HASZARD'S GAZETTE.

FARMERS' JOURNAL, AND COMMERCIAL ADVERTISER.

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Haszard's Gazette.

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TERMS OF ADVERTISING.

For the first insertion, occupying the space of 4 lines, including head, 2s.—6 lines, 2s. 6d.—9 lines, 3s.—12 lines, 3s. 6d.—16 lines, 4s.—20 lines, 4s. 6d.—25 lines, 5s.—30 lines, 5s. 6d.—36 lines, 6s.—and 2d. for each additional line. One fourth of the above for each continuance.

Advertisements sent without limitation, will be continued until forbid.

MAILS.

THE MAILS for the neighbouring Provinces and the United States, will be made up and forwarded via Pictou, every *WEDNESDAY* afternoon at Four o'clock, and *SATURDAY* morning at Nine o'clock, until further notice. Those on *WEDNESDAY* by the Steamer *Lady Le Marchant*, and on *SATURDAY* by a Sailing Packet.

Mails for England, will be closed every alternate *WEDNESDAY* at Four o'clock, afternoon, viz :

Wednesday, July 5.	Wednesday, Sept. 13.
Wednesday, July 19.	Wednesday, Sept. 27
Wednesday, Aug. 2.	Wednesday, Oct. 11.
Wednesday, Aug. 16.	Wednesday, Oct. 25.
Wednesday, Aug. 30.	

Mails will also be forwarded to New Brunswick and the United States via Shediac by the *Lady Le Marchant*, every *THURSDAY* morning, on the arrival of that vessel from Pictou.

THOMAS OWEN, Postmaster General,
General Post Office, June 24, 1854.

Royal Agricultural Society.

CATTLE SHOW FOR 1854.

THE QUEEN'S COUNTY CATTLE SHOW, will be held in Charlottetown, on Wednesday, 20th September, 1854.

PREMIUMS.

For the best Entire Blood Colt, foaled in 1852.		£3	0 0
For the second best	do do	1	0 0
" 3d do	do do	0	10 0
" best Blood Filly,	do	1	10 0
" 2d do	do do	1	0 0
" 3d do	do do	0	10 0
" best Entire Colt for Agricultural purposes, 1835,		2	0 0
For the second best	do do	1	0 0
" 2d do	do do	0	10 0
" best Filly,	do do	1	10 0
" 2d do	do do	1	0 0
" 3d do	do do	0	10 0

CATTLE.

For the best Bull, dropped since the 1st January, 1852,		2	0 0
For the second best	do do	1	1 0
" 3d do	do do	1	0 0
" 4th do	do do	0	10 0
" best Bull, of any age,		1	10 0
" 2d do	do do	1	0 0
" 3d do	do do	0	10 0
" best Cow, giving milk, of any age,		1	10 0
" 2d do	do do	1	0 0
" 3d do	do do	0	10 0
" best Heifer, dropped since 1st January, 1852,		1	10 0
" 2d do	do do	1	0 0
" 3d do	do do	0	10 0

SHEEP.

Best pen of 3 Ewe Tegs, of Leicester breed,		2	0 0
2d do	do do	1	0 0
3d do	do do	0	10 0
Best Ram under 3 years old (Lambs excluded),		2	0 0
Second best do	do	1	0 0
3d do	do do	0	10 0
Best Ram Lamb,		1	10 0
2d do		1	0 0
3d do		0	10 0

PIGS.

Best Sow, having reared a litter this season,		1	10 0
2d do	do do	1	0 0
3d do	do do	0	10 0
Best Boar,		1	10 0
2d do		1	0 0
3d do		0	10 0

At the Cattle Show in Charlottetown, the following Premiums, offered by the undermentioned gentlemen, will be awarded, viz ;

By Judge Peters, £1 for the best half-bred Galloway Bull.
By Mr. Walkinshaw, £1 for the best yearling Ayrshire Heifer.
By Mr. Walkinshaw, £1 for the best yearly Heifer of any breed.
By Mr. J. D. Haszard, £1 for the best Poll Bull of any age
By Mr. J. D. Haszard £1 for the best Poll Cow of any age.
By Mr. B. E. Wright, £1 for the best two year old Heifer of Alderney breed.

