

explain, this, in comparison with the other change, of the grub.

I was particular in not allowing any living thing have communication with the contents of the tumbler, for I kept it in a shady place in my house, and covered. I have this week found two grubs which I have confined and am now feeding—but if an opportunity occurs next season, (some may say, God grant that such will not be!) I will be more minute in my observations.

I am, Sir,

Your most obd't. servant,

JOHN J. E. LINTON.

STRATFORD, HURON DISTRICT,
6th October, 1842.

SIMCOE COUNTY AGRICULTURAL SOCIETY.

For the British American Cultivator.

The ploughing, and show of grain, took place on the 11th instant, at Mr. Richard Drury's, Penetanguishine Road. Six teams competed for the premiums, which were awarded as follows, viz. :—

1ST CLASS.

		£.	s.	d.
Best Ploughing,	George Cadwell,	1	15	0
Second do.,	William Hill,	1	8	9
Third do.,	Charles Kerredge,	1	2	6
Fourth do.,	Wm. Buchannan,	0	17	6

2ND CLASS.

Best do.,	Chs. Partridge, junr.	1	0	0
Second do.,	William Read,	0	17	6

GRAIN.

Fall Wheat,	Richard Drury,	1	0	0
Spring do.,	Do.,	1	0	0
Barley,	William Gardner,	0	15	0
Peas,	Michael Bergin,	0	15	0
Oats,	George Caldwell,	0	10	0

The ploughing was excellent; as also the show of grain. The wheat was very good, and the oats of first-rate quality, weighing 41 pounds to the bushel.

The day was remarkably fine, and mine host of the Farmers' Arms regaled the ploughmen with an excellent dinner; after which the party broke up well pleased with the day's amusement. As this was the first show of the kind in the county, we hope for a more full attendance next year.

JAMES CARNEY, Secretary.

Barrie, 11th October, 1842.

From Alison, on Population.

If we consider the situation of man at his first appearance in the world, and for a long period after his species had begun to multiply, it is evident that an unlimited operation of the principle of increase is requisite, in order to overcome the physical difficulties with which he is surrounded. Without the strength of many of the inferior animals,—without food provided by nature for his support,—endowed with a constitution which required artificial covering, and placed naked in the world, without any protection from the weather,—compelled to maintain an incessant, and often doubtful, struggle with beasts of prey, and destitute of any weapons to counterbalance their advantages, he is compelled to contend from the infancy of his being with want, hardship, and suffering. Accustomed, as we are, to the powers which ages of civilization have conferred upon mankind, and to the complete subjugation of the lower animals, which has resulted from the extension of his numbers, we can hardly imagine the difficulties with which our forefathers had to contend, when society was in its infancy, and when the

human race seemed placed in the midst of boundless forests or morasses, only to become the prey of the innumerable savage animals by whom they were peopled. It is the researches of modern travellers alone which can carry us back, as it were, to the first ages of the world; which have explored those regions where man seems lost in the immensity of nature; where the powers and numbers of the animal tribes bear a fearful proportion to his feeble frame, unprotected limbs, and unarmed hands; where the incessant roar of beasts of prey resounds, save at the hour of sleep, through forests of measureless extent and impassable thickness; where every element teems with enemies of superior strength, perfect equipment, and inveterate hostility; and where his race, so far from advancing, seems to be hardly able to maintain its ground against the difficulties and annoyances to which it is exposed. * * * If the precarious and difficult situation of man in the savage, or pastoral, state is considered,—exposed to perpetual hardship from the inclemency of the season; doomed to constant toil for the acquisition of subsistence; subject to many of the diseases and calamities incident to our condition, and ignorant of all the means which experience or science has discovered for their alleviation; unacquainted with the mechanical arts, and but imperfectly skilled even in the simplest methods of cultivation, it seems surprising how his numbers could ever have increased, or the tender plant have taken root, amidst the rude shocks to which it was exposed. Nothing has enabled it to overcome these obstacles, and emerge into an easier and more prosperous state, but the incessant operation of the principle of population, unrestrained by notions of prudence, unfettered by the operation of reason. It is this which has provided a constant addition to the numbers of the species, more than sufficient to repair its losses; which, under circumstances where reason would perhaps have despaired of the fortunes of mankind, has constantly led to its multiplication; and, through all the difficulties of infant existence, has born aloft, in every age, the standard of the human race.

