

having an exact counterpart between the mental and moral organization and the external development. Washington Irving in his "Ichabod Crane," has exactly given us in his inimitable style the lineaments of such a personage, and in one sentence, which we quote, we have him admirably portrayed: "To see him striding along the profile of a hill on a windy day with his clothes bagging and fluttering about him, one might have mistaken him for the genius of famine descending upon the earth, or some scarecrow eloped from a corn-field." But Scott, in his "Dominio Sampson," has most especially and happily delineated this physical peculiarity of the pedagogue. Were it not that we are well aware of the poor man's innate goodness of soul, and real worth, we would be disposed to treat him as an exceedingly unloveable, if not repulsive, person, from the grotesque and almost hideous spectacle he presents to us in his outward appearance. Who cannot read without laughing heartily at his utter indifference to his personal appearance, and contempt for the world's gay adornment, at the ruse which was practised on him when McLarin surreptitiously took away his time-honored thread-bare, patched garments, and substituted, piece by piece, a new set, without the good old man being aware of it? Life was too solemn a thing with him to admit of thoughtless amusements; none but "serious" conversation was allowable, and a hearty laugh was the expression of a spirit ripe for the destination of unforgiven sinners.

Society has been reproached for its neglect and want of appreciation for a calling that properly discharged has an incalculable effect on its welfare; and it has been well observed, that there we find a most stable and advanced state where the teaching class are held in due esteem and importance, and their labors adequately rewarded. We are progressing in this respect. It is now no longer believed that a person who is absolutely worthless elsewhere will, if he have a modicum of learning, do very well for a teacher. We have been convinced that in this there is special training, special adaptability, and general culture required; and that it is not as it was represented by Fuller two hundred years ago, only necessary to have a rod and ferule to set up as a schoolmaster. The popular impression of a teacher in the present time is quite different from what it was a hundred years ago, and there is no doubt if such a personage is ever embodied in the pages of our future standard literature, he will have quite different features from those we have noticed.

It was not uncommon in time past to deplore the teacher's fate, to sympathize with his un congenial employment, to represent him as a sort of drudge. Crabbe gives us a sketch of a teacher as follows:

"But Leonard—yes, for Leonard's fate I grieve,  
Who loathes the station he dares not leave,  
He cannot dig, he will not beg his bread;  
And all his dependence rests upon his head.  
And deeply skill'd in sciences and arts,  
On vulgar lads he wastes superior parts.  
Alas! what grief that feeling mind sustains  
In guiding hands, and stirring torpid brains:  
He whose proud mind from pole to pole will move,  
And view the wonders of the worlds above;  
Who thinks and reasons strongly—hard his fate,  
Confined for ever to pen and slate."

The sentiments here expressed were unhappily at one time too general, and perhaps even now are not quite rare. True, in such a career there is small field to play the heroic, but is it without distinctions? Has it no great names to enshrine in its temple of fame? A profession counting an Ascham, an Arnold, a Mann in its ranks, can never be ignored.

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## NOTES ON CLIMATE.

I. *Meaning of Term*—From the Greek, *Klima*, a shape; a zone or region of the earth. The ancients drew imaginary circles round the earth, parallel to the equator, in such a way that the longest day in each circle was half-an-hour longer than in the one succeeding. Thus, there were twenty-four climates from the equator to the poles. The word now means the general character of the weather in any country, as regards:—

- (1.) The degree of heat and cold at different seasons.
- (2.) The humidity of the atmosphere.
- (3.) The direction and force of the prevalent winds.
- (4.) The varieties of electrical condition.