All Cattle intended for Exhibition must be entered at the Society's Depot on or before Saturday the 16th September.

Regulations will be published in a future advertisement.

The same amount of Premiums will be given, to be competed for at Saint Eleanor's, in Prince County, and at Finlay's, Cross Roads, in King's County ; the time of holding the Shows to be determined by the local Committees in each County.

By Order,
CHARLES STEWART, Sec'y.
Commtee it Room, May 3, 1854.

Agricultural Chemistry and Geology.

ORGANIC FOOD OF PLANTS.

In order that plants may live and grow, they require constant supplies of food. This food they obtain partly from the air and partly from the soil, and it is of two kinds, namely, organic and inorganic. The organic food which plants receive from the air is chiefly in the form of carbonic acid gas, which is a kind of air without colour, but having a slightly sour taste, and a peculiar smell. It extinguishes fire and destroys animal life. It is one-half heavier than common air, renders lime water milky and is absorbed by its own bulk of cold water.

This gas causes the boiling up of soda water, and the frothing of beer. It is composed of carbon and oxygen ; 6 lbs of carbon and 16 lbs of oxygen forming 22 lbs of carbonic acid.—When combined with solid substances they are called carbonates. All limestone rocks, for example are carbonates, nearly one half of their weight being formed by carbonic acid gas. It readily combines with a great variety of other solid substances. To prepare this gas a little muriatic acid may be poured upon pieces of limestone in a tall covered beer glass, or in a bottle. It may also be prepared by pouring vinegar upon soda. The gas will rise and fill the glass or bottle like water. We may prove that it is composed of carbon and oxygen, by burning charcoal, which is carbon, in a jar of oxygen gas. When the charcoal is extinguished, it will be found that the jar contains carbonic acid gas—for if a taper be plunged into it, it will instantly be extinguished.

In 5000 gallons of air there are two gallons of Carbonic Acid Gas which plants freely drink in. Here we discover one of the wonderful adaptations of things in nature to each other. Though Carbonic Acid Gas forms only 1-2500th part of the atmosphere, yet the plants spread out their broad and thin leaves in such great abundance and over so comparatively large a space- and each leaf being supplied with a great number of openings or pores, they are enabled to take in a large quantity of this gas from the air. It is a striking fact that there are no less than 120,000 of these pores, or little mouths, on a single square inch of the common lilac. We may be able to form an idea of the number of these that are at work upon a large tree from the fact that upon a single oak tree seven millions of leaves have been counted.

Plants suck in Carbonic Acid Gas, only in the day-time. During the night they give off a quantity of this gas. They only retain the carbon which they receive from the air and give off the oxygen again, as may be proved by putting a few green leaves under a large glassful of fresh spring water and placing them in the sunshine, when small bubbles of oxygen gas will be seen to rise from the leaves and collect in the upper part of the glass.

The effect of the carbonic acid gas absorbed and retained by the plant is to hasten its growth by furnishing part of the material from which its stalk, stem, leaves, &c., are composed.

Besides carbonic acid gas, plants drink in, from the air a quantity of watery vapour, which serves to moisten the leaves and stems, to fill the vessels and partly to produce the substance of the plant itself.

It will be remembered that plants contain starch, sugar, gum, &c., as was explained in a previous communication ; and if we consider the facts that these parts of the plant consist of carbon, hydrogen and oxygen, (the two latter gases united in such proportions as to form water) we may easily discover how it is that the water which is absorbed by plants constitute a part of their substance.

