SAFE CURE

FOR THE KIDNEYS, LIVER AND URINARY ORGANS
THE BEST BLOOD PURIFIER.

There is only one way by which any disease can be cured, and that is by removing the cause—whatever it may be. The great medical authorities of the day declare that nearly every disease is caused by derangement of the kidneys or liver. To restore these therefore is the only way by which health can be secured. Here is where WARNER'S SAFE CURE has achieved its great reputation. It acts directly upon the kidneys and liver and by placing them in a healthy condition drives disease and pain from the system. For all Kidney, Liver and Urinary troubles, for the distressing disorders of women, and Malarial, and physical troubles generally, this great remedy has no equal. Beware of impostors, imitations and concoctions said to be just as good.

For Diabetes ask for WARNER'S SAFE DIABETES CURE.

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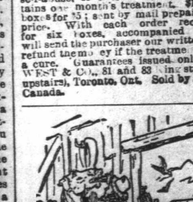
DR. E. C. WEST'S NERVE AND BRAIN TREATMENT, a guaranteed specific for Hysteria, Dizziness, Convulsions, Fits, Nervous Neuralgia, Headache, Nervous Prostration caused by the use of Alcohol or Tobacco, Wakefulness, Mental Depression, Softening of the Brain, resulting in Insanity and leading to misery, decay, and death; Premature Old Age, Barrenness, Loss of Power in either sex, Involuntary Losses and Spermatorrhœa caused by over exertion of the brain, self-abuse, or over-indulgence. Each box contains one month's treatment. $1 a box, or six boxes for $5; sent by mail prepaid on receipt of price. With each order received by us for six boxes, accompanied with $5, we will send the purchaser our written guarantee to refund the money if the treatment does not effect a cure. Guarantees issued only by JOHN C. WEST & CO., 81 and 83 King-street east (Office upstairs), Toronto, Ont. Sold by all druggists in Canada.



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THE PERRY DAVIS PAIN KILLER acts with wonderful rapidity and never fails, when taken at the commencement of an attack, to cure

Cholera, Cholera Morbus,

as well as all summer complaints of a similar nature.

For Toothache, Burns, Scalds, Cuts, Bruises, &c.

the PAIN KILLER will be found a willing physician, ready and able to relieve your suffering without delay, and at a very insignificant cost. For

Colic, Cramps,
—AND—
Dysentery in Horses,

the PAIN KILLER has no equal, and it has never been known to fail to effect a cure in a single instance. It is used in some of the largest livery stables and horse railroads in the world. To resuscitate young lambs or other stock chilled and dying from cold, a little Pain Killer mixed with milk will restore them to health very quickly.

☞ The PAIN KILLER is for sale by Druggists, Apothecaries, Grocers and Medicine Dealers throughout the world.

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The celebrated DR. H. HOLLICK, of London, has established an agency in Toronto for the sale of his medicines for the sure cure of all nervous diseases, arising from whatever cause. Enclose stamp for pamphlet, which will be sent in sealed envelope to all who address

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No preparation has ever performed such marvellous cures, or maintained so wide a reputation, as AYER'S CHERRY PECTORAL, which is recognized as the world's remedy for all diseases of the throat and lungs. Its long-continued series of wonderful cures in all climates has made it universally known as a safe and reliable agent to employ. Against ordinary colds, which are the forerunners of more serious disorders, it acts speedily and surely, always relieving suffering, and often saving life. The protection it affords, by its timely use in throat and chest disorders, makes it an invaluable remedy to be kept always on hand in every home. No person can afford to be without it, and those who have once used it never will. From their knowledge of its composition and operation, physicians use the CHERRY PECTORAL extensively in their practice, and clergymen recommend it. It is absolutely certain in its healing effects, and will always cure where cures are possible.

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PURIFIES AS WELL AS Beautifies the Skin.

