

Control and Operation of Cable Telegraphy.

THE success of short-wave radio telegraph 'links' during recent years is well known to have led to the merging of the most important of the cable and radio companies. In addition, the rapid strides made in radio telegraphy and in international telephony have produced the impression that submarine cable telegraphy is now of little value. In a paper read to the Institution of Electrical Engineers on Jan. 7 by H. Kingsbury and R. A. Goodman on cable telegraphy, it is stated that there are no signs of the supersession of transoceanic cable telegraphy by radio, due to economic or other reasons. The growth of cable communications between the countries of Europe and the rest of the world is both steady and satisfactory.

UNFORTUNATELY, it has always been the general policy of the European States to retain not only the control but also the actual operation of their telephone systems. Hence at the international meetings the majority of the delegates are merely representative of the interests of their governments. The immediate revenue accruing to the State rather than the development of a first-class foreign telegraph service is their main consideration. It is therefore difficult to introduce reforms, no matter how desirable they seem to the engineers of private companies. Cable companies could easily compete with the direct radio beam, provided that the companies had control of all stations and that land lines were available and properly maintained. Many minutes are added to the transmission time of a message by the mere handing over of traffic from a company to a government system. For example, a preferred rate message from San Francisco to Copenhagen handed in over the counter in the ordinary way occupies about fifteen minutes from the time it passes out of the sender's sight until it is in the hands of the addressee. On the other hand, a sender offering a short telegraph message by telephone in New York for London is reasonably certain of delivery in two minutes from the moment of completing dictation of the message in New York.

Weather of 1931.

In a pamphlet entitled "Notes on the Weather of 1931", issued by the Meteorological Office (Air Ministry), the topsy-turvy character of last year's weather is clearly brought out. New 'records' for cold were set up in March and October, months that are only on the fringe of winter and sometimes provide summer warmth. On March 3 temperature fell to 1° F. at Braemar, and on March 10 to 5° F. at Rickmansworth. On the latter date temperature failed to rise above 30° during the day in many places in south-east England. The night frosts of the last week of October were in some parts of England the most severe ever recorded in that month. There was a pronounced tendency for the worst weather in the south-east of England to be reserved for week-ends and public holidays, and the August holidays provided some days that were much colder than those experienced at Christmas. The gale in the English Channel on Aug. 24 would have been noteworthy had

it occurred in mid-winter. No temperature within three degrees of the reading of 61° that was recorded at Aberdeen on Christmas Eve has ever been known there in December for at least sixty years. Mention should be made also of the very rare event of a tornado of the American type, on June 14, at Birmingham. Although not to be compared with the worst tornadoes experienced in America, this storm was violent enough for roofs to be stripped, and there was loss of life. The zone of destruction was, fortunately, a characteristically narrow one, varying from 200 yards to 800 yards. The year must be regarded meteorologically as one of the most eventful known since the Meteorological Office was inaugurated nearly eighty years ago.

Prehistoric Stock of South Africa.

At a meeting of the Royal Anthropological Institute (Section of Human Biology) on Jan. 8, Sir Arthur Keith exhibited a series of human skulls from the Matje River Rock Shelter, a newly discovered prehistoric site in the Zitzikamma District, on the coast of the Cape Province. The deposits in this rock-shelter, amounting to 21 feet in depth, were excavated by Prof. T. F. Dreyer, of Grey University College, Bloemfontein. The rock-shelter was first inhabited during the age of the 'Mossel Bay' culture, which is usually equated with one of the later palaeolithic cultures of Europe, and this culture was richly represented during the formation of the deeper strata, amounting in depth to 14 feet. All the remains from the Mossel Bay strata manifest racial traits, which were first revealed by the discovery of the large-brained Boskop skull in 1913. Three of the skulls from the deepest Mossel Bay strata have peculiar features of the forehead; the frontal bones appear compressed from side to side, with a high median keel. This malformation, known as trigonocephaly, occurs occasionally in modern races. A tendency to trigonism is not uncommon among Bushmen and Hottentots, who may be regarded as descendants of the prehistoric stock of South Africa. Sir Arthur Keith added that South Africa was the home of the most remarkable of all prehistoric peoples known to us, a people or stock tending to produce individuals with brains of remarkable dimensions and with a tendency for infantile and juvenile characters to persist into adult life, a tendency which Prof. M. R. Drennan has termed 'pedomorphism'. Although remains of Bushmen have been found so far north as Lake Nyassa and Boskop remains in Northern Rhodesia, all the evidence at present points to South Africa as the evolutionary home of this prehistoric pedomorphic race.

Prehistoric Gold Ornaments from Cornwall.

Two torques and six penannular armlets have been found by a farm labourer in a bank of earth on Amalveor Farm, in Towednack, near St. Ives, Cornwall. According to the *Times* for Jan. 2, one of the torques consists of three strips of twisted metal; the other, a single twisted coil, is of considerable length, its circle being 13 in. in diameter, and, being flexible,