Plants also derive carbon from the soil in the forms of carbonic acid, humic acid and some other substances which exist in the black vegetable matter of the soil. Humic acid may be formed by dissolving a little common soda in water and boiling the solution upon rich dark soil. After the solution has settled it must be poured off and vinegar or weak spirit of salt added to the clear brown liquid. Brown flocks will fall, which are humic acid. [Further information on this point will be given in a subsequent communication.]

Nitrogen also forms a portion of the organic food of plants and is taken up by them from the soil principally in the forms of ammonia [hartshorn] and nitric acid. No nitrogen has ever been discovered to enter plants from the air though it exists therein in so large a proportion.

(From the Boston Transcript, June 28.)

A MODEL BABY.

There was only one baby among the members of the late excursion party up the Mississippi to the Falls of St. Anthony. That baby was only six months old—a son of Henry Farnam, Esq., the engineer of the Chicago and Rock Island Railroad. When the baby was first brought on board the Golden Era, some of the company shrugged their shoulders and said "humph!" One crusty old bachelor muttered, "We may look out for squalls now;" and a young man with moustaches, who passed for a wit, sighed for the days of good king Herod. The baby meanwhile looked about and crowed a little, and then quietly entertained himself with sucking his fist.

Well, from the time we left Rock Island on Monday evening till we returned on the following Saturday, not a cry or the symptom of a cry was uttered by the baby. He was indeed a charming little fellow—always bright and placid, and ready to meet halfway those who were disposed to be attentive. Of the sensation of fear he seemed to be utterly ignorant. He would go to the arms of a rough old backwoodsman as readily as to those of the beautiful Miss W. or Miss J.; and remain contented away from his mother or nurse, till, fearful that he was giving trouble, they would come in search of him. But instead of giving trouble, he seemed to be doing more than anybody else for the general entertainment. It was frequently proposed to pinch him to see if he *could* cry; and in one instance the experiment was tried without success. The features of the gruff old bachelor, who had looked so austerely at first on this infant phenomenon, would now relax as he came in sight, and he at last ventured upon the experiment of taking him in his arms, and found to his delight that the baby maintained his good character even in his inexperienced embrace.

The general satisfaction at the baby's unparalleled behavior at length manifested itself in a substantial form. It was resolved to get up a *testimonial*. A subscription was put in circulation for a gold cup, to be presented as a token of the admiration and esteem of the passengers, who, when they reflected how much a *crying* baby might have detracted from their enjoyment, liberally opened their purses, and subscribed the handsome sum of $260. A formal presentation of this offering was then made. Mr. Rockwell, late member of Congress from Connecticut, was deputed to address the baby. This he did in the presence of the assembled passengers, the baby meanwhile being held in his mother's arms, and always jumping and chuckling at the right place in Mr. Rockwell's speech.

The speech, which was a capital one, and enunciated with due gravity and dignity, was followed by a reply from Professor Twining, of New Haven, the baby's *medium* on the occasion, and who spoke in the little fellow's behalf in admirable style, now witty and now beautiful, for upwards of five minutes. Both speeches were much enjoyed and applauded. Ex-President Fillmore was appointed to prepare an inscription for the gold cup; a task which he accomplished with his accustomed good taste; and Mr. Sockwell was appointed to purchase the cup.

Thus ended one of the pleasantest little episodes of the great excursion—one that must be always remembered with pleasure by those who witnessed it, and especially by the parents of the child who so early in life won so solid a mark of the approbation of his seniors.

ONE OF THE SPECTATORS.

CURIOUS ILLUSTRATION OF HABIT.—The omnipotence of habit receives illustration from what happened to a constant reader of the London *Times*. So addicted to it was he, and so dependent upon it for all the news, as to refuse intelligence from any other source; and to this fountain he persisted in applying personally. Nobody was suffered to read its broad and stately columns in his stead or on his account. No information was acceptable, even in that select source of light and knowledge, which did not shine through his own eyes.

