the straightness of the nose and brow, the squareness of the nasal outline, and the frontal temporal region: the features are, in a word, short, square, and light.

All the characters grouped together under each of the three racial types, Semite, Hittite, and Philistine, do not pass as a single unit in heredity. The analysis of modern Jewry shows that the characters which make for "roundedness" as opposed to that of "squareness" as well as of length and heaviness as opposed to either, are inherited as simple characters in a Mendelian manner. The results obtained by following the matings of these types show that the rounded Armenoid type of face is dominant to the small, squared Philistine type, and that the heterozygous form may be often as extreme as the pure Armenoid, though generally it is less so. The Semitic long and heavy type is certainly recessive to the Armenoid, and probably so to the Philistine, but the evidence is scanty in this latter case. The Philistine type breeds pure when mated like to like; the Armenoid likewise, if one or both parents are homozygous, failing which it may split into rounded and squared types as 3 : 1. When the Armenoid Jew is mated to the non-Jew the result is exactly the reverse of that recorded for the mating Philistine × Armenoid. The Gentile (Western European) type is dominant.

Although the Philistine type of face is often identical in appearance with the Western European, nevertheless it is genetically entirely different. In other words, the straight, short, squared features of the Western European are induced by a different chromosomal mechanism from that which induces the like character in the Philistine—the two peoples are then essentially different in origin. The diversity of the Jewish type and its frequent similarity to that of the people of Western Europe receives ample explanation from the kaleidoscopical rearrangements of the original elements which went to compose the Jewish Race before 500 B.C.

The Experimental Explosions in France.

THE arrangements for the experimental explosions next month in France (NATURE, vol. 113, p. 135) are now practically complete.[1] They will be carried out by the military services, though details as to time, etc., have been settled by a committee on which various scientific bodies are represented. There are to be three main explosions, in each of which rather more than ten tons of explosives will be fired on the surface of the ground. The site of the experiments is to be the neighbourhood of La Courtine, about forty miles west of Clermont-Ferrand, and the explosions will be made at three different points about one-third of a mile apart, the centre of the triangle formed by them being in lat. 45° 44·8′ N., long. 2° 14·7′ E. The times have been chosen so that the experiments may be made under different meteorological conditions, the first on May 15 at about 19 h. 30 m. civil time, the second on May 23 at 20 h., and the last on May 25 at 9 h.

Arrangements have been made for the help of observers distributed along the eight principal azimuths from the origin, and they will no doubt be assisted by a very large number of voluntary observers. The most important element is, of course, the time at which the sound is heard, and for this purpose it is suggested that observers should regulate their watches by the hourly signals from the Eiffel Tower. While the ear is a very sensitive receiver and good observations may be made by hearing alone, a simple form of stethoscope would enable the sound to be heard at very great distances. The details which it is suggested that observers should notice are the time as exactly as possible, the apparent direction of the sound both horizontally and vertically, the intensity of the sound according to an arbitrary scale, and also the movement of windows, etc., the nature of the sound whether single, double, rolling, etc., and the meteorological conditions at the time. The earth-waves, it is expected, will be registered at considerable distances from the source, and their records will no doubt add to or confirm our knowledge of the velocities of condensational and distortional waves in the superficial layers (NATURE, vol. 111, p. 585).

If not too late, one or two other points may be suggested as worthy of close attention. Except near the source the air-waves that shake windows are usually different from the sound-waves and near the ground travel with a slightly less velocity (NATURE, vol. 112, p. 602). They seem to take a lower course in crossing the silent zone and in the outer sound-area they precede the sound. It is desirable that the relative order of the sound-waves and the rattling of windows, and the interval between them, should be observed at all distances. In the case of double or multiple reports being heard, the intervals between them and the order of intensity should be recorded. Many of the previous observations of multiple reports are vitiated by the doubt as to the singleness of the original explosion. C. DAVISON.

[1] The conditions of the experiment are described by M. G. Bigourdan in *Comptes rendus* of the Paris Academy of Sciences, vol. 178, 1924, pp. 25-28, and by Prof. C. Maurain in *La Nature* for March 22.

University and Educational Intelligence.

CAMBRIDGE.—Dr. E. Lloyd Jones, Downing College, has been re-appointed as demonstrator of medicine. The Linacre Lecture at St. John's College will be delivered by Sir Charles Sherrington, president of the Royal Society and honorary fellow of Gonville and Caius College. The lecture will be at 5.15 P.M. on May 6 in the Anatomy School, and the subject will be "Problems of Muscular Receptivity."

GLASGOW.—The following degrees have been conferred:—*Ph.D. in the Faculty of Science:* P. F. Gordon, for a thesis entitled "The Separation of the Components of Petroleum"; and Mr. R. C. Smith, for a thesis entitled "Sintering." *Ph.D. in the Faculty of Arts:* Mr. I. L. G. Sutherland, for a thesis entitled "A Critical Examination of some Current Tendencies in the Theory of Human Conduct." *Ph.D. in the Faculty of Engineering:* Mr. D. S. Anderson, for a thesis entitled "The Evaporative Condenser. A Study of Heat Transmission by Film Evaporation"; and Mr. R. M. Brown, for a thesis entitled "Investigation into some of the Effects of Cold Drawing on the Properties of Iron and Steel."

MANCHESTER.—The extra-mural department of the University has arranged for summer courses of post-graduate study in mathematics to be held at University College, Bangor, from Monday, August 18, to Saturday, August 30. The courses are intended to afford facilities for advanced study in mathematics to teachers and others who are unable to attend courses during the regular University terms. Each course will consist of twenty lectures of one hour each, two lectures being taken on each of ten mornings. The following three alternative courses are proposed: (1) higher geometry, by Mr. H. W. Richmond (King's College, Cambridge); (2) theory of functions, by Prof. L. J. Mordell (University of Manchester),