positive and negative being twisted together, and drawn into steel tubing, which is lined with a bituminous composition. (2) Wires as before drawn into plain iron tubes. In this system great care must be taken that the insides of the tubes are quite smooth, otherwise the insulation of the cables is certain to be damaged. (3) Concentric wiring, having the outer conductor "earthed." This outer conductor is sometimes of copper strip covered with lead, and sometimes small iron wires twisted closely together. The great advantages of concentric wiring over the tube system are *(a)* lower first cost and *(b)* less cutting away of floors, ceilings, and walls. The disadvantage is that the conductors cannot be so easily renewed as in the case of the tube system.

More skilled labour is required both with the tube systems and the concentric systems than with the wood casing system. In the case of the first two systems a leakage will very soon find its way to the other conductor—the result being a short circuit. In the wood-casing system a leakage may go on for years—the only result being waste of current. The precaution of "double" wiring as at Claybury is excellent but costly.

Gas Engines.—It is stated that "the speed of gas engines fluctuates slightly, so that running the lamps direct from the dynamo gives an unsteady light." This is perfectly true when gas engines of the "Otto" (Crossley) type are used. These engines never run much above 200 revolutions per minute, and only on full loads do they take an explosion every two revolutions, or say 100 explosions per minute. There is now a gas engine in the market which I have had experience of for over two years, which runs at 750 revolutions per minute and takes 375 explosions per minute. This engine runs so smoothly that there is not the slightest visible "jump" in the lamps. Indeed, it takes a very sensitive voltmeter to show any variation. This engine is of the "enclosed vertical" type, and is generally used coupled direct to dynamos.

Oil Engines.—My experience of oil engines has been large, and my advice is, Never use one if you can possibly help it, especially for dynamo driving. These engines are very expensive to buy, and even more expensive in maintenance. The best oil I have found is a Russian oil at from 5d. to 8d. per gallon, according to the state of the market. Oil engines are "nasty, noisy, smelly things," but I recommend the use of oil engines for small installations up to about 10 horse-power or as "stand-by" in water-power installations.

Turbines.—The remark by the Superintendent of the Devon County Asylum that "turbines should be avoided" seems to indicate that something is radically wrong with the installation. Of course there must be abundance of water at the driest time of the year, and the height of fall has to be taken into consideration.

COMPLIMENTARY.

Presentations.

Mr. Richard Adams, L.R.C.P.Edin., M.R.C.S.Eng., Medical Superintendent of the Cornwall County Asylum, at Bodmin, on his retirement from that office, which he had held over forty years, was presented with a valuable silver coffee tray as a testimonial of esteem, subscribed for by 157 of the officials, past and present.

Dr. Nathan Raw was, just before his departure from the Dundee Infirmary for his new sphere of labour in the Mill Road Infirmary, Liverpool, the recipient of a present, subscribed for by the nursing staff of the former institution, which consisted of a pair of silver candlesticks and silver inkstands enclosed in a case. On the outside of the lid of the inkstand are engraved Dr. Raw's initials, and inside is the following inscription: "Pre-

sented to Nathan Raw, Esq., M.D., B.S., L.S.Sc., F.R.C.S.E, by the nursing staff of the Dundee Royal Infirmary in grateful remembrance of his unfailing courtesy and consideration. October 2nd, 1897."

HACK TUKE MEMORIAL.

By a very handsome donation of £25 from Mrs. Hack Tuke the sum for investment has been brought up to £350. This sum has been handed over to the Association and invested. The interest of the fund will prove of the greatest service in developing the Library, which is probably the form of memorial most fitting to Dr. Tuke's memory, and which he would certainly have approved.

OBITUARY.

W. H. HIGGINS.

Dr. William Henry Higgins died on October 26, 1897, at Birkenhead, whither he had recently retired after leaving the Leicestershire and Rutland Asylum. He graduated at Edinburgh, having obtained both the gold and silver medals for Anatomy, and in 1869 he became a member of the Royal College of Surgeons, England. Immediately after this he was attached to the Pacific Steam Navigation Company, sailing to the west coast of South America for four years, during three of which he was Superintendent of their hospital at Callao. He then returned to Edinburgh to make a special study of mental diseases. His first appointment in lunacy was as Assistant Medical Officer to the Derby County Asylum, under Dr. Murray Lindsay. From thence he went, in 1876, to the Leicestershire and Rutland Asylum, under the late Dr. Buck. After Dr. Buck's death he was appointed Medical Superintendent, in 1881. During his term of office he carried out many structural alterations and improvements on the asylum. Though he took a great interest in the treatment and welfare of his patients, Dr. Higgins seldom contributed any writings in connection with mental diseases. In 1894 his health began to break down, and in June of that year he became seriously ill. After several months' leave of absence, he finally retired, in March, 1895, with a pension sanctioned by the County Council. It was hoped that in the retirement from the work and worries of an asylum his health would improve, but to a severe recurrence of his former illness he succumbed. He occupied his leisure hours with astronomy, and in his latter years engaged in the study of Hebrew and Swedish.

PROFESSOR HAUGHTON.

By the death of Professor Haughton, which took place on October 31, 1897, the University of Dublin has lost one of its most remarkable ornaments and Irish social life one of its most striking figures. Haughton was a man who, under more favourable circumstances (viz., most especially if he had been blessed with a lesser measure of early success), might have been capable of almost any intellectual feat. His versatility and the agility of his intelligence alone amounted to genius. In the humdrum region of university teaching in which unhappily he early lost himself he always seemed the most brilliant pioneer. Unfortunately he yielded to the temptations—to diffusion and lack of concentration—to which a versatile genius is particularly exposed, and consequently he did not really lead in any of the numerous subjects which he illuminated. One example is afforded by his ill-fated remark on

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