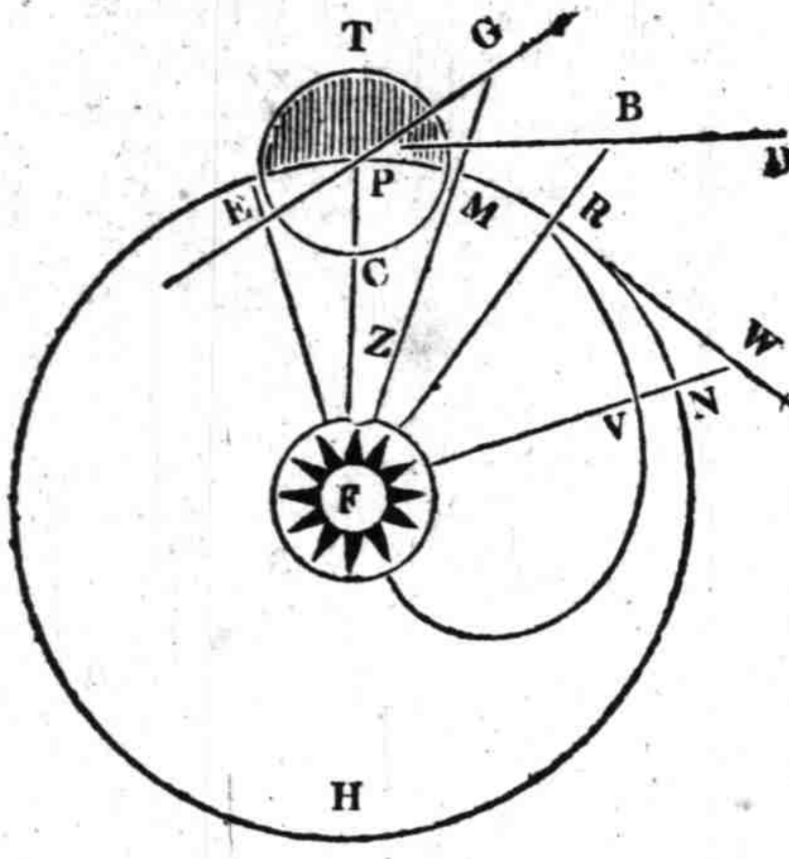




Our are the plans of fair, delightful Peace, Unwarp'd by party rage, to live like Brothers.

FOR THE REGISTER.



OF THE TIDES.

The same figure may give us some aid in explaining this phenomenon. For the day tide is to the night tide, as the length of the day is to that of the night, in the different seasons of the year; and thus, in northern latitudes, this difference is increased. From this we may apprehend the tides of the ocean are produced by that power which gives the diurnal and annual motion to the earth, that is by the power of contraction and repulsion. The illuminated disk, ECM, will have a tendency to keep up an accumulation of water upon the meridians of those horizons, and that in proportion as the illuminated disk is enlarged or diminished; whereas the refrigerated disk ETM, in proportion to its magnitude or density, will either solicit or resist the influence of water upon those horizons; for just in that part of the frigid disk which is made most dense, the water will tend, both from the contractions of the frigidity and expansion of the solar ray—but the earth passes through those points of elevation twice in 24 hours, which is made on or near the horizons. But though we can see clearly how the water rises on the horizons, the northern direction of the tides, and their elevation to the north, remains to be yet explained; and this arises from polar attraction, both of the air and the ocean. This polar attraction, as the attraction of gravitation, is as the square of the distance, and will be augmented in the same ratio to the polar circles. That this is the true solution we have many grounds of demonstration, for were these motions produced by right-lined attraction the tide would be greatest at the equator, where no tide is found but such as is made by the trade winds. We would not have allowed the tides could be enlarged when sun and moon were opposite to each other, but in this position, as at the change, the horizons of sun and moon fall on the same meridians around the earth. It is objected that there is little frangibility of the moon's light in the atmosphere, and that therefore she can have little effect on the ocean, whereas the moon has, without any doubt, the greatest effect in producing the tides.—Let us now recollect, that the moon is managed more by the repulsive rays of the earth's medium, than any frangibility or repulsion made on these rays of the earth by the atmosphere of the moon. This repulsion will have the earth as the focus of its action; and thus the vicinity of the moon, through the earth's medium, will, in this way, increase her power upon the water. There is one circumstance in relation to the tides which, by observation, may throw light on this subject, as repulsion also begins in the polar circles, which produces clouds and evaporation—Thus this repulsion will tend to make the tides unusually high about the polar circles and diminished to the pole. I shall detain you no longer on the Tides, but in the next Chapter endeavor to apply the doctrine of motion advanced to animal life—and in this application we are most interested.

