

DIGESTION.

Hunger and thirst are the preliminary steps to digestion; they constitute a law implanted in the animal economy, for the purpose of inducing the living being to take such nourishment as is required to sustain that waste of the system which animated nature is continually undergoing. If the dictates of the sensation of hunger and thirst are rationally obeyed, satisfaction and healthy digestion are the result; but if, on the contrary, these important sensations are neglected, weakness and disease must necessarily ensue. Appetite, or, in its more advanced stage, hunger, teaches animals to seek for solid food, and thirst suggests the propriety of rendering the solid mass more pulpy and dilute by the employment of drink. Experience and reason, both in man and brutes, must in some measure direct the selection of the proper objects to be employed for these purposes. I was some years ago consulted by a worthy individual with regard to the propriety of fasting, as a religious observance. I told him that the sensation of hunger and thirst constituted a most important law in the animal economy, destined by the Creator for the most beneficent purposes; that it ought to be obeyed as a matter of duty, and that if infringed, some prejudicial result would necessarily ensue: because it is no argument in favour of any such experiment upon human life that existence does not terminate upon its adoption, or that the symptoms of some frightful disease are not instantly ushered in. The seeds of future mischief may be sown by one experiment, and may only lie dormant until a second or succeeding infringement shall cause them to spring forth into living activity. In the course of an extensive series of experiments upon cows, it was found that, when they were not supplied with sufficient food during one day, the product of milk was a day or two in reaching its former average; thus demonstrating that the animal had been weakened by the abstinence, inasmuch as it took a longer period to reach its ordinary condition than was required to reduce it. The milk, in such an experiment, corresponds with the muscle and fatty portions of the body of animals which do not supply milk: hence abstinence in all animals must be followed by a diminution of the weight of the body. It has been well remarked by Liebig, that "in the process of starvation it is not only the fat which disappears, but also by degrees all such of the solids as are capable of being dissolved." In the wasted bodies of those who have suffered starvation, the muscles are shrunk and unnaturally soft, and have lost their contractility: all these parts of the body which were capable of entering into the state of motion have served to protect the remainder of the frame from the destructive influence of the atmosphere. There is no difference in this respect between one set of animals and another. Civilized and savage men, wild and domestic animals, must all be classed under the same category.

In the human species, a morsel of food is grasped by the front teeth of both jaws, which are each supplied with sixteen teeth, making thirty-two in all. In those animals which chew the cud, as they have only one row of teeth, the food is less firmly grasped by the jaws, and there is, therefore, a greater necessity that it should be of a soft and pliable nature. By the assistance of the lips, jaws, tongue, and auxiliary muscles, the food is conveyed into the cavity of the mouth, and by the aid of the tongue and lateral motion of the mouth, it is placed between the opposing jaws, where it is masticated or ground to a proper consistence. But the action of the jaws in grinding the morsel introduced between them, at the same time, elicits the compressing power of the muscles of the cheek upon the parotid gland, which is situated in man in front of the ear, and expels its secreted fluid, the saliva, into the mouth, to assist in comminuting the nutritive matter. Besides this mechanical action, there is, however, a nervous sympathy called into operation. The masticated matter acts upon the tongue and adjacent parts, inducing a sympathy with the glands placed under the tongue, and cau-

ses them to pour out their copious contents. The object of mastication or chewing is, therefore, to reduce the food to such a consistence as shall fit it for its reception and proper digestion in the stomach. This is well illustrated in the instance of animals which are not supplied with teeth.

The common fowl, for example, is destitute of these grinding apparatus; but it has a muscular mechanism, termed the gizzard, which powerfully compresses the introduced food, and by means of pebbles and stones, which are a necessary article of food with the class of animals referred to, an artificial substitute for the teeth is provided. In graminivorous animals, we shall find that a substitute for the second row of teeth is provided in the operation of rumination, or chewing the cud. From attention to these facts, therefore, we are taught that the preparatory step of digestion consists in the fine division of solid food by means of the apparatus set apart in the mouth for this purpose, and its mixture with a certain amount of fluid saliva, to render it more dilute.

The importance of the proper grinding of the food, and of rendering it as soluble as possible, can be well appreciated by such individuals as have been the subjects of indigestion from the eructation of morsels of food, of gases, and of acid liquors. It is scarcely necessary to remark, that similar rules are applicable to the inferior animals, and more particularly in the state of confinement to which most of them are more or less subjected, when they are made to minister to the wants of the human species.—*Thomson's Researches on the Food of Animals.*

POMERANIAN CABBAGE.