Removes Tan, Pimples, Freckles, Moth Patches, and every blemish on beauty, and defies detection. It has stood the test of thirty years, and is so harmless we venture it to be sure the preparation is properly made. Accept no counterfeit of similar name. The distinguished Dr. L. A. Sayre said to a lady of the haut ton (a patient):—"As you ladies will use them, I recommend 'Gouraud's Cream' as the least harmful of all the Skin preparations." One bottle will last six months, using it every day. Also Poudre Subtile removes superfluous hair without injury to the skin.

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For sale by all druggists and fancy goods dealers throughout the U. S., Canada, and Europe. Also found in N.Y. City, at R. H. Macy's, Stern's, Ehrich's, Ridley's, and other fancy goods dealers. ☞ Beware of base imitations. $1,000 reward for arrest and proof of anyone selling the same.

AGRICULTURAL.

We will always be pleased to receive letters of enquiry from farmers on any matters affecting agricultural interests, and answers will be given as soon as practicable.

GLANDERS IN HORSES.

A correspondent says this loathsome, incurable, and contagious disease is prevalent among horses in Hastings county, and asks if steps should not be taken to prevent it spreading. This same question has recently been agitating the farmers of the Western States, but the only one that has taken, so far as we are aware, any action toward the eradication of the evil is Illinois, where the ravages of glanders became so disastrous that not only horses and mules were dying off rapidly, but even those persons who were brought in contact with the affected animals also succumbed to the disease. Unfortunately it is not generally known that glanders in the horse may be transmitted to man, and when a person has been sufficiently exposed to the virus it is only a question of time, and frequently a very short time, when a most loathsome death puts an end to his existence. Some writers, among them the editor of the *Brewers' Gazette*, say that the true nature of many obscure cases of disease and death in man has never been suspected to be glanders, but such, however, is the case, as two men, father and son, in Whiteside county, Ill., died from this disease, which several attending physicians variously diagnosed as pleurisy, pneumonia, and a malignant form of erysipelas. Soon after the death of the son the father became similarly affected, and it was only during the last few days before the death of the latter that the true nature of the disease was suspected, from the circumstance that five glandered horses, contained in this man's stable, had been treated by both him and his son. This occurrence caused considerable excitement in all parts of the State, and public opinion became so pronounced that a bill was introduced in the Senate authorizing the expenditure of $10,000 to prevent the spread of all contagious diseases in horses, mules, and asses, the money to be expended under the direction of the State veterinarian. The bill provides for the destruction of affected animals and the imposition of fines, ranging from $50 to $500, on persons who do not report all cases to the proper authorities. This will no doubt have a good effect, as the State veterinarian has inaugurated a lively crusade against the owners of diseased animals, and before long glanders and farcy will be comparatively unknown in Illinois. If the disease is spreading as rapidly as our Hastings correspondent says it is in his locality, something should be done to abate it, and the only way to successfully bring about a remedy is for the farmers to agitate the question themselves. We would like to hear from subscribers in other districts where this disease may prevail, and will give them all possible assistance to thoroughly ventilate the subject and secure a remedy if needed.

THE RAIN AND THE CROPS.

The farmers who are to be seen vending their bucolic wares at the market on various mornings are not so contented-looking nor independent as tillers of the soil usually seem to be. On the contrary, the rustic brow wears a look of uneasiness not often seen, and as they gather in small knots and converse they all have the same topic, the cause of their anxiety, viz., the heavy rains. A MAIL reporter yesterday interviewed several of the farmers with regard to the prospects of the crops in their vicinities. They universally expressed concern at the aspect of affairs, and hoped devoutly that a change for the better in the weather was at hand, which would give the low-lying districts a chance. The first farmer spoken to was one from York. In answer to a question he said:

"Yes, the rain has done a terrible amount of damage in our township, especially in the lowland districts. The barley, peas, and potatoes are the most damaged. Some farmers are ploughing up their potatoes. The fall wheat will be about an average, and the spring wheat is about even with it. The fruit crops are also suffering, but I think they were damaged at first by the late frosts. The hay crop is pretty heavy, but if we have to cut and lay it on soaking ground, the loss will be great. Oats are also damaged, but may be saved if the weather changes, and we get a dry spell."

