EBB AND FLOW OF THE EARTH'S ATMOSPHERE.

The current number of Himmel und Erde contains a valuable article by Dr. J. Hann, entitled "Ebb and Flow of the Earth's Atmosphere." The paper deals entirely with the diurnal and annual range of the barometer, and Dr. Hann's laborious investigations of these phenomena have frequently been referred to in our columns. It is more than 200 years ago since the regular variation of the barometer by day-time was first observed, and the first person who investigated the regular variation during the night-time, and fixed the morning minimum at about 3h. or 4h. a.m. was the celebrated botanist Colestino Mutis, at Bogota, who commenced his observations in 1761. Blanford and F. Chambers first explained the characteristic difference between the daily range on the sea-coast and at inland stations, and showed the connection of this difference with land and sea breezes. Dr. Hann points out that while there is a large number of theorists as to the cause of the double daily oscillation of the barometer, none of them satisfactorily explains the whole of the phenomena. With regard to the yearly range he shows that when the values for the northern and southern hemispheres are separately considered it is found that the smallest quantities occur in both hemispheres in July, so that we obtain the important result that the values of the double daily oscillation depend more upon the position of the earth with respect to the sun than upon the seasons. He agrees with Lord Kelvin and others that the only means of eventually obtaining a satisfactory explanation of the subject will be by harmonic analysis, and by comparison of the variations at a large number of stations.—London Public Opinion.

A WORD TO CAMPERS.

"A holiday under canvas can be made a remarkably pleasant experience if con-Senial spirits compose the party, but there is a common mistake made by too many of those who take to the woods at a time when fish are the only lawful quarry. I refer to the practice of taking guns and rifles to camp when the law forbids the killing of any any game. There is no sense in carrying a weapon which is not to be used, and I know Cases where the fact of one being within reach has made a law-breaker of a man who meant no harm, but was tempted by an unexpected chance at unlawful game. Furthermore, country people visiting a camp and seeing a gun or rifle included in the outfit, are apt to conclude that it is there for use and that the campers will have a quiet try at whatever game appears. This d_{ca} encourages the countryman to do a bit of illegitimate killing himself when he gets a chance. Gun and rifle are excellent in that their proper place, but that place is not in a.J. a July camp. The usual excuse offered is the possibility of a shot at a bear or wild-cat. cat. That is all very fine, but the 'bears' and 'cats' really killed have always ap-peared the second seco peared to me to strangely resemble does and fawns. It is far better to leave weapons at home than to run the risk of being tempted to join a native in that miserable business, 'floating' or 'jacking.'"-Out-

SPANISH THEATRES.

In no other country is the theatre as popular as in Spain. After the bullfight, a Spaniard loves the theatre best. A true Spanish home is so dull that men and

women alike scarcely ever spend a quiet evening in their inner circle. It is not to be wondered at, therefore, that they should prefer to leave their uncomfortable rooms to get warmed and dazzled for a few hours in the glare of the teatro. It is there also they see their friends, and continue their habitual tertulia or gossip. Even the children love the drama, play, or sainete, and on Sunday afternoons and feast days their mammas deck them up in finery and take them to see the latest sensational play. It is curious indeed to watch a box full of baby faces keenly interested and devouring a terrible drama full of harrowing scenes, or laughing at a short play full of wit and piquant jokes. It does not seem at all natural to see children taken to these spectacles, but Spanish children are little old men and women, and a fairy pantomime would be too dull for them. In Madrid there are almost as many theatres as churches. They are very commodious, splendidly decorated, and all built after the same model. A large stage, a pit full of cozy red velvet butacas or stalls where ladies and gentlemen sit together, and round the house the palcos or boxes, large and airy, with looking-glasses, chairs, and carpets. Above the tiers of boxes is the paraiso, paradise or cheap gallery, which derives its name from its vicinity to the sky. The Madrid Opera House is perhaps smaller than the Grand Opera or Convent Garden, but it is far more convenient. It reminds one of a dainty lady's boudoir; it is so fresh and bright with its red and gold decorations, its soft electric lights, its velvet carpets and pretty frescoes. The Royal box itself is a gem with pink capetonnee walls and the arms of Spain above the red and gold curtain. This is only the small royal box, as the Queen never uses the immense one that occupies the centre of the house except on very grand occasions. Behind the Queen's box is a pretty saloon, where she can retire to take refreshments between the acts. There is a telephone there, and it was through it that Her Majesty received the news of Montpensier's death one night when the opera was going cn.-North American Review.