Last spring, says J. E. Teschemacher, in a recent communication to Hovey's Horticultural Magazine, Mr. H. Colman sent me from Paris a small quantity of cabbage seed, labelled: "given me as seed of a most extraordinary cabbage.—I have not seen it." This seed I distributed amongst many of my friends, and sowed some myself.—When it first came up, the seedlings so much resembled those of the Courve tronchuda sowed in an adjoining patch, that I could not then tell the difference. The result is as follows. The cabbage is of the pine apple form, weighs from six to twelve or fifteen lbs. each, is the purest and sweetest vegetable of the tribe, and not a single plant of all mine, or those of my friends, failed forming fine, hard, solid heads.

One plant, of which the head was broken off soon after planted out, sent forth four shoots, each of which formed a fine solid head; the four weighed 12 1-2 pounds. Mr. L. Stone, of Watertown, to whom I gave some seed, exhibited this cabbage at the annual exhibition of our Horticultural Society, and he was kind enough to distribute plants all around, last autumn, for the purpose of being kept through the winter for seeding the approaching summer, so that I hope we shall have plenty of seed for next season. It seems to me highly probable that it will take the place of the large drumhead, as four or five of these will grow in the same space as is required for two of the others; add to this, that the flavour is far superior, and the faculty of heading well, unailing.

Although I have no name for it, I think it very probable that it is the Pomeranian Cabbage, just introduced into England or Scotland, where it met with much commendation.

CORN BINS.

Our Deerfield friend mentions a method practiced in his town of erecting corn houses with cribs very convenient and safe and with very little expense. The slats leaving open spaces for drying corn in the ear exposing the corn in wet weather leave it sometimes liable to injury. The slats and spaces being of the same width a second set to fill the open spaces may be so constructed as to move in and cover these already made; and the movement of opening and shutting may be made with the facility of opening and closing the slats of a window blind.

Farmer's Monthly Visitor.

ARRIVAL OF THE WASHINGTON. NINE DAYS LATER FROM EUROPE.

We give the following telegraphic abstract of the news by the Washington, as published in an Extra by the N. Y. Times:

The steamer Washington, which sailed from Southampton on the 21st of March, and which brings tendays later intelligence from Europe was telegraphed to day at 12 M. 30 miles out.

The Monster Meeting was to be held in Dublin on the 20th but no report of it is received. The Lord Mayor refused to call it.

AUSTRIA.—Revolution in Vienna.—A letter of the 14th of March from Vienna says, Vienna is in full revolt. All the inhabitants of the capital rose en masse, and every one is in high fermentation.—The students united with the Burgers Guard and the crowd then proceeded to the villas of Prince Metternich, situated on the Rennweg, and destroyed it. After that the mass proceeded to the Chancellery of the State the students heading them.—The most exaggerated demands were made. A person who was however not known, appeared on the balcony and declared that the Emperor would in a short time satisfy all their demands—that his Majesty had every confidence in the fidelity of the inhabitants of Vienna. Nevertheless, the troops were called out and a well sustained fire kept up.

At the departure of the courier, tranquility had not been restored. Nineteen persons are said to have been killed and fourteen wounded.

The *emette* was very terrible—cries of "the Constitution," and "Liberty of the Press," were uttered. The deputies from Proseburg gave the impulse to the movement. Crowds were addressed by the students and others.

The troops fired upon the crowd and killed six men. The revolt had then attained its height. The captain commandant was dragged from his horse, and a student who had been wounded in the head was placed on it. The people who served as his escort, went through the city uttering cries, "The Constitution" and "Liberty of the Press."

A detachment of artillery was compelled to unfix their bayonets by order of the people. All the shops were closed. The appearance of the militia preceded by their band was greeted with the most tumultuous joy by the people—their motto being "The Constitution" and "Liberty of the Press."

Seven o'clock Evening.—It is just reported that the rails on the railway have been torn up. Under date of the 14th the Journal adds, "at 8 o'clock P. M. the people went to the hotel of the police near the Prater,—the troops fired on the people. At 10 o'clock the students were armed. Metternich and Ledhins have withdrawn. The people are marching on the Custom House. A new era has opened for Austria."

At the opening of the Assembly of the States the students and the citizens assembled and presented petitions for reform.—Their petitions were received.

The retreat of Metternich and the arming of students and the citizens, contributed to the reestablishment of order. The palaces and the public offices are occupied by the students and the citizens. There is no doubt but that Austria will enjoy the same rights as the German population.