### II.—CAUSES WHICH EFFECT CLIMATES.

(1.) *Latitude*.—The amount of heat derived from the sun depends upon the angle at which its rays strike the earth. Where it shines vertically, the greatest amount of heat is received; and as the sun always shines vertically at some point within the tropics, that region of the earth is the hottest, and is called the

Torrid Zone. There the days and nights are nearly equal throughout the year, and the temperature is, therefore, comparatively uniform. The further we get from the equator, the less is the amount of heat received, because the sun's rays strike the earth more obliquely; and the difference between summer and winter increases in the same proportion. In the temperate regions, the four seasons—spring, summer, autumn, winter—are distinctly marked. In the Frigid Zone the short summer is very hot, because the sun is then nearly always above the horizon and a great amount of heat is thus accumulated; but the winters are long and bitterly cold, the sun being scarcely seen for months in the year: the days are very short, the nights very long. The temperature of a place depends, therefore, principally on its latitude.

(2.) *Elevation above the Sea level*.—The temperature of the air constantly diminishes as we ascend above the sea-level, in the proportion of 1° F. for about 300 feet rise. The air is therefore always cool at great elevations, even in tropical latitudes. The city of Quito, for instance, though situated on the equator, has a temperature climate, it being situated between 9,000 and 10,000 feet above the sea.

(3.) *Proximity of the Sea*.—The water of the ocean becomes heated by the sun's rays much less rapidly than the land, and also parts with this heat much more slowly by radiation. The temperature of water is therefore much more equable than that of land, and, as the surrounding air partakes of the same character, islands and countries near the sea have the heat of summer and the cold of winter greatly modified, and enjoy a much more equable climate than inland countries. This effect is greatly increased when marine currents being a large quantity of warm water, as is the case with the Gulf Stream on the western shores of Europe. On this account, the temperature of the North of Ireland is about equal to that of New York, which is 13° nearer the equator. At Moscow which is surrounded by a large expanse of land, the average difference between summer and winter temperature is as much as 50°, while at Edinburgh it is only about 20°.

(4.) *The Mountain Slope, or Aspect of the Country*.—The side of a mountain, or hill, which faces the sun at noon receives a much greater quantity of heat than the opposite side, and its mean temperature is therefore proportionally greater. There are some remarkable exceptions to this rule, due to other causes, especially in the Himalaya and Pyrenees mountains.

(5.) *Character of the Prevailing Winds*.—If they come from a warmer region, they raise the temperature; if from a colder, they lower it. The prevailing winds of Europe are from the west and south-west: as these blow over a vast expanse of water warmed by marine currents, the countries where they blow have their temperature raised. Of a very opposite character are the east winds which often prevail in spring-time in the western countries of Europe. These, blowing from the cold blains of Siberia and Russia, are cold and dry at this season; but in summer, as these plains are hotter than England, they are warm winds. The character of the winds affects humidity as well as temperature. The south-west winds of England are moist, and bring rain; so do the east winds of South America, and the south-west monsoons of India. In England, in spring time, fogs are prevalent, especially on the south coast, from the meeting of the warm moist south-west winds with the cold east winds. The former, being suddenly cooled, are unable to retain their moisture in an invisible state, and so it becomes visible as fog, mist, or rain.

(6.) *Direction of Mountain Chains*.—If these are so placed as to form a barrier against cold winds, the country on one side will be warmer than that on the other: if they intercept moist winds, one side will be more humid than the other. Thus the countries south of the great mountain axis of the Old World—as Hindostan, Sahara, Italy; &c.—are free from cold winds. Again, on the east side of the Andes, rain is very abundant; on the west side it seldom falls.

(7.) *Human Agency*.—The degree of cultivation a country has reached has a sensible effect on the climate. The removal of forests tends to raise the temperature, and to render the air less humid. On the other hand, a large extent of forest sometimes acts as an effectual barrier to cold or pestilential winds. The clearing of the Apennines is believed to have effected the climate of the right bank of the Po, so that the Sirocco now prevails in that district, though it was formerly unknown. It is estimated that the mean annual temperature of England is 2° F. higher now than a century ago, and this result has been brought about by the removal of forests and the cultivation of the land.—*Papers for the Schoolmaster.*

THE SUCCESSFUL TEACHER.—He who would teach successfully must do five things:

1. He must get the knowledge of the things to be taught.
2. He must study this knowledge.
3. He must study himself.
4. He must study his pupils.
5. He must mix faith, patience, and prayer with the whole.