T. C.

OF ANIMAL LIFE.

I proceed to make some remarks on animal motion, though I must confess I approach this frame with the modus agendi, heretofore advanced, with reverence to the Divine Architect, for I feel myself surrounded with a new world of wonders, superior to those of unorganized matter. Caloric is evolved from animal nutriment, and this repulsive matter, as the rays of light, must be capable of being changed and modified by the animal solids; this animal spirit modified by the muscles, nerves and the coats of the containing vessels, is shed on the contained fluids for their assimilation to the animal use. The lungs, the heart and the bowels, appear to be dependent for their animal stimulus from the spine and muscles of the body. It is truly a received opinion that the animal power is placed

in the nervous system; when we come to the same conclusion from the application of a general doctrine, the fortification of this truth cannot be of disadvantage, while perhaps by the doctrine advanced we may have some more distinct ideas respecting the agents of assimilation.

As old age makes his deprivations by relaxing the solids, destroying the elasticity of the skin, by distending the veins, and by their relaxation filling them with blood not under the control of the nerves may not this relaxation and consequent want of animal stimulus be counteracted for some time, by giving tone and elasticity to the skin, for this coat of nerves is connected with those of the whole nervous system.

Bleeding, while it empties the vessels, will permit the applications to take effect. The cold bath, muscular exercise, and cheerfulness of mind, being furnished with the proper supports for mind, might all co-operate in prolonging the human life. The great effect of blistering perhaps may be accounted for by its effects on the nervous covering of the body—Not being in the practice of physic, I cannot enlarge much on this very important subject, and I cheerfully submit these hints to those who can apply them to the healing art. A small error in theory, may be attended in practice with much disadvantage. I have been naturally led to these remarks, by the doctrine advanced heretofore, and the consequences must be the best demonstration.

In my next, I shall make some concluding remarks.

N. B. Caloric is not only an attendant on all matter as a sonorous medium, but by cohesion becomes a constituent part; though this caloric contains both the positive and negative electricity—this cohesive matter or caloric is set at liberty by the decomposition of food in the stomach and vessels—But as the rays of light, which can represent bodies to this cohesive matter is modified by the animal solids, and is the agent of assimilating animal food for the animal use; thus restorative powers applied to animals must have their agency, by affecting the solids.

CONCLUDING REMARKS.

Is it true that the diurnal motion, the annual motion, and the polar motion, have been explained? Does the same explanation discern the phenomenon of gravitation, the tides, polar attraction, and polar motion? And can we doubt respecting the agents which give motion to the solar system? What shall we say then—do indeed the rays of light, the red, the orange, the yellow, the blue, the green and the violet, give motion to the creation? By the harmonious relation of those rays they are thus made more capable of frangibility. When ordered forth by Omnipotence when 'He said let there be light,' may we not suppose these heavenly messengers went forth with joyful songs to execute their great commission, of giving light, life & motion, to a chaotic earth. In the material world, this was a joyful day, will it not be more joyful when the messengers of moral truth shall again return to open up the foundations of Zion that immortality may be made known, that the human mind may have support, and that death may be swallowed up of life? This event is not in the power of man, but it altogether from above—it is heavenly and divine, and connected with the eternal world—His ways are above our ways, as high as the heavens are above the earth,

Engraved as in eternal brass, The mighty promise shines; Nor can the power of darkness raise The everlasting lines." T. C.

