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Man and the Atmosphere.

One of the best arguments in favor of our earth being a special creation, opposed to the nebular hypothesis, or the nonsensical electrical matter theory, is derived from the atmosphere, that wonderful ocean of gas in which we live, and which we inhale at every breath. Viewing natural laws as the operations of matter (not the properties of it, which all high natural-law theorists blunderingly mix together), we cannot conceive how the moon could ever have been a part of this planet in a gaseous or fluid state, according to the nebular hypothesis. The moon has no atmosphere, no seas, no lakes, no rivers. Those men who talk of natural laws being eternal and universal, and of the whole of the planets, with their satellites, and the glorious sun, being at one time a huge mixed mass of gas, out of which they were resolved by gravity, have never profoundly reflected upon the simple question of "respiration." The same laws are not in existence throughout every part of the universe. There may be laws in active force in some of the planets unknown to our planet, and of which we cannot have the remotest conception. It must be so with respect to the solar orb; philosophers have written and talked much about the cause of solar light—how it is produced—but the subject is still shrouded in mystery. On the moon's surface no gentle dews distil their sweets, and no refreshing shower falls upon the lava rocks there; no flowers bloom, and no sweet sound nor perfume float upon the gale; there is no breeze for there is no atmosphere,—all is a lifeless dreary waste. Those who recognize moral laws as eternal principles—and none but the morally insane deny them—know that no moral law is in force in the moon, for moral principles are properties connected with intelligent and responsible beings. If our planet had no atmosphere, no living creature would be seen moving on its surface. The atmosphere must, from its very nature, have been specially created for man, and man especially created for the atmosphere. His muscles are solid pieces of the principal element of the atmosphere. It is composed of 79 parts nitrogen, and 21 oxygen, and this very composition is evidence of a special design. A full grown person takes 40 cubic inches of this atmosphere into his system every three seconds, and no person could exist for one minute if deprived of air, and if its composition were different it would be incapable of supporting life. Why this should be so, we cannot tell; we only know that such is the fact—one over which man has no control, to alter or amend, by any invention whatever. Man did not create this atmosphere for himself, nor did the atmosphere call itself into existence for him, and the natural law that could call them into existence, apart from the fiat of a great Intelligent Being, according to some theorists, must be one they have dreamed about, for such a law has never had an existence since time began on this earth. To produce the simple act of respiration—breathing—both the atmosphere and man must have been specially created with the properties and qualities which they possess. The oxygen performs the most active part in respiration; it is extracted from the nitrogen in the lungs, and combines with the carbon and hydrogen in the system, forming oxygenated compounds, such as carbonic acid gas, and the vapor of water; these products are expelled from the lungs. The oxygen acts as the supporter of low combustion, and the human body in life is like the "burning bush," burning but not consumed. Why, it might be asked, was man made to live on bread &c.? If his body be principally composed of water, and the principal element of the atmosphere, why is it that he has to toil for a food to keep up life, which merely goes into his system to be quickly expelled therefrom? Why is he made to require such food as demands unceasing toil to procure it, or the sacrifice of other lives to enjoy. Why was he not made so as to feed upon air or water for food? These questions are all vain; the nebular hypothesists, who endeavor to account for all things, may be able to give some

answer; ours is, "all things are done well," there is beauty over all this delectable world. It has been said that "nitrogen is a poison and oxygen is the vital air;" this is a great error: oxygen is just as much a poison as nitrogen,—our atmosphere proves this. Oxygen is no doubt the active agent of respiration, but it only serves its purpose as combined with 79 parts of nitrogen to do this. In life it is the fruitful agent for sustaining our bodies, but it is also the fruitful agent which at last brings down the strong man to the grave, and re-composes his frame into the clods of the valley, from which it originally sprung.

Who Rules the Country?

We boast of being the most free, happy, and best governed people in the world. The boast is no doubt true, but in making it, we should always take the exceptions into consideration. We are at least the most governed people in the world, if legislation is any criterion, for it is interminable. We have universal suffrage, and the charter of our liberties proclaims the doctrine—"rulers receive their just powers from the consent of the governed." But who make, and who are our rulers—the universal people? We do not think so. If all the men in these United States were asked, "what part did you take in electing the rulers of our Confederacy?" we are confident that eighty out of every hundred would say, "we voted to elect the nominees," the other fifth part of our voters could say, "we got them elected." The great mass of our people submit to be led; they are the most patient and accommodating people on the face of the earth. The city government of New York would perhaps not be tolerated in a single city in Britain; the abuse of power, the squandering of money, the enormous taxes, are without a parallel in any city in the world, yet our people bear it with great patience.