A Markham farmer spoke in the same vein as regards the damage done by the rain, but said that compared with other townships they were fortunate. The crops were doing pretty well, and would be an average. "If we have another week like last, however," he said, "it will

JUST ABOUT FINISH US,

as we had a good deal of rain. The fall wheat is not extra, being badly hurt by the late frost. It has a look as though it might spring up. The fruit and root crops are looking very well."

An upper Markham farmer said that the crops were doing well; the rain had been heavy lately, but not done very much damage. They compared favourably with those of Markham.

A county Huron farmer said that the rain had done considerable damage in that vicinity. The fall wheat would not yield eight bushels to the acre. Where the spring wheat was not drowned out it would be very fair. The pea crop, especially that in the low lands, would be bad. In the high land it would be good. The hay crop would be a success, but the potato crop was sure to be a failure. In some places they were rotting out of the ground. In coming through to Toronto he saw many fields on which the farmers would realize nothing. The garden and apple crops were light, but the fall fruit would probably be a success.

A farmer who had travelled around considerably lately, said that in the township of Whitchurch the crops were above the average owing to its being high land. The fall wheat, however, would not be over half the usual crop. Oats were above the average, as also were peas. Potatoes looked well. The barley and rye crops were good.

At Georgina, the crops were

BELOW THE AVERAGE.

The fall wheat would not average one-half. The spring wheat and oat crops would be about the average. The barley was suffering from the wet; also the potato crop, the land being too low. It had rained there heavily almost every day lately. The hay crop would be above the the average.

At North Gwillimbury, the crops will average about the same as last year, with the exception of that of fall wheat, which will average about half. The spring is slightly better than this. The barley and oat crops will be good. There has been too much wet, however, for the peas. East Gwillimbury tallies pretty well with North.

Pickering township has been somewhat fortunate in everything except her fall wheat crop, but the farmers did not sow much of this. The hay crop will be a long way above the average this year, as also will the oat crop. The peas look well, also the root crop.

At Vaughan the crops look well, with the exception of hay, which has suffered from the rains. Of the potatoes which come up the appearance is good, and they may be sound if the weather keeps dryer. The fall and spring wheat are heavy, especially the latter. Should more rain fall, however, it is certain that the fall wheat will rust, as its appearance tends slightly that way. The oat crop is good, but the barley is spoiling.

At Brampton the peas show the most effects of the weather. The hay is good, but the farmers fear they will lose it after it is cut, as the land is soaking, and the hay will have to be pitched in pools of water. The potatoes look well, also barley, but the potatoes have been badly hurt.

At Scarborough the potatoes have suffered the most. The hay crop is a very heavy one, and cutting has already begun in some places. The peas have been slightly damaged; the barley fair. The fall wheat and apple crop will not reach the average. Spring wheat is promising. It is believed, however, that if another rainfall occurs like that of last Wednesday the crops will be ruined.

At West Williams the fall wheat will not average one-half of that of last year. The potatoes look bad, and the pea crop is in the same condition. The oats will average the same as last year, as will also the apple crop.

At Uxbridge the crops compare with those at Whitchurch.

At Scott township the crops are above the average, except fall wheat. The hay is very good.

LIVE STOCK.

The Jersey bull Monogram, 7555 American Jersey, C. C. H. register, has been transferred to V. E. Fuller, of Hamilton, Ont., by W. Rolph.

If corn is fed whole to animals it should at least be soaked twelve to twenty-four hours. This will improve its digestibility, and when the farmer is distant from a mill is an economical substitute for grinding.

Williams & Hastings' sale of Kentucky short-horns took place in Dexter park, Chicago, last week, when 48 animals were sold at an average of $389.68. Corwin Anderson sold at the same place 47 head, the average being $301.36.