FOR THE REGISTER.

SPONTANEOUS VITALITY.

In a conversation not long since, with two intelligent gentlemen, on the great chain of creation, particularly the animal, one of them observed, that it was his opinion, that if it

were possible to break or destroy a link of this great chain, (from the most minute insect to man) it would amount to an annihilation of the whole animal creation. I observed, that there were links of this chain occasionally extinct or absent—to which the other replied, in a state of embryo, but in their primitive elements, and that they were dependent for their existence on the heat of the sun; producing, first, animalcule, and then, perfect animals.

I observed it as my opinion, that there was more dignity in our idea of Deity, as author of all things, when we conceive him to be the cause of causes, than the cause simply of events that we witness, if there is any difference in infinity of power!

The idea of spontaneous vital production, has been grossly misconceived of by those who are not familiar with the silent and ever active elementary principles of nature. Infidel principles are frequently attached to those who speak of spontaneous vitality, as if it contradicted the sacred truths in that best of books, which says God created animals and vegetables. They ought to recollect that God created all things which exist, those evident to our senses and those not so—and that these have been from the first creation in a continual state of improvement; which we see to be the fact, from the globe itself, as well as from the animals and vegetables on its surface.

To prove the fact that spontaneous vitality does take place, I shall bring forward one or two facts from a celebrated Naturalist whose authority has, I believe, never been disputed:

"The experiments of Buffon, Reaumur, and others, shew that microscopic animals are produced in three or four days, according to the warmth of the season, in the infusion of all vegetable or animal matter. One of these gentlemen put some boiling veal broth into a phial, previously heated in the fire, sealing it up hermetically, or with melted wax, observed it to be replete with animalcules, in three or four days. A paste composed of flour and water, which has been supposed to become acescent, produces the animalcules, called cels, which are seen in great abundance. They are viviparous, and produce at intervals, a numerous progeny. To suppose the eggs of the former microscopic animals to float in the atmosphere and pass through the sealed phial, is so contrary to apparent nature, as to be totally incredible—and as the latter are viviparous, it is equally absurd to suppose their parents float in the atmosphere to lay their young in paste!"

Smithfield, July 28.

Laws of the United States.

An Act making appropriations for the support of the navy of the United States for the year one thousand eight hundred and twenty-two, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That for defraying the expenses of the navy for the year one thousand eight hundred and twenty-two, the following sums be, and the same are hereby respectively appropriated.

For the pay and subsistence of the officers, and pay of the seamen, in addition to the sum of one hundred thousand dollars, already appropriated, the sum of eight hundred and sixty-one thousand four hundred and sixty-six dollars.

For provisions, in addition to the sum of twenty thousand dollars, already appropriated, and to an unexpended balance of thirty thousand dollars, the sum of two hundred and sixty-seven thousand two hundred and fifty-eight dollars.

For medicines, hospital stores, and all expenses on account of the sick, thirty-two thousand dollars.

For the repairs of vessels, in addition to the sum of twenty thousand dollars already appropriated, the sum of three hundred and eighty-eight thousand dollars.

For improvement of navy yards, docks and wharves, fourteen thousand four hundred and fifty dollars.

For pay of superintendents, naval constructors, storekeepers, inspectors of timber, clerks of the yards, and artificers, thirty-six thousand four hundred and fifty dollars.

For labourers and teams employed in loading and unloading vessels, piling, docking, and removing timber, stores, &c. and fuel for the engine, twenty thousand dollars.

For ordnance and ordnance stores twenty-five thousand dollars.

For contingent expenses, in addition to the sum of twenty thousand dollars already appropriated, two hundred and ten thousand dollars.

For the pay and subsistence of the marine corps, in addition to an unexpended balance of twenty-two thousand dollars, one hundred and forty-seven thousand three hundred and ninety-three dollars.

