

out-of-the-way country. Successive chapters treat the previous studies, geological structure, surface form, landscape, springs and rivers, lakes, climate and plants. Special attention is given to the karst district of limestone understructure and subterranean drainage; the peculiar topography thus controlled being so fully developed that a considerable series of special terms is required to name its various features. Although having a plentiful rainfall, the karst surface suggests aridity by reason of the scantiness of soil and the frequent exposure of bare rock; and the loose-lying limestone blocks have not been without influence on the course of local history in furnishing ammunition for the 'stone batteries' with which Montenegrins on the valley sides have harassed the Turkish invaders in the defiles below. The uplands are frequently dissected by deep canyons, which greatly impede travel and trade; but the people have by long practice become expert in shouting across the chasms, thus sending both public and private messages.

Scutari lake, seldom over twenty feet deep, is explained as a limestone lowland, or *polje*, whose outward drainage is obstructed by the alluvial deposits of the river Drin.

As is often the case, the treatment of the different chapters is uneven. Careful discussion of origin is given to the forms of the limestone region; much less attention is given to such problems as the location of stream courses and the attitude of divides; an inward migration of the latter is strongly suggested by the short course of the Bojana system to the Adriatic and the long course of the Danube branches to the Black sea.

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#### CURRENT NOTES ON METEOROLOGY.

##### INTERNATIONAL CLOUD STATIONS.

THE following is a complete list of the stations which are now taking cloud obser-

vations with photogrammeters, and theodolites, in connection with the scheme to be followed throughout the International Cloud Year, which has been extended until August 1, 1897. Paris; Upsala; Potsdam; Braunschweig; Danzig; St. Petersburg; Nijni-Novgorod (in summer); Batavia, Manila, and Sydney, N. S. W. The following stations are taking observations with theodolites: Washington, D. C.; Blue Hill Observatory, Readville, Mass.; Bossekop (in summer); Dorpat; Tiflis; Ekatherinenburg; Irkutsk. There will probably also be a second station in Australia, one in India and one at Lisbon.

##### ILLUSTRATIONS OF CLOUD TYPES.

IN connection with its work on clouds already referred to in SCIENCE, the Weather Bureau has issued a sheet giving illustrations of the typical cloud forms. The accompanying text contains descriptions of the clouds, and also data as to their mean heights and velocities. The sheet was prepared as an aid to observers in their cloud work. Most of the types selected are good, and the reproductions excellent as a whole. The alto-stratus and stratus are, however, unsatisfactory. The International Cloud Atlas, which has just been issued, gives us the cloud types selected by the International Cloud Committee, and these will, of course, now be the standard for the world.

##### THE ST. LOUIS, MO., TORNADO OF MAY 27.

WITH commendable promptness the Weather Bureau issued on May 29, a special *Storm Bulletin* (No. 4 of 1896), showing the weather conditions over the United States on May 26-28, in connection with which the severe tornado of May 27th occurred at St. Louis. The Chicago 8 A. M. forecast on May 27th predicted severe thunder storms for Illinois, Indiana and Missouri during the afternoon and night, and a special warning was sent out from Washington at 10:10 A. M.

## CLIMATE OF THE FALKLAND ISLANDS.

IN a recent account of the Falkland Islands (Scot. Geogr. Mag., May, 1896, 241-252) mention is made of a striking effect of the high winds which are characteristic of the higher latitudes of the South Temperate Zone and are a marked feature of the climate of the Falklands. Owing to their being obliged constantly to beat against these violent winds, the inhabitants have acquired a peculiar gait that is so noticeable as to have gained for them the name of 'kelpers,' which is sometimes used as synonymous with 'natives.' R. DE C. WARD.  
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## CURRENT NOTES ON ANTHROPOLOGY.

## RACIAL ELEMENTS IN ASSAM.

IN the *Times* of Assam, February 8, 1896, Mr. S. R. Peal gives the results of his extensive studies of the racial constitution of the Assamese people. The aboriginal inhabitants he believes to have been Dravidian, though at present he would not assign more than five per cent. to that element. They were overlaid by the intrusive Mon from the east, a monosyllabic stock, who in time were followed by a small invasion of Tibetans. All of these were weak and of low culture. The Hindu religions, the Aryan physique and the prevailing tongue were introduced by the immigration of Sanskrit-speaking conquerors at a remote epoch. They left such a profound impress on the earlier population and the existing Assamese language that Mr. Peal says of it: "With the exception of the Bengali, there is probably no derivative from the Sanskrit that bears a closer affinity to its parent." This was the extreme limit of the wave of Aryan migration which swept eastward across Bengal. The conquering Ahoms, from Siam, who in later centuries gained temporary control of Assam, exerted little permanent influence on its civilization or language.

## THE TUPI LINGUISTIC STOCK.

THE eighteenth volume of the Bibliothèque Linguistique Américaine (Maison-neuve, Paris), which has just appeared, is a valuable member of the series. It presents the elements of a comparative grammar of the dialects of the Tupi linguistic stock of South America, prepared by the able pen of M. Lucien Adam, to whom we owe so many analyses of American tongues. The southern Tupi is known as the Guarani; and the 'Lingoa Geral,' spoken throughout Brazil, is a corrupt form of the same idiom. The stock is widely diffused, extending from Paraguay to Guiana, and for thousands of miles along the Amazon and its tributaries. Its literature is quite extended, the bibliography of it published in 1880 by Valle Cabral, numbering over three hundred titles.

M. Adam presents an analysis, carried through the principal dialects, of the phonetic laws of the stock, the expressions of the relations of possession and action (genitive and nominative), the pronouns, and an elaborate study of the conjugation. A comparative vocabulary with 358 titles is an extremely useful appendage.

The collation of the literature which he has utilized includes most of the best works, but I regret not to see included the excellent studies on the Neengatu of the late Mr. C. F. Hartt.

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## SCIENTIFIC NOTES AND NEWS.

## THE COLORS NAMED IN LITERATURE.

MR. HAVELOCK ELLIS has made (*Contemporary Review*, May) an interesting study of the color terms used by imaginative writers, which is a real contribution to scientific æsthetics. The fact that the Greeks did not name green and blue does not, of course, indicate (as Mr. Gladstone and others have alleged) that they could not see the more refrangible rays of the spectrum, but it does show a lack of interest in