The Emperor had decreed the establishment of a National Guard, under the orders of Count Noven. All the Princes of Imperial Family are about to retire into private life. *Liberty of the Press is granted.* The sympathy between the students and the citizens is very great. Joy is universal.

The City has been illuminated. Patrols of the Burgers guard go through the streets at night, and everywhere are received with *Vivats*, and handkerchiefs are waved from the windows in token of assent.

A letter from Vienna of March 13th, says: "Since yesterday, the agitation has augmented. Thousands of persons were collected before the Hotel of the States, and cried out, 'The States Forever!'"

"The Cabinet Council were sitting peremptorily at the Imperial Palace. The emperor and the Arch Duke did not quit the building. The people uttered loud cries or 'Down with Metternich!' The shops were all closed and no business whatever was going on."

Queen Victoria was safely delivered of a Princess on the 18th and is doing well.

France.—The Provisional Government of France progresses quietly. They are about establishing a Council of Finance under the direction of Garner PAGES, for the purpose of regulating the important affairs of the day.

The Bank of France has suspended payment of its notes in specie.

A decree has been issued fixing the number of working hours for laborers at eleven.

A meeting of the Peers of France was held at Paris to take council as to their future position and prospects.

On the 19th Paris was quiet.

The new 5 franc pieces of the Republic have been put in circulation. The Bank of France gives cash for its notes to those who require silver to pay their work-

men.

Order is completely restored at Lyons. A despatch from Berlin announces that the Emperor of Russia has accepted the policy of non intervention in the affairs of France as France abstains from aggressions.

Gen Cavaignac has assumed the Government of Algiers and proclaimed the Republic. The military force of France is increasing every day. The regular army has not been diminished. The National Guard in and around Paris, numbers 200,000 men. The Garde Mobile with the new enrolments made since the Revolution cannot be less than 100,000. The last as being armed and equipped with all possible rapidity even in the face of extraordinary financial difficulties that ought to introduce the most rigid economy.

The Queen of Spain has recognized the new Republic with expressions of sympathy. The Spanish government has authorized its ambassador at Paris to recognize the new government. So also has the Grand Duchy of Hesse Cassel, the Hanseatic Towns and the Duchy of Baden.

A telegraphic despatch from Brest says that the fleet of France uphold the new government.

Louis Philippe has taken up his permanent residence at Claremont, where he receives frequent visits from Messrs. Guizot, Debatel and Montebello the Minister.

Ireland.—St. Patrick's Day passed off without any outbreak, but the suppression of meeting of the 20th, the day before the sailing of the Washington, it was believed, would undoubtedly cause an insurrection. The garrison was in arms, and Government steamers were despatched from Portsmouth to Dublin to assist in quelling the anticipated insurrection.

Germany.—A Peasant's war has broken out in Germany. Several Castles have been burnt and destroyed, and the lives of the inhabitants have been spared, but an organized system of Revolution is visible.

The death of the Emperor of Russia is announced in the Gazette of Silesia, but letters to the 3d of March from St. Petersburg are silent on the subject.

Italy.—The King of Naples has consented to the Constitution of Sicily as a separate State. The Constitution was to be proclaimed at Rome on the 11th of March.

There are rumors that Milan was in open revolution, and had been bombarded by the Austrians.

Saxony and Hamburg have abolished the Censorship of the Press.

ARRIVAL OF THE HIBERNIA.

Later from Europe—Important Intelligence.

The Steamship Hibernia, Shannon, has arrived at New York. Her dates are only four days later from England, provided she sailed on her regular day, the 25th March. The intelligence, however, is of the utmost importance.—We subjoin our telegraphic summary:

BALTIMORE, APRIL 10.—A. M.

The Hibernia has arrived. The monster meetings of Ireland passed off quietly. The leaders in the movement had been arrested by the authorities, and were awaiting their trial. The pressure in monetary affairs continued unabated, and heavy continental failures had occurred. The Bank of Rome had also suspended payments.

France.—The Provisional Government were quietly maturing their plans. All Russian and English merchants had been ordered to leave France. Many Clubs had been formed in Paris, in aid of liberty throughout the world!

Cracow.—A Republic had been proclaimed in Cracow, and 400 political prisoners had been released from confinement. Fifteen thousand insurgents under arms to enforce their demand for a republic!

Germany.—Republican principles are steadily advancing in Germany, Denmark and Holland.

Bavaria.—The King of Bavaria has abdicated his throne.