CAMPOAMOR, THE SPANISH POET.

An interesting sketch of the literary career of the favorite Spanish poet of the new school, Campoamor, is given by a Madrid correspondent of the Evening Post, New York :

Campoamor is the hero of the day. His special creation is a short poem melodiously called the "Dolora"—a sort of bitter and fragrant epigram that may run to any length from a line to a page. It has been variously defined by various critice. The poet him self describes it as a "poetical composition in which lightness is wedded to feeling, and conciseness to philosophic import." 'Tis no hopeful spirit that pervades these wonderful and sharply-flavored little poems. Campcamor treads jauntily enough the gloomy forest of disillusion. But he fronts sorrow with a cynical if tranquil brow, and rhymes her with delicate and graceful raillery. In brief and smiling lines he tells us that glory is vapor ; that to live is to forget ; that the best in life is but a mingling of shadows, ashes, and wind; that evil is infallible, and death man's greatest gift; that honor and virtue are but words, and heat and cold our keenest sensations ; that change of destiny is but change of sorrow, and that pleasure is the fount of satiety. One "Dolora ' contained in two lines tells somebody-

"However much I weep and lament the fact, Good I loved thee not; perfidious I adore thee.

Another in four lines :

" Half my life I lost

For a certain pleasure ; The ether half would I give For such another joy.'

His most popular " Dolora " is " Quienl supiera escribir." It is the story of a girr who comes to the priest to write her a letter for her lover. The rhythm is delightfu and the simplicity flawless. The verse id broken into conversation, dictation, an comment, and it is the girl, in the vivid elo quence of passion, who dictates and gives the pricst a lesson in amatory style. "Well done, bravo, love ! I copy and I conclude," remarks the priest ; " for this subject 'twere

idle to study Greek or Latin." Campoamor, like most other Spanish men of letters, has followed a varied and versatile career. He started as a dcctor, then turned to philosophy and politics. In those palmy days he was the Governor of Castellún, Alicante, and Valencia, and numerous streets were called after him in these provinces. He has sat in every Parliament, and wrestled triumphantly with the eloquent Castelar.-Literary Digest.

PRIMROSES.

Faded ! O yes, but if I were a flower

I could desire no happier fate than this :

To serve you with my beauty for a time, To please you with my freshness while it

stayed And when it passed, to fade upon your breast.

Worthless? O no, for richer far to me

And dearer, too, are these few primroses Than all the rarest blossoms in the world; For they have nestled near your heart, and

felt. Perhaps, the gentle imprint of your lips.

Keep them? O yes, and kiss them o'er and o'er

To catch some lingering echo of the kiss You left on them ; and when they're dry and

brown I'll love them in their death for your sweet sake,

Who wore them when they lived, and gave them me.

-S. B. K., in The Speaker.

In the December number of Florida Life is an article from the pen of B. W. Partridge, in which he describes the effect of the drought of 1891 on Lake Miccosukie one of the largest lakes in middle Florida, where about $\breve{6},000$ acres of water became dry land for a time. The rainy season of 1892 filled it with water again. Mr. Partridge conceived the idea that the lake could be drained, by boring holes in its bottom, and organized a company to try it. Experts were engaged to examine and report on the plan, and the result was that the company has bored a number of holes in the bottom of Lake Miccosukie, and the water is rushing down through them via a sub-terranean possage to the Gulf. In a few months they expect to permanently drain the lake, and thus recover 10,000 acres of valuable land.

What would Fenimore Cooper say if he heard that his favorite Blackfoot Indians had earned upwards of \$3,000 by freighting and selling coal ? Yet, acording to the Cal-gary Herald, they did this last year, and they now have three mines on the reserve; but the mining is carried on in a primitive fashion. They are putting up new houses with lumber taken out at Castle Mountain, and many of the buildings are painted.