John Hope, Brantford, Ont., purchased at Anderson's sale of Kentucky short-horns, at Chicago, a cow calf for $170; Princess Maud 4th, red roan, calved Feb. 7th, 1882, for $530, and Mosette 5th, red and a little white, calved May 4th, 1882, for $320.

At Anderson's sale of Kentucky short-horns in Dexter park, Chicago, recently, R. Gibson, Delaware, Ont., purchased Fame 3rd, red and a little white, calved Aug. 12th, 1880, for $200, and Darlington 8th, red and some white, calved Aug. 30th, 1877, for $415.

A great many old farmers believe that the breed of hogs is determined by the amount of corn in the crib. It is certainly true that the best-bred hogs require most liberal feeding. In fact, it is one of the advantages of a good breed that it will make better use of the greatest amount of feed than a poor animal. But a half-starved pig of the best breed is the worst kind of a scrub.

Cattle and sheep should always have plenty of shade in the pasture. They like when they have eaten enough to lie down in a cool shade and take their comfort, and if they can do so, they will thrive much better. A few shade trees for this purpose will pay well for any drain they may make upon the fertility of the soil. If there are no trees it will pay to erect a cheap shed, even though it be but a rude structure of four posts set in the ground and a roof covered with brushwood or pine limbs. It should be open to the north always, and may be open on all sides if more convenient. The effect of a blazing sun upon a cow's back when lying down seems to be more marked than while she is feeding, and cannot fail to make the animal feverish, and thus injure both the flavour of the milk and its keeping qualities.

Ewes will produce larger and better lambs, says a writer, if they are in good, plump condition at the time of coupling. If not in fair condition they should be gaining and kept improving until they reach the desired condition; they will not breed well when loaded with fat. Those having lost their lambs or failed to breed are liable to become too fat to become sure breeders. When this is the case they should be placed on short pasture so as to reduce their weight. The use of valuable ewes is sometimes lost for a year or two by allowing them to become filled with fat. Such ewes are valuable; their inclination to take on fat readily is a good point, but requires guarding that it may not impair their proliticacy.—*Exchange.*

Feed the Cows well in Summer.

The customary loss from poor and scanty feed in midsummer, when grazing is the chief dependence for the summer feed for the herd, is about two-fifths of what would have been the yield if full feeding of green food had been supplied through the entire season. When a herd has been permitted to shrink from drought, it not only gives less milk through all the remaining part of the season, but it dries up entirely very much sooner than when the flow is kept right up to its maximum measure all the time. Herds which are full fed, go dry on an average only about one month in the year, while those which suffer from a drought six to ten weeks in the hot part of the season, with no extra feed, go dry on the average about three months. Animals pinched in the summer get poor and worthless in vigour, so that they do not stand the winter well, and yet it costs more to winter such a herd than it does a flesh one. To subject cows to a lack of feed when they should be doing their best brings disaster in every quarter, and inflicts losses upon the owner which keep him struggling with poverty from year to year, and is distressing and discouraging, make him dissatisfied with his business, and life an up-hill journey.—*Live Stock Journal.*

Swine in Summer.

We think there is usually a great mistake made in the belief that hogs will fatten better in a high temperature. Writers tell us that it requires double the feed in winter to keep up the animal heat, and that, therefore, there is a large margin in favour of the summer feeding of swine. It is all an error. Summer is no time to feed hogs. A fat hog in warm weather is a burden to itself, and that being so, it must require an additional amount of food to sustain the wear which comes from excitement. Swine do not require a high temperature. If they are protected even in winter from storms and winds, they will stand the cold without detriment. At the beginning of winter—when we usually have fine weather—we will find fat hogs lying out in the open air, not bunched together, but lying contentedly by themselves. It never was intended to cook a hog before it was butchered. All we want for our hogs in summer is grass, and we never begin to feed until early fall. Upon grass alone the animal will make good solid development. It will look a little angular and thin, but the bone and muscle, the foundation for a large hog, will be there. Just as soon as corn is fit to feed, we begin to feed it gradually, until in about three weeks the animal can have all he will eat. Then you will see it lay on fat rapidly. There is no excessive heat; flies to bother it. It has nothing to do but to eat, sleep, and become fat. As may be needed, we feed middlings, or such other foods as may be required to keep up the muscular system. Thus the hog evenly develops, and it may be kept growing all through the winter, and the food be as economically disposed of as at any time during the summer.—*Western Rural.*

THE FARM.