Austria.—A new Cabinet had been appointed and installed by the Emperor.—The Italian provinces of Austria, Milan and Lombardy, have rebelled and thrown off the yoke of Austria.

Sardinia.—The revolution still continues to make head-way to the Kingdom.

Rome.—The Pope has caused to be published a Constitution for the governance of his States.

Russia.—Great Military preparations were making in Russia, to meet impending difficulties.

Spain.—Every thing remained quiet in this country.

Portugal.—Much distress prevailed in Commercial Affairs.

COMMERCIAL.

In England the pressure in commercial matters was heavy. English Consols were quoted at 83 $\frac{1}{2}$. Paris three per cents were quoted at 50 $\frac{1}{2}$.

Cotton.—Upland and Mobile Cotton had suffered a decline of $\frac{1}{4}$, and Orleans had declined a $\frac{1}{4}$.

Flour.—28s. per barrel was the extreme quotation.

Corn.—26s.27s. per quarter.

LORD JOHN RUSSELL.

An extra of the New York Morning Star contains one day's later intelligence from England. From this it appears that the resignation of the Whig cabinet had been determined upon; and that a courier

had been despatched to Ireland with the announcement of a contemplated change.

Lord John Russell has from the outset been the victim of circumstances, and of Sir Robert Peel's adroit policy. When he went into office he found all he had promised to do, done; and what he desired to do further, placed on the verge of impossibility. There has been no more liberality in the Whig ministry or its measures than there was in the Tory ministry and its measures. The latter had not the will, but were driven to act; the former have the will but, are disabled from acting. It was the fortune of the Conservatives to please the people; it is the misfortune of the Whigs to please nobody.

Russell's health, too, has been found unequal to the heavy duties of a "First Lord of the Treasury." He never was very robust, and indeed his literary tastes in early life (Russell actually wrote and published a tragedy some twenty years ago) constitution which his subsequent career has not had a tendency to remedy. He may console himself with the idea that this plea of ill health will cover his retreat with some show of decency; and that a Whig ministry in England is, after all a merely tolerated interruption to the undeniable ascendancy of Toryism; we mean of Toryism, in the abstract, and not as exemplified by party measures or men.

PRUSSIA.

Hamburg, March 16.

In Berlin, as well as in Vienna there have occurred disturbances of the public peace, that threatened to take a very alarming turn.

At the former place there had been going on during the last few days, a very lively agitation to get up petitions to the King, praying for liberty of the Press, and other reforms already granted by most of the other German Governments.

Several meetings in the Parks had been held and dispersed by the Military.

On Tuesday these scenes were repeated, and again several persons wounded and one killed on the spot.

The people were again attacked by the troops yesterday evening, and according to the account received by persons who arrived here this afternoon by the railroad, the results have been most disastrous, ten having been killed and about 100 wounded, while the soldiery are said to have suffered very severely, by the people throwing stones at them and awaiting their attack behind some sort of barricades which impeded their progress.

According to a telegraph despatch dated Berlin, Friday, 17th, 5 o'clock P. M., which arrived at Cologne at half past 6 on that day, order was restored and that Metropolis continued quiet.

General Taylor and the Indiana Regiment.

—Frankness and independence of Rough and Ready.

Our readers are aware that the Indiana legislature have requested General Taylor to alter his report of the battle of Buena Vista, alleging that great injustice was done by that report to the second Regiment of Indiana volunteers. They also declared that General Taylor had admitted in private conversation that injustice had been done. (By the way, how common is it to charge that General Taylor has made such and such remarks in private conversation. If any one wants facts on the subject, why not write to the old hero, all the members of the Indiana legislature have done. That is the way to get the truth, the whole truth and nothing but the truth.)

Here is an extract from General Taylor's reply to the Indianaians:

"In relation to the impression, which seems to be current, that my official report of the Battle of Buena Vista has done marked injustice to the 2d Regiment of Indiana troops, I have only to say, that nothing has been developed subsequently to the date of that report to cause me to change it. It was founded upon my personal observation on the field, and upon the official statements of my subordinates; and I would say, that all might have been well, had not many of the officers agitated the subject in a manner greatly to injure the Regiment and involve the credit of the State, which I very much regret.

"In all armies the best and most experienced troops have been at times subject to panics under a murderous fire of an enemy, which are inexplicable. Such it is most probable, may have been the case at the time in question. I am proud and free to state, however, that my confidence in that Regiment was not lost, but it was my intention to have placed it in action had the enemy resumed his attack on the day following; and I have always felt assured and confident that, had the battle been renewed, the 2d Indiana Regiment would have acquitted itself with gallantry and intrepidity on all future occasions before the enemy."

