FIG. 1—OUTLINES OF THE CRANIAL ARCH OF: (a) ORDINARY IRISH SKULL; (b) SKULL OF A MICROCEPHALIC IDIOT; (c) THE FOSSIL CRANIUM DESCRIBED BY DUBOIS; (d) SKULL OF A GORILLA. THE BASE LINE IS ONE WHICH PASSES THROUGH THE EXTERNAL OCCIPITAL PROTUBERANCE BEHIND, AND THE CENTRE OF THE GLABELLA IN FRONT.

FIG. 2—OUTLINES OF THE ANTERO-PERIOD CRANIAL ARCH OF: (a) ORDINARY IRISH SKULL; (b) SPY CRANIUM NO. 2; (c) NEANDERTHAL CRANIUM; (d) THE FOSSIL CRANIUM DESCRIBED BY DUBOIS; (e) THE SKULL OF A GORILLA. BASE LINE THE SAME AS IN FIG. 1.

By permission of Messrs. Macmillan.
ORDINARY MEETING.*

T. CHAPLIN, ESQ., M.D., IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed, and the following Elections were announced:—


ASSOCIATE: — G. Swinburne, Esq., C.E., Melbourne.

HON. COR. MEMBER: — Professor Armand Sabatier, M.D., France.

The following "Note" was then read by the author:—

NOTE ON THE SUPPOSED DISCOVERY OF REMAINS BELONGING TO AN ANIMAL INTERMEDIATE BETWEEN MAN AND THE APE. By Professor E. HULL, LL.D., F.R.S.

Those naturalists who consider man as a direct descendant from some form of ape have long been looking out for remains of the "missing link," or rather several missing links which should connect the skeletons of the families simiidae and hominidae. Up to this time none such have been discovered. Recently, however, certain remains have been disinterred from the Pleistocene gravels, or volcanic ash, in the valley of the Bengawan river in Java which have been described by Dr. Eugene Dubois, and are referred by him to a new family to which he gives the name of Pithecanthropus, as constituting a connecting link between man and the apes.† These consist of a cranium, a right upper wisdom tooth, and a left femur. There is some doubt, however, whether these three parts of the skeleton all come from the same individual.

The question regarding their relations to man and the ape is examined by Professor D. J. Cunningham, F.R.S., of Dublin, one of our highest authorities on questions of comparative anatomy, in a paper read before the Royal Dublin Society;‡ and it may be interesting to members of the Victoria Institute if I give in an abbreviated form the conclusions at which he has arrived.

* 10th of 30th Session.
† "Pithecanthropus erectus; Eine menschennliche Übergangsform aus Java" (Batavia, 1894).
Professor Cunningham illustrates his reasoning by sketches of the relative form, outline and capacity of the Java cranium and those of two other fossil human crania (the Spy cranium No. 1, the Neanderthal cranium), and that of an average adult woman, and shows that the Java cranium is of a lower type and smaller capacity than either of these fossil specimens; for while the Neanderthal cranium has a capacity of 1,200 centimetres, that of the Java cranium has only a capacity of about 1,000. When compared with the capacity of the average European, the difference is still more striking, this being 1,400-1,500. The Java cranium is therefore undoubtedly one of a very low order; but its capacity is still very much in excess of that of the ape.*

Notwithstanding, however, this low capacity of the Java cranium, Dr. Cunningham has no hesitation in pronouncing that it belonged undoubtedly to a human being as is borne out by its form, and by the capacity itself, which in man falls as low as 1,000 as a minimum. The same is true as regards the femur; and he states that "most certainly they were not derived from any transition form between any of the existing anthropoid apes and man." The "missing link" therefore still remains undiscovered. I should add that a reviewer (Geological Mag., 1895, p. 132) considers from the description and photographic illustrations the cranium is that of a man, "suffering from disease which caused the sutures of the skull to close prematurely, giving rise to a microcephalus condition, and giving rise to the irregular outgrowths of bone on the femur;"—and he considers the evidence from the remains quite insufficient to establish the conclusion that the individual constituted a link between man and apes.

[A brief discussion of a general character then took place, after which a paper on "The Physical Characters and Affinities of the Guanches, or Extinct People of the Canary Islands," by Sir J. W. Dawson, C.M.G., F.R.S., was read. This latter will appear as soon as the discussion is perfected.]

Professor E. Hull, LL.D., writes—4th June, 1896—to say that Professor O. C. Marsh (Journal of Science for June, 1896) differs from Professor Cunningham, basing his opinion on the form of one tooth, a molar, with diverging roots—a simian feature—but this tooth was only "supposed but not proved to belong to the skull."

* The capacity of the normal cranium of man is about 55 cubic inches, that of the chimpanzee, 27½, and that of the orang 26 inches.