For clothing the same, in addition to an unexpended balance of six thousand nine hundred and thirty-eight dollars and thirty-four cents, the sum of twenty-two thousand seven hundred and thirty-six dollars.

For fuel for nine hundred and thirty-eight non-commissioned officers, musicians, and privates, six thousand eight hundred and fifty dollars.

For military stores for the same, the unexpended balance of the year one thousand eight hundred and twenty-one, being

eleven thousand one hundred and eighty dollars and fifteen cents.

For contingent expenses for the same, that is to say, fuel for commissioned officers, bed sacks, repairing barracks, transportation, and travelling expenses to officers, postage of letters, armorers and armorer's tools, and stationery, with extra rations to officers commanding posts, fourteen thousand dollars.

To make good a deficit in the contingent expenses of the marine corps, which accrued prior to the year eighteen hundred and twenty-one, the sum of nine thousand one hundred and nine dollars and twenty-two cents.

Sec. 2. And be it further enacted, That the several appropriations hereinbefore made, shall be paid out of any money in the Treasury, not otherwise appropriated: Provided, however, That no money appropriated by this act shall be paid to any person for his compensation or perquisites, who is in arrears to the United States, until such person shall have accounted for and paid into the Treasury all sums for which he may be liable: Provided, further, That nothing in this section contained shall extend to balances arising solely from the deprecia [depreciation] of Treasury notes received by such person to be expended in the public service. But in all cases where the pay or salary of any person is withheld in pursuance of this act, it shall be the duty of the accounting officer, if demanded by the party, his agent or attorney, to report forthwith to the agent of the Treasury Department the balance due, and it shall be the duty of said agent within sixty days thereafter, to order suit to be commenced against such defaulter.

Approved—May 4, 1822.

An Act supplementary to the several acts for adjusting the claims to land, and establishing Land Offices, in the districts east of the Island of New Orleans.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That all the claims to land said to be derived from the British or Spanish authorities, reported to the Commissioner of the General Land Office by the registers and receivers of the land offices at St. Helena Court House, and at Jackson Court House, in the districts east and west of Pearl river, appointed under the authority of an act, entitled "An act for adjusting the claims to land, and establishing land offices, in the districts east of the Island of New-Orleans," which are contained in the several reports of the registers and receivers, and which are in the opinion of the registers and receivers, valid, agreeably to the laws, usages, and customs of the said governments, be, and the same are hereby recognized as valid and complete titles, against any claim on the part of the United States, or right derived from the United States.

Sec. 2. And be it further enacted, That all the claims reported as aforesaid, and contained in the several reports of the said registers and receivers, founded on orders of survey, requettes, permission to settle, or other written evidences of claims derived from the Spanish authorities, which ought, in the opinion of the registers and receivers, to be confirmed, shall be confirmed, in the same manner as if the title had been completed: Provided, That the confirmation of all the said claims provided for by this act, shall amount only to a relinquishment forever, on the part of the United States, of any claim whatever to the tract of land so confirmed or granted.

Sec. 3. And be it further enacted, That every person, or his or her legal representative, whose claim is comprised in the lists or registers of claims reported by the registers and receivers, and the persons embraced in the lists of actual settlers, or their legal representatives not having any written evidence of claim reported as aforesaid, shall, when it appears by the said reports, or by the said lists, that the land claimed or settled on had been actually inhabited or cultivated by such person or persons in whose right he claims, on or before the fifteenth day of April, one thousand eight hundred and thirteen, be entitled to a grant for the land so claimed or settled on as a donation: Provided, That not more than one tract shall be thus granted to any one person, and the same shall not contain more than six hundred and forty acres; and that no lands shall be thus granted which are claimed or recognized by the preceding sections of this act, or by virtue of a confirmation under an act entitled, "An act for adjusting the claims to land, and establishing land offices, in the districts east of the Island of New-Orleans," approved on the third day of March, eighteen hundred and nineteen: And provided, also, That no claim shall be confirmed where the quantity was not ascertained, and report made thereon by the registers and receivers, prior to the twenty-fifth day of July, one thousand eight hundred and twenty.

