulet; plant remedies consisted of mistletoe, elder and roots and seeds of the pæony, and mineral cures were represented by precious stones, silver coins and lead. There are numerous examples on record of the supposed transfer of epilepsy to other persons, animals or plants. Other methods of treatment were charms, invocation of patron saints and miscellaneous cures, which included mock burial, castigation of the patient to drive out the supposed evil spirit, venesection and inhalation of tobacco smoke.

Simplified Subscribers' Telephone Sets

AN article by E. S. McLarn (*Elect. Comm.*, 21, No. 1; 1942) describes designs which represent the first successful attempt at evolving a type of subscriber telephone set in which the components are designed and co-ordinated logically with the view of achieving simplified installation, maximum reliability and economy in maintenance. The improvements resulted from lengthy and intensive study of subscriber set behaviour in the International Telephone and Telegraph Associate Telephone Companies, operating under the most diverse conditions. Maintenance cost could be lowered if repairs were reduced to a simplified error-proof mechanical operation, for less skilful help would be required and the training period curtailed. An analysis of telephone set troubles under all kinds of climatic conditions shows that the causes are due principally to (a), excess moisture, dirt, lint and insects, and (b), open- and high-resistance circuits brought about by deteriorated soldered joints, broken conductors and poor contact between conductors and screw-heads.

The improved features of the new telephone sets introduced as a result of the investigation may be summarized as follows: complete unit mounting of