We have a Congress at Washington, but its members do not make all the laws; they speak and vote upon them, but some of them are made in New York and other places before Congress assembles, and the members have the privilege of voting for them and making them effective, just like the eight-tenths of our people who vote for political nominees at elections. We have what is called "The Third House" in Washington; this is a self-elected body composed of what are termed "lobby members," these men make quite a number of laws, to the great disgrace, sometimes, of the Senate. The lobby members belong to every class, each having its own peculiar interests to advance; they care not for their country nor liberty, their own benefit is the sole object of their outside legislation. It is thought, here, that with plenty of brass in their pockets and faces, they can accomplish almost any object. In our last number, on page 314, we noticed a Bill which had been introduced into the Senate by Mr. Dawson, for making the acts of the Chief Clerk of the "Patent Office" legal. We merely remarked that we did not see the use of this Bill, but since then we have learned that it is a most disgraceful one. The Senate passed it and sent it down to the House of Representatives, but on Monday, the 14th, the Senate, by a vote, recalled it, for it contained the odious provision of "making all the acts of the Chief Clerk of the Patent Office, and the Commissioner of Patents, valid and effectual at law." Had this Bill become a law, fraud, corruption, and every evil deed might be made valid and effectual at law, by the Chief Clerk and Commissioner of Patents. Why is such a Bill introduced at all; there is no necessity for it? Some of the Senators must know why it was introduced. There is surely something "under the rose" here. Senator Seward, it is said, knows all about it. The Committee on the Judiciary, through whose hands the Bill passed, was declared by Senator Geyer to be unacquainted with the Patent Laws. The majority of our Senators are also, or they would not have uttered such sentiments as are reported in the "Congressional Globe," in the debate on the Patent Laws. The Reporter for the Telegraph appears to have an understanding with the members of the "Third House," as a few lines is all that he has reported to the daily papers here, of one of the most important debates that has taken place during the present Session.

Fresnel's Light-house Reflectors.

History tells us that the grandest lighthouse ever erected was the celebrated colossal statue, which strode over the harbor of Rhodes. Ancient lighthouses, even among the maritime Phœnicians and Greeks, were merely fires made of wood, and kept burning upon tall cliffs, or else dim lamps kept burning in rude towers. It was easy, in past days to delude the weary mariners buffeting the storm and billow by the false bonfires of those land pirates, who, both in France, Spain, Ireland, and Britain, were, at one time, so numerous—whose profession was to illure, by false lights, the storm-stricken sailor to some destructive rock, then murder those who escaped the sea, for the plunder of the wrecked vessel. Those days have gone past, more by improvements in marine beacons than the humanity of the age or the vigilance of governments, but it is not long since those improvements were made. In modern times, England has, for a long period, been the most eminent marine nation, consequently, as her coast is very dangerous, great attention has been paid to the construction of good lighthouses. The three most wonderful sea structures of light-houses in existence belong to her; they are the well known Eddystone Lighthouse, built by that famous engineer Smeaton, the Bell Rock Lighthouse, and the Skerrevore Lighthouse. The Eddystone Lighthouse was completed by Smeaton, in 1759. It is 68 feet high, and the base 26 feet in diameter being barely less than the surface of the rock on which it stands. It is built of stone; the stones are dovetailed together, and "joggled," as it is termed, so as to prevent the courses of stones from sliding on each other. It is situated in the midst of the sea, nine or ten miles distant from Plymouth. Tallow candles were burned in this lighthouse for forty years after it was finished. Then came lamps with twisted-cotton wicks, and then common argand lamps; all these, however, are now superseded by argand lamps and reflectors, one argand lamp with lenses and reflectors, and one argand lamp with lenses and reflecting prisms.