Now mark the brave and fearless candor of a plain-spoken old hero, who would not flatter Neptune for his trident nor Jove for his power to thunder. The Presidential election is coming on; Indiana appeals to him to modify some portions of his report, offensive to the pride of her people. With many of other politicians, "subsequent developments" might have been urged calling for a modification of the original censure. Not so, Old Zach. Plainly and plumply he tells the Indiana

legislature he was an eye-witness of the course of their troops on the field, and that nothing has occurred to change his opinions.—At the same time, he admits, what all history has verified, that the best troops are at times subject to panics under a murderous fire, and that the Indiana Regiment, he felt confident, would have retrieved its reputation in another battle.—We may easily believe that under the stimulus of regret and mortification, they would have proved the truth of this remark, and exhibited the most desperate prowess.

The same qualities of frankness, truth and honesty shine out in all the conduct of General Taylor. The following statement of a gentleman who recently met the General, illustrates these noble traits.

"One remark I made to the General on another subject, I will repeat together with the reply. I observed, 'General, you made the fate of the day at Buena Vista turn upon the battery having got into position your friends have thought you were over candid in such an admission—that such an accident, as it were, should alone have saved you.'"

"Sir," said the General, "in the first place, my despatch conformed strictly to the truth, which should always be told.—Our infantry were retreating, beaten back by superior numbers. I did not think it best to pause to rally them—there was no time. I ordered Captain Bragg into Battery—he said he was unsupported. I told him to place his guns in position, which he did at once. I remained with him and was shot through the clothes with three bullets, for they were close upon us; by the third discharge they were in retreat. As to his being an accident, the fate of every hard contested field turns upon some point, often apparently a small one. With us, by the permission of Providence, the chances, however small they were, turned in our favor." In all this may be discerned a strong and abiding regard for simple plain truth. You may also read in his countenance that

"On each glance of thought, decision follows. As the thunderbolt pursues the lightning flash."

Such is the man who is not believed when he says "In an *Whig*." We differ from these doubters.—Our own opinion is that General Taylor would not turn upon his heel to gain the Presidency (incredible as that may seem to the aspirants for office,) and that he is as good and sound a Whig as the most noisy and obstreperous of those who are perpetually assailing his character. *Rich Rep.*

ITALY.

As soon as the news of the French Revolution and the subsequent proclamation of the Republic was known at Rome, an immense crowd of people proceeded with banners amid shouts for the Constitution and the French Republic, to the Quirinal where a deputation was chosen to present an address to the Pope.

The journals of Rome publish the following reply of the Pope to an address of the Municipality, calling for Constitutional Institutions, and guarantees.—"The events which follow participate and in rapid succession, sufficiently justify the demand which you Senator Senators addressed to me, the same of the Magistrates and Council at Lamezia, it is known that I am unnecessarily engaged in giving to the Government that form which you gentlemen demand, and which nations require."

"Nevertheless, I flatter myself that in a few days, the works being completed, I shall be able to announce the new form of government which will obtain general satisfaction and more particularly that of the Senate and Council; who are more minutely acquainted with the circumstances and the position of the country.

"May God bless these, my desires and labors, and if conclusive to the welfare of Religion, I shall say at the post of the Crucifix to offer up thanks for all its events. Providence has allowed to take place, whilst I, not as much as Prince, but as head of the Universal Church, shall be content if they contribute to the Glory of God."

A REFUGE FOR KINGS.

It is said that a meeting in behalf of France and Liberty, held in the Sixty Capitol, at Harrisburg, on Tuesday evening last, M. B. Lowery Esq., of Crawford county, suggested the propriety of instructing the Senators and requesting the Representatives in Congress from Pennsylvania, to procure the passage of a law granting 50 acres of land to each of the Crowned Heads of Europe, that they might emigrate to the distant West of our country, set down in quiet, become useful and respected citizens, and under the protection of the Stars and Stripes receive such practical lessons in the science of self government as would induce them all their lives as to the efficacy of royalty.

Fancy Louis Philippe, Nicholas, and their brother kings, in the middle of the western woods, with farmers' tools on, and spades in their hands; Queen Victoria, the Duchess D'Orleans, &c., near the doors of their log cabins with their spinning wheels at hand while the young Colonists smoothen themselves with throwing stones at the frogs in the neighboring ponds. Not an impressive event. *Vice la Republica.*

Every May be has a May not be. Never wads in unknown waters.