Sec. 4. And be it further enacted, That the registers and receivers of the public moneys of the said respective districts, except in relation to perfect titles, as recognized in the first section of this act, and the first section of the act of the third day of March, one thousand eight hundred and nineteen, shall have power to

direct the manner in which all lands claimed in virtue of the preceding sections shall be located and surveyed; and, also, to direct the location and manner of surveying all the claims to land recognized by the second, third, and fourth sections of an act, entitled "An act for adjusting the claims to land, and establishing land offices, in the districts east of the Island of New Orleans," approved on the third day of March, one thousand eight hundred and nineteen, having regard to the laws, usages, and customs, of the Spanish government on that subject; and having regard, also, to the mode adopted by the government of the United States in surveying the claims to land confirmed by virtue of the second and third sections of an act of Congress, entitled "An act regulating the grants of lands, and providing for the disposal of the lands of the United States south of the state of Tennessee," approved on the third March, one thousand eight hundred and three. And that, in relation to all such claims which may conflict, or in any manner interfere, the said registers and receivers of public moneys of the respective districts shall have power to decide between the parties, and shall, in their decision, be governed by such conditional lines or boundaries as may have been agreed on between the parties, either verbally or in writing, at any time prior to the passage of this act. But, upon the decision of those claims alluded to, which may conflict or interfere, and in relation to which the parties interested have agreed on no conditional lines or boundaries as to the manner of locating the same, the said registers and receivers of the respective districts shall make an equal division of the land claimed, so as to allow each party his or their improvements: Provided, however, That, should it be made appear, to the satisfaction of the register and receiver of public moneys of the respective districts, in any such case, that the subsequent settler had obtained on the claim of the former, and had made his establishment after having been forbid so to do, the said registers and receivers of public moneys shall have power to decide between the parties, according to the circumstances of the case and the principles of justice.

Sec. 5. And be it further enacted, That patents shall be granted for all lands confirmed by virtue of the provisions of this act, in the same manner as patents are granted for lands confirmed under former acts, to which this is a supplement.

Sec. 6. And be it further enacted, That to every person who shall appear to be entitled to a tract of land, under the second and third sections of this act, a certificate shall be granted by the register and receiver of the district in which the land lies, setting forth the nature of the claim, and the quantity allowed; for which certificate the party in whose favor it issues shall pay one dollar, to be divided between the said receiver and register.

Sec. 7. And be it further enacted, That the President of the United States be, and he is hereby, authorized to remove the land office from St. Helena Court House to such other place within the said districts as he may deem suitable and convenient.

Approved—May 8, 1822.

An Act requiring surveyors-general to give bond and security for the faithful disbursement of public money, and to limit their term of office.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That from and after the passing of this act, every Surveyor-General, commissioned by the authority of the United States, shall, before entering on the duties of his office, and every Surveyor-General now in commission, on or before the thirtieth day of September next, execute and deliver to the Secretary of the Treasury of the United States, a bond, with good and sufficient security, for the penal sum of thirty thousand dollars, conditioned for the faithful disbursement, according to law, of all public money placed in his hands for disbursement, and for the faithful performance of the duties of his office.

Sec. 2. And be it further enacted, That the commission of every Surveyor General, now in office, shall, unless sooner vacated, by death, resignation or removal from office, cease and expire on the first day of February next; and the commission of every Surveyor General, hereafter commissioned by the authority of the United States, shall cease and expire, unless sooner vacated, by death, resignation or removal from office, in four years from the date of the commission.

Sec. 3. And be it further enacted, That the President of the United States shall, and he is hereby authorized, whenever he may deem it expedient, require any Surveyor General of the United States to give new bond and additional security, under the direction of the Secretary of the Treasury, for the faithful disbursement, according to law, of all money placed in his hands for disbursement.

Approved—May 7, 1822.

Tickets in the Hillsborough Masonic Lottery (price \$3) for sale at J. Gales's Bookstore.