This gentleman fell sick, and was confined to his bed. The stream of intelligence, therefore, from that journal, and he had no other, was quite shut out. He could not read himself, and would not permit any one else to do it for him. As his illness happened to be of a bad kind, and as obstinate as himself, he may easily be conceived to be in a tight place. For two whole years he was without any hint from the external world. His only mental sustenance was such as he had collected and laid up, squirrel-like, in former days. He subsisted as bears do, on his old fat; but it was getting pretty well used up, one may believe, when, though he was carefully attended by doctors—we forget of what 'opathy, for he was rich—he was given over—as cured, at the end of the time mentioned. No sooner was permission granted for the indulgence of his appetite for the *Times*, than he fell with incredible ardor to the perusal of that paper, beginning where he had left off two years before.

We shall not stop to relate what alternations of joy and sorrow, of satisfaction and chagrin, played by turns over his still pallid countenance, as he rushed with eager curiosity, not through a fable, but the real and stirring history of his country and the world at large, during a space filled with the most agitating events that ever, perhaps, occurred in Europe, namely, the two, years preceding the downfall of Napoleon. But when he came to the battle of Waterloo, his interest grew perfectly intense, and at the victory for England and the allies, which terminated forever that battle and the struggle in which his country had been engaged so long, he was thrown into a paroxysm of exultation. He rose up and vociferated a *hundred huzzas* with all his might. —Nothing could appease him, and a sudden loss of voice was only able to stop his clamor, and allay somewhat the violence of his excitement. It was, it may be well supposed, a trial of no small magnitude to satisfy the longings of his pent-up curiosity for so long a period, and to come to the knowledge of the state of his country's affairs in the space of a few days, which no person had dared to whisper to him before.

What a strength of habit was displayed by this eccentric person! But upon a nice inspection of himself, every person will ascertain, perhaps to his surprise, that some habit—it may be more than one—rules pretty despotically in his own bosom.—*Dr. Olin's Greece, &c.*

MARSHAL ARNAUD.—The Commander-in-chief of the French expedition to the East, is, in many respects, a remarkable man. His military success is one of the most striking examples of rapid advancement which has been achieved in the French army of occupation in Algeria. M. de St. Arnaud was born at Paris in 1801, of a family not distinguished by fortune. He was young when he entered the army. During the reign of Charles X. he was for a short time in the body-guard of that monarch; but he shortly after resigned his situation and returned to England, where he resided some time. Soon after the revolution of 1830, he returned to France, and once more entered the army. It was at this time, while the regiment to which he belonged was on duty at Fort de Blaze, where the Duchess de Berri was imprisoned, that he obtained the favorable notice of Marshal Bugeaud, commandant of the citadel, by his intelligence and activity. In 1837, as captain, he went to Algiers in the foreign legion, which was chiefly composed of political refugees who had sought employment in the armies of France. In that corps M. de St. Arnaud, distinguished alike by his intrepidity and his military skill, contributed powerfully to the success of many important enterprises. In less than ten years he rose through the various grades from that of Chief of battalion to the dignity of Marshal of France. Among the exploits in which he distinguished himself, the most important were the expedition he directed, in 1849, against the unsubdued tribe of Beni-Boudouan, in the west of Miliana; the attack of the Beni-Ferrah tribe, the following year; the defeat of Himmel-Bahr; and the submission of the Chestf Bou Mana, who had provoked an insurrection in the Dahra. In 1851, M. de St. Arnaud returned to France with the rank of Lieutenant-general. His energetic and determined character recommended him to the notice of Louis Napoleon, then President of the Republic, as one of the firmest supporters of his views; and in the month of October, 1851, the future Emperor confided to him the confidential post of Minister-of-war. In 1852, he was raised to the dignity of Marshal of France, and soon after that of Senator, which was followed by his appointment to the post of Grand Ecuyer to the Emperor. M. de St. Arnaud has been twice married. By his first marriage he had one daughter, (married to M. de Puysigur,) and a son, who became a soldier, and was killed in one of those campaigns in Algeria, where his father won so much renown.

