

permitting other matters in solution to pass on and in turn deposit themselves where needed. The refractory force of the atmosphere prevents the sun's rays from being destructive of plant life. It is the vehicle of the organic excretia, as well as of water, and while the surface of every particle of soil to the depth at which the atmosphere can circulate, is covered with moisture by its presence, it furnishes to these particles the necessary gases for securing such chemical changes as will gradually convert the inorganic and inert portions into suitable pabulum for plant growth.

We need not explain its exosmose action, for every leaf gives evidence of the importance of this function. To animals it is still more important than to plants. By respiration oxygen is supplied to the blood; indeed, no function of the animal economy can perfect itself without the presence and sustenance of atmospheric air. Even when dilated, as at great elevations, still the animal respires the larger bulk to get the same amount of oxygen, and the very atmosphere, that in its dilated condition abstracts the heat at the mountain tops and creates their caps of snow, when descended to their base is compressed in figure, and gives out as present heat, that which was before latent, thus increasing the verdure of the valley. None of nature's laws could be exhibited without the intermediate office performed by the atmosphere. The very life-principle would be inert without it; men, animals, and plants, would cease to exist, and the universe itself would become a chaotic mass of death and darkness.

VALUABLE SUGGESTIONS TO PROMOTE HEALTH.

Never go to bed with cold or damp feet. In going into a colder air, keep the mouth resolutely closed, that, by compelling the air to pass circuitously through the nose and head, it may become warmed before it reaches the lungs, and thus prevent those shocks and sudden chills, which frequently end in pleurisy, pneumonia and other serious forms of disease. Never sleep with the head in the draught of an open door or window. Let more cover be on the lower limbs than on the body. Have an extra covering within easy reach in case of a sudden and great change of weather during the night. Never stand still a moment out of doors, especially at street corners, after having walked over a short distance. Never ride near the open window of a vehicle for a single half minute, especially if it has been preceded by a walk; valuable lives have thus been lost, or good health permanently destroyed. Never put on a new boot or shoe in the beginning of a walk.

ERRORS ABOUT SLEEP.

Dr. Hall, in his "Journal of Health," says:—"One of the very worst economies of time is that filched from necessary sleep. Multitudes of business men in large cities count it as a saving of time if they can make a journey of a hundred or two miles at night by steam-boat or railway. It is a ruinous mistake. It never fails to be followed by a want of general well-feeling for several days after, if, indeed, the man does not return home actually sick, or so near it as to be unfit for all attention to his business. The first great recipe for sound, connected, and refreshing sleep, is physical exercise. We caution parents particularly not to allow their children to be waked up of mornings; let nature wake them up. But have a care that they go to bed at an early hour, and let it be earlier and earlier, until it is found that they wake up of themselves in full time to dress for breakfast. Being waked up earlier, and allowed to engage in difficult or any studies late, and just before retiring, has given many a beautiful and promising child brain fever, or determined ordinary ailments to the production of water on the brain."

LITTLE CHILDREN'S DRESSES.

A distinguished physician, who died many years since in the city of Paris, made this statement:—"I believe that during the twenty-six years I have practised my profession in this city, twenty thousand children have been carried to the cemeteries, a sacrifice to the absurd custom of exposing them to the weather with their arms naked."

I have often thought if a mother were anxious to show the soft white skin of her baby, and would cut a round hole in the little thing's dress, just over the heart, and then carry it about for observation by the company, it would do very little harm. But to expose

the baby's arms, members so far removed from the heart, and with such feeble circulation at best, is a most pernicious practice. Put the bulb of a thermometer in a baby's mouth; the mercury rises to 99 degrees. Now carry the same bulb to its little hand; if the arm be bare and the evening cool, the mercury will sink to 40 degrees. Of course all the blood which flows through these arms and hands must fall from 20 to 40 degrees below the temperature of the heart. Need I say that when these cold currents of blood flow back into the chest, the child's general vitality must be more or less compromised? And need I add that we ought not to be surprised at the frequently recurring affections of the lungs, throat, and stomach. I have seen more than one child with habitual cough and hoarseness, or choking with mucus, entirely and permanently relieved by simply keeping its arms and hands warm. Every observing and progressive physician has daily opportunities to witness the same simple cure.—Lewis' "New Gymnastics."

Never too Old to Learn.

Socrates, at an extreme age, learned to play on musical instruments.

Cato, at eighty years of age, thought proper to learn the Greek language.

Plutarch, when between seventy and eighty, commenced the study of Latin.

Boccaccio was thirty-five years of age when he commenced the study of polite literature, yet he became one of the great masters of the Tuscan dialect, Dante and Petrarch being the other two.

Sir Henry Spelman neglected the sciences his youth, but commenced the study of them when he was between fifty and sixty years of age. After this he became a most learned antiquarian and lawyer.

Colbert, the famous French minister, at sixty years of age, returned to his Latin and law studies.

Ludovico, at the age of one hundred and fifteen, wrote the memoirs of his own times; a singular exertion, noticed by Voltaire, who was himself one of the most remarkable instances of the progress of age in new studies.

Ogilby, the translator of Homer and Virgil, was unacquainted with Latin and Greek till he was past the age of fifty.

Franklin did not commence his philosophical pursuits till he had reached his fiftieth year.

Accorso, a great lawyer, being asked why he began the study of law so late, answered that he indeed began it late, but he should, therefore, master it the sooner.

Dryden, in his sixty-eighth year, commenced the translation of the *Iliad*, and his most pleasing productions were written in his old age.

Chaucer wrote his *Canterbury Tales* when sixty years of age.

John Wickliffe acquired his great reputation after he was fifty years of age.

Thomas Hobbes wrote the most important of his works between the ages of sixty and ninety.

Alexander Von Humboldt, Washington Irving, Sir William Hamilton, Macaulay, Lord Brougham, Cousin and Carlyle, are illustrious examples of thorough students in old age.—*Upper Canada Journal of Education*.

You are a Stupid Blockhead!

Are you sure of that? Is it not just possible that the boy's teacher is the stupid one? Are you quite certain that your questions or your explanations are expressed in intelligible language? Don't you talk so rapidly that none but the brightest scholars can follow you? Does not your severity of manner frighten the poor fellow so that he can not tell what he knows perfectly? Are you not, in your anxiety to make him recite promptly and brilliantly, embarrassing him so that he can not recite at all? Have you ever done any thing to give that boy self-confidence? Have you ever heartily encouraged him, sympathized with him, made him feel that you are his friend? Have you ever earnestly tried to find the avenue to his heart? Say to yourself thoughtfully, 'After all, am not I the stupid one?'

But grant that the boy is naturally a 'stupid blockhead'. Is it his fault? Had he the making of his own brains? And is it not misfortune enough to have been born a blockhead without your repeatedly reminding him of the disagreeable fact? Will your statement make him any the brighter, or yourself the more amiable?