than 17 per cent. occur the population is termed blond, where more than 30 per cent. dark.

According to this grouping the two extremes are the Swedish (3 per cent. brunettes) and southern Italy ( 70 per cent.). From this point of view the map showed that north Europe was mainly blond, South Europe dark, and Central Europe intermediate. He traced the southern limit of the blond races through the various countries, showing that it nowhere reached below the 50th parallel in Central Europe, and below $55^{\text {th }}$ parallel in Britain and Russia. The northern limit of the dark peoples is more irregular. In the intermediate zone blond areas are rare (one of these occur in south England, i.e. Berkshire, Oxfordshire, Hampshire, Sussex and Middlesex), dark areas fairly numerous, but individually very small. Intermediate areas in the blond zone are only found in the British Isles, but in the dark zone are fairly frequent in western Europe.

From these data and certain other considerations relating to shape of face and nose, character of hair, \&c., Dr. Deniker had been confirmed in his theory that the present population of Europe is composed of six main races. These he proceeded to enumerate, giving their typical characteristics, tracing their positions throughout the map, and indicating the proportions in which they had intermingled to form the existing populations of the various countries. The following is an abbreviated sketch of his classification :-
(1) A race, blond, wavy-haired, long-headed, very tall, with long face, a straight prominent nose; the northern race, so called because its representatives are confined almost exclusively to North Europe. This is the Cymric race of Broca, the Germanic or Reihengräber race of German authors, the Teutonic race of Ripley, or the Homo Europaeus of Lapouge.

With this race is connected a subrace, blond or intermediate, straight-haired, medium-headed, of tall or medium stature, angular face, and retroussé nose, the subnorthern race, found in the neighbourhood of the northern.
(2) A race blond, straight-haired, moderately shortheaded, and of short stature, broad square face, nose often retroussé; the Eastern race, so named since its principal home is in eastern Europe.
Connected with this is a subrace, blond or intermediate, medium-headed, of very short stature, named the Vistulian race, occurring in Poland, parts of Prussia, and probably Saxony and Silesia.
(3) A race dark, hair sometimes curly, long-headed, of very short stature, straight or retroussé nose; the Iberoinsular race. This is the Mediterranean race, or Homo Mediterraniensis of certain authors, found chiefly in the Iberian Peninsula and the islands of the western Mediterranean.
(4) A race dark, very short and round headed, of short stature, round face, broad nose, and thick-set body; the Cevenole or western race. This type occurs in its greatest purity in the extreme west of Europe, though found sporadically elsewhere. This is the race called variously by other authors Celtic, Celto-Ligurian, Celto-Slavonic, Sarmatian, Rhetian, Ligurian, or Homo Alpinus.
(5) A race very dark, moderately long-headed, and fairly tall; the Littoral, or Atlanto-Mediterranean race, situated on the coast of the Mediterranean, from Gibraltar to the Tiber, and in occasional groups on the Atlantic Littoral, but never more than 150 miles from the sea.
(6) A race dark, short-headed, tall, nose slender and straight or arched; the Adriatic or Dinaric race, which is found grouped round the northern Adriatic, particularly in Bosnia, Dalmatia, Croatia, and the centre of the Balkan Peninsula, but found also sporadically and with somewhat modified characteristics in Central Europe.

With the last two races are connected two secondary races, which are perhaps no more than types, produced by the admixture of the two former with each other or with the northern, subnorthern, and western races.
(a) The north-western, long- or medium-headed, situated between the northern and Atlanto-Mediterranean saces, spread chiefly in Ireland.
(b) The sub-Adriatic, moderately short-headed, more rarely short-headed, of medium stature, found in many parts of Central Europe, probably the result of admixture between the Adriatic and subnorthern and western races.

## REPORT OF THE SURVEY OF INDIA.

THE Indian Survey report is a full record of useful work and widespread progress, but it lacks some of the interest which used to attach formerly to the very varied character of the work undertaken by the Survey department. The scientific section of the report is included within the limits of a few pages; and the narratives of individual surveyors (which always formed a most interesting chapter or two) have entirely disappeared.
The main work of the department, now, is the revision of old mapping in districts which have been sorely in need of such revision for many years. The plains of India, in fact, are being re-surveyed, and, on the whole, the work of the department is increasing, rather than diminishing, on purely utilitarian lines. It would almost seem as if the days of Indian geodetic triangulation, which once took such a strong lead amongst the scientific triangulations of the world, were numbered. Only one first-class series is in progress at present, and this is to connect the great meridional Mandalay series of Burma with a future extension following the Salwin valley. It is, however, satisfactory that the practice and training necessary for surveyors in this class of work is well maintained so far, for it is impossible to say what the future may demand in the way of similar extensions in Persia, Tibet, or even in China.

One subject of special interest dealt with in the report is the deflection of gravity. In 1901 a theory was advanced by Major Burrard that deflections of gravity in India could be classified by regions. Astronomical determinations of latitude have therefore been carried systematically through considerable arcs to prove whether this theory were sound. The results undoubtedly support Major Burrard's prediction, and it is expected that the substitution of this regional law for the old theory of local attraction will exercise a profound influence on future investigations.
The report on geographical or reconnaissance surveys (on the scale of $1 / 500,000$ ) includes an out-turn of 38,000 square miles of survey of this class by one native assistant in western Tibet. This seems a remarkably large out-turn for one surveyor to secure during the progress of a " shooting expedition "; but it is only one instance amongst many of the remarkable capacity of well trained native explorers for work of this nature. In reasonably easy country there seems to be hardly any limit to their power of producing fairly accurate geographical maps so long as they have a few fixed points to work upon.

In this connection it is well to note the remarks of the Surveyor-General (Colonel St. G. Gore) on the difficulty that constantly faces him of finding qualified native assistants to meet the demands of military or political missions or geographical expeditions. He most justly observes that in the first place it is difficult to find the men who possess the necessary qualifications, and in the second that, having found them, it is impossible to train them efficiently in country which is unsuitable for instruction. It is due to a combination of natural aptitude with perfect educational environment that the native explorer of the Indian Survey becomes so extraordinarily efficient as a topographer. If these men are wanted (and they are wanted) for Imperial duty over half of the continents of Africa and Asia, it seems but fair that the Imperial Treasury should contribute something towards maintaining a sufficient staff to meet all demands.
T. H. H.

## UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

Cambridge.--The State Medicine Syndicate reports that during the current year there were 57 candidates for the diploma in public health, of whom 34 were successful. For the diploma in tropical medicine and hygiene there were 12 candidates, of whom 8 were successful. The syndicate has resolved to hold two examinations for the latter diploma in 1905, the first beginning on January 10, the second on August 8.

Applications for the vacant readership in botany (annual stipend 300l.) are to be sent to the Vice-Chancellor by Tuesday, November 15 .

Mr. R. H. Lock, late Frank Smart student in botany, has been elected to a Drosier fellowship at Gonville and