The farmers in North Essex are well on with their haying, and report a good yield.

The earlier clover is cut the better it will yield the second growth, and the better chance for a crop of clover seed.

If meadow is free from stones clover can be cut close to the ground, not only without injury, but also with decided benefit to the second growth.

A little timothy or June grass in the clover greatly helps it to cure quickly. Clover alone is too full of juice, and its thick stems dry out slowly.

The "sweating" which clover hay gets in the field is what is needed to prevent injurious heating after it is put in the stack or mow. After once sweating a little it is comparatively safe if got in free from rain or dew.

A top dressing of 50 to 100 pounds of plaster per acre will be of great benefit to young clover plants after the shade of growing grain is removed. It will also stimulate the second growth of clover after mowing and to some extent protect the roots from the dreaded clover root worm.

Buckwheat is commonly sown too thickly. Three pecks per acre is enough seed on fair land, and if very rich, a half bushel is still better. With plenty of room the plants assume a spreading habit, and the grain is more apt to be plump than where the crop is crowded and thereby stunted.

The Illinois State entomologist reports vast numbers of Hessian fly now in a dormant condition. They are so low down in the stalk that they are left behind in the stubble when the wheat is cut. This is true of the entire winter wheat region of Illinois. He advises that the stubble be burned at the earliest possible moment.

Hog manure should not be used on land intended for cabbages for at least a year before the crop is grown. Its premature use is a mistake commonly made by farmers who draw manure for the garden from their hog pen. Hog manure breeds worms that work at the roots of cabbage plants, and render them valueless.

The advantage of harrowing corn and young potatoes is that it can be performed so quickly. Twenty acres with a brisk walking team may be harrowed in a day, and it answers the purpose of cultivation when the use of a cultivator, not to mention a hoe, is not to be thought of. Between frequent rains, when it is impossible to do anything else, the harrow may be brought into use.

The judges appointed to examine the farms entered for competition for the prize offered by the Agriculture and Arts Association for the best managed farm in the province have commenced their labours. The number of entries being very great, a reduction has had to be made in those taking part in the competition, York county being limited to five. Yesterday the judges inspected the farms of Messrs. David Smiley, West York, and Wm. Rennie, of Markham, and to-day those of Messrs. Wm. Mulligan, Simpson Rennie, and George Morgan, of East York. Their decision will not be known for some time.

If rain storms come just as the wheat is in blossom the water is apt to wash off the pollen and make some berries missing in the places where they should be. It is generally the upper portion of the ear that is thus destroyed. Quite often a crop that looks to be good will be lessened one-third to one-half in threshing. Some varieties have more open heads than others, and are therefore more liable to injury from this cause. The Mediterranean wheat very rarely sets as many grains as the head has room for; but with dry weather, when the wheat is in blossom, it sometimes does so, and large crops are then produced.

Some of the worst insect pests in this country were imported from Europe, and are the more destructive here because the parasites that kept them in check there were not always brought over at the same time. The Hessian fly gets its name from having originated in some straw brought by Hessian soldiers sent to this country in our revolutionary war. It had a parasite at home, and it is only of late years that it has found its way here. Now the Hessian fly is as nearly as destructive as formerly, only appearing in localities where its parasite has been temporarily lessened in numbers. The cabbage worm is another pest with a parasite, but the latter has reached only a few localities.

Root Culture.