AGRICULTURE IN NEW MEXICO.—One of the chief productions of New Mexico is Indian corn, for which the soil seems to be admirably adapted. But the growing season is there so dry that without artificial irrigation, there is generally no success in its cultivation. In preparing ground for cultivation, a thorough irrigation is the first necessary proceeding. The furrows are then opened with the awkward Mexican plough, and the corn is planted in rows. It usually receives from two to four irrigations before arriving at maturity. Lands in New Mexico without water are of no value to the agriculturist. There is one exception, however, to the above rule of "no water, no crops." The Navajoes, who occupy the western portion of the country produce abundant crops of corn without irrigating their lands. The method which they adopt is this : Holes are bored in the ground with sticks to a depth of twelve or eighteen inches, and each of these receives one or more grains of corn, each grain being enveloped in a ball of mud about the size of a man's fist. The seeds thus protected and dropped into the hole, are covered to a depth of two or three inches with light earth, to prevent a too early evaporation of the moisture, and left to germinate. The sharp sticks and the hoe are the only instruments used in the whole operation of planting and cultivating the crop. The great depth of the hole serves to shield the root of the future plant from heat, and enables it to grow by the greater moisture of the subsoil. This fact induces the belief that deep ploughing will greatly increase the agricultural capacity of New Mexico, and diminish the necessity for irrigation. The New Mexican plough is of the most primitive construction, and reminds one of the antediluvian times. It consists of a piece of timber, about six feet long, which answers the purpose of a beam, having a short-pointed branch projecting at the end for the share. A straight piece of wood is attached to the after part of the implement for a handle. The wheat of New Mexico has but little straw, its average height not exceeding three feet. It is cut with a clumsy sickle, and is thrashed out upon a circular earthen floor, generally by the feet of goats—sometimes by horses, mules, oxen, and donkeys. The farmer then awaits a suitable wind, when the straw is blown from the wheat upon being tossed high in the air with wooden forks constructed for the purpose. The residue is then repeatedly tossed into the air with a spade until the chaff is blown away; and the sand, gravel, and clay which remain are imperfectly removed by washing. The wheat is sifted through a perforated hide, to separate the small stones from it, and then being dried, is considered ready for the market or the mill. Wild potatoes, somewhat similar to the Irish potatoes, abound in the mountainous regions of New Mexico, but are too small to repay the labor of gathering them.

THE MAD STONE.—We were shown yesterday one of those curious natural poison extractors known as the mad stone, of which there are several that we have heard of in different parts of Eastern Virginia. That which was shown us is in the possession of Mr. Olivier, who resides upon Halifax street, in this city, and we are informed that he has several certificates of cases in which it has been successfully used for the bite of the mad dog. It is rectangular in shape, with parallel sides and polished surfaces, traversed by dark gray and brown streaks, and about a size larger than half a Tonqua bean, except that it is not near so thick. Upon being applied to the wound of the patient, it soon extracts the virus, which, it is said, may be distinctly seen in the water into which it is repeatedly dipped during the operation. Most of our elderly readers in this part of the State are no doubt familiar with the tales of cures effected by this wonderful stone. The one we are speaking of possesses a high reputation for its efficacy in hydrophobia, substantiated by testimony. However marvellous may seem such a power in so simple a substance, yet it is not more so than many other mysteries of nature, and we do not see why incredulity should not bow to the recognition of it as an antidote against one of the most appalling and deadly diseases by which the human frame can be racked. At all events its reputed virtue is susceptible of being easily and fully tested should a case unfortunately arise requiring a resort to it, which we sincerely pray may never be. We think we confer a public benefit by making known the fact that there is such a stone in this city, which we learn has been known to set as a sovereign remedy for the bite of a mad dog in repeated instances.—*Petersburg (Va.) Intel., June 29.*