So satisfactory had been the result of the metal reflectors, in lighthouses, that there seemed little room for improvement, until Fresnel devised the application of lenses, and also reflecting prisms in combination with lenses, to a single large lamp. There are great practical difficulties in fabricating a large glass lens. Condorcet and Brewster suggested, and Fresnel effected the construction of a lens of separate prisms, all unnecessary glass being removed. The great improvement made by him was the substitution of reflecting prisms for mirrors, thus introducing the principle of lighting by one argand lamp lenses and reflecting prisms. When light is falling on the second surface of a prism, it may fall so obliquely that the surface cannot refract it, this incident light is, therefore, totally reflected from the second surface. "If a ray," says Professor Cooper, "enter the glass prism so as to make the angle of incidence greater than 41° 49', it is totally reflected." Fresnel tried the illuminating powers of this light, in 1843, against those of mirrors, and found it to be as 140 is to 87. The first light of this kind, on a large scale, put up in a lighthouse, was by Stephenson. Fresnel is a Frenchman, but England, having always an eye to marine improvements, has adopted his mode of lighting more extensively than even France. It is not much to the credit of our go-aheaditive spirit that we are so far behind in our lighthouse system. We hope that what we have said may be the means of doing some good for our hardy sailors. We hope it will never again be said that expensive lighthouse apparatus was imported to this city, and lay in our Custom House, unheeded, until it was sold at auction for old metal, to some cunning fellows who knew what it was. This was done, and our government had no little trouble to get the apparatus back again; the case is still at law.

Burnet's Patent Water Cooler.

The use of ice in hot weather is indispensable to health and comfort, when used prudently. Its employment is becoming more general in every family, rich and poor. We have often regretted the great waste of ice by the common means of using it; this has, we are happy to say, been remedied by coolers on

an excellent principle. Burnet's Water Cooler, patented last year, and for sale by J. & C. Berrian, 601 Broadway, this city, is an excellent and at the same time handsome apparatus for economizing ice. The Cooler is made like a hollow cylinder, with a jacket, having its division filled with some good non-conducting material. The ice is placed inside with the water, and as the atmosphere does not come in contact with it and the water, none of the cold is absorbed by the hot air on the outside. This is the way by which the ice is saved. There is a pan for keeping fruit under the cover, and it is very convenient for offices, stores, workshops, and private dwellings. Two pounds of ice to the gallon of water will keep it at 40°—only 10° above the freezing point—all day. We have one of them in our office, and consider it to be a great improvement over the earthen jars which, at one time, were so much in vogue.

Preservation of Meats.

In Houndsditch, London, there is a large establishment for making "preserved meats." Meat and vegetables are put up in canisters, which keep for many years if the operation be performed in a proper manner. All the heating is done by steam, and by a very peculiar process. The canisters, filled with the meats to be preserved, are put into a brown-looking mixture, which looks like chocolate. No fire is visible, but the vessels containing this liquid are ramified with steam pipe. This liquid is the chloride of calcium; it will not boil under a temperature of 320°; there is a most important object in using it instead of water, which boils at 212°. A great heat is obtained without steam, and this is just what is wanted. The canisters containing the provision, before being placed in the bath of the chloride of calcium or lime, are closed permanently down, with the exception of a small hole in each, not much larger than the prick of a shoemaker's awl in the cover. The cook stands watching, with a cold sponge and a soldering tool. Whenever he sees steam issuing in a small jet from the hole in any canister, he knows the enclosed air is driven out of the canister, and whenever he is satisfied the viands are perfectly done, he squeezes from the sponge a drop of water in the hole, the steam is at once condensed, and then he drops a plug of molten solder in the opening, and thus hermetically seals the canister. All the canisters are treated in this manner. Meat put up in this way has been known to keep good for years, but if, by any accident, the air gets inside, it putrefies in a short time. It is the air which causes decomposition in all animal substances: it is the grand agent of both life and death. One sign of putrefaction, in such canisters, is their bulging outwards; those which are fresh have a concave surface. This mode of preserving meat and vegetables is a very excellent one, indeed, if proper care be taken in the selection of good meat, and the careful expulsion and exclusion of air. One defect of the system is, every canister purchased by a stranger must be by faith, for there is no way of finding out what the quality of the viands is. In this respect it is inferior to the patent "Meat Biscuit" of Gail Borden, Jr.

The Use and Application of Chloroform.

The medical journals have been discussing the chloroform question again. A few deaths by its use has excited much attention, and some have come to the conclusion that it should not be used to render people insensible during severe surgical operations. The hydropathists have thus expressed themselves. We believe that there is no danger in the use of chloroform, if applied with discretion. The deaths which have resulted from its application have been very few, considering the extensive use which is made of it. Its uniform success and safety rendered those incautious under whose superintendence the deaths were produced. In every case the quantity employed should be weighed or measured, but it is often given without the least attention being paid to the exact quantity employed.

Candidates for the Presidency.

Gen. Scott received the Whig nomination for President on last Monday, at Baltimore; no less than than 53 ballotings were cast. The two candidates are—Gen. Scott, Whig; Gen. Pierce, Democrat.