From Liebig's Chemistry.

EFFECTS OF SALT.—Fresh flesh, over which salt has been strewed, is found, after twenty-four hours, swimming in brine, although not a drop of water has been added. The water has been yielded by muscular fibre itself, and having dissolved the salt in immediate contact with it, and thereby lost the power of penetrating animal substances, it has on this account separated from the flesh. The water still retained by the flesh contains a proportionally small quantity of salt, having that degree of dilution at which a saline fluid is capable of penetrating animal substances. This property of animal tissues is taken advantage of in domestic economy, for the purpose of removing so much water from meat, that a sufficient quantity is not left to enter into putrefaction.

In respect of this physical property of animal tissues, alcohol resembles the inorganic salts. It is capable of moistening, that is, of penetrating animal tissues, and possesses such an affinity for water as to extract it from most substances.

When a solution of salt, in a certain degree of dilution, is introduced into the stomach, it is absorbed; but a concentrated saline solution, in place of being itself absorbed, extracts water from the organ, and a violent thirst ensues. Some inter-change of water and salt takes place in the

stomach; the coats of this viscus yield water to the solution, a part of which having previously become sufficiently diluted, is, on the other hand, absorbed; but the greater part of the concentrated solution of salt remains unabsorbed, and is not removed by the urinary passages; it consequently enters the intestines and intestinal canal, where it causes a dilution of the solid substances deposited there, and thus acts as a purgative.

PUTRID POISONS.—The poison of bad sausages belongs to this class of poisonous substances. Several hundred cases are recorded in which death has occurred from the use of this kind of food. In Wurtemberg especially, these cases are very frequent, for there the sausages are prepared from very various materials—blood, liver, bacon, brains, milk, meal, and bread, are mixed together with salt and spices; the mixture is then put into intestines, and, after being boiled, is smoked. When these sausages are well prepared, they may be preserved for months, and furnish a nourishing savoury food; but when the spices and salt are deficient, and particularly when they are smoked too late, or not sufficiently, they undergo a peculiar kind of putrefaction, which begins at the centre of the sausage. Without any appreciable escape of gas taking place, they become paler in colour and more soft and greasy in those parts which have undergone putrefaction, and they are found to contain free lactic acid, or lactic acid ammonia, products which are universally formed during the putrefaction of animal and vegetable matters.

The cause of the poisonous nature of these sausages was ascribed at first to hydrocyanic acid, and afterwards to sebamic acid, although neither of these substances had been detected in them. But sebamic acid is no more poisonous than benzoic acid; with which it has so many properties in common; and the symptoms produced are sufficient to show that hydrocyanic acid is not the poison.

The death which is the consequence of poisoning by putrefied sausages succeeds very lingering, and remarkable symptoms. There is a gradual wasting of muscular fibre, and of all the constituents of the body similarly composed: the patient becomes much emaciated, dries to a complete mummy, and finally dies. The carcase is stiff, as if frozen, and is not subject to putrefaction. During the progress of the disease, the saliva becomes viscous and acrid, and an offensive smell.

Experiments have been made, for the purpose of ascertaining the presence of some matter in the sausage to which their poisonous action could be ascribed; but no such matter has been detected. Boiling water and alcohol completely destroy the poisonous properties of the sausages, without themselves acquiring similar properties. Now this is the peculiar character of all substances which exert an action by virtue of their existing condition,—of those bodies the elements of which are in the state of decomposition or transposition; a state which is destroyed by boiling water and alcohol, without the cause of the influence being imparted to those liquids: for a state of action or power cannot be preserved in a liquid. Sausages, in the state here described, exercise an action upon the organism, in consequence of the stomach and other parts with which they come in contact not having the power to arrest their decomposition; and entering the blood in some way or other, while still possessing their whole power, they impart their peculiar action to the constituents of that fluid.