A common mistake in growing roots is sowing too early and aiming at large size rather than quality. A medium-sized root quickly grown is much better than one planted so early that before time for digging it has become pithy, stringy, and tasteless. Roots are not really grown simply for the nutriment they contain, but as appetizers and to promote the digestion of other food. We have sown sugar beets up to the middle of June and turnips to the first of August, and had crops easily grown and requiring less labour in cultivation than in harvesting. If thoroughly cleaned once, these root crops soon shade the ground, and make future weed growth almost impossible. To do this easily and cheaply, however, the rows must be so straight that nearly all the work can be done by machinery. The weeds must be killed when the slightest scratch of the surface suffices for their destruction. In this way it is not difficult to grow parsnips, and even carrots, the fine delicate leaves of which, when they first emerge from the ground, are the plagne of farmers whose rows are at uneven distances, in crooked lines, and only to be distinguished by the growing plant.

In ordinary planting it is important to put in plenty of seed, such a quantity, indeed, that the hoe may be used rather freely at first, leaving a sufficient number of plants to grow to maturity. True, it may look somewhat wasteful at first sight to cull out the plants while small to six or eight inches apart, but such are the demands of successful culture. Indeed, for coarser growing sorts of roots a wider distance apart in the rows will at the harvest give more weight per acre. The thinning process will be weak point in growing roots as commonly grown by the average farmer. Where two or more roots touch each other neither is worth harvesting, and with deep rooted plants, like carrots, having small tops while young, if the thinning be not done early it will probably not be performed at all, or be accomplished with so much damage to the remaining plants as to be of comparatively little advantage.

Of the different kinds of roots the white turnips and sugar beets are best adapted to early winter feeding. Carrots are good at any season. Swedish turnips are better than the early varieties after midwinter, while for late use mangel wurtzel are best of all. Parsnips may be left in the ground all winter; but not many of these should be grown unless to be sold, as the top sprouts very early in the spring, and soon thereafter the root is of little value for feeding. Unless a portion of the parsnip crop is stored in the cellar, where it can be got at during winter, there is apt to be an over-supply in the spring, which we have never found to occur with any other root.—*American Cultivator.*

THE POULTRY YARD.

A shovelful of dry earth thrown daily over the floor of the hen-house will absorb foul odours, and by fall the whole mass may be worked fine and applied to the wheat. It makes a valuable manure, and by sifting to exclude sticks and stones, it may be drilled with the seed or mixed with other fertilizers thus applied.

Fresh burned lime, if given to fowls and they swallow any of it, will cause inflammation of the crop, and possibly death may follow. The mucous membrane of the crop is very sensitive, and the effect of caustic lime upon it may be realized by a person who will put a little of the lime in his mouth or the eye. When lime is given to fowls it should be in the mild or carbonated state, as in the form of powdered oyster shells, bones, or old mortar. No doubt fowls require more lime than they can procure in their food or in the gravel they may pick up, and the best manner of giving this is in the way above mentioned.

A correspondent of the *Country Gentleman* says regarding chicken cholera:—"I finally used a strong tea made of white oak bark, which I used in the drinking water as a preventive. When a fowl was taken sick I used it pure, giving several teaspoonfuls at a time, four or five times a day. I have taken fowls so far gone that they were past eating and drinking, and cured them in a few days with this simple remedy. As a disinfectant I use crude carbolic acid, pouring it on boards in the chicken-house, and on the perches, coops, etc., or anywhere the fowls frequent."

There is no need of hens or chickens being destroyed by lice; an occasional washing of the roosts in kerosene, early in the day, so that it will not be too strong when the hens go to roost at night, a little sulphur in the nests of either sitting hens or layers, or a few onion skins, and an occasional feed of chopped onions to the young chicks, or the hens that are sitting, are all good protection against vermin. Do not feed onions to laying fowls unless you like the flavour of onions in your eggs, nor even then if you produce eggs to send to market, as other people may not like it.

Scabby leg in poultry is caused by a minute insect that burrows beneath scales upon the leg. An occasional washing of the roosts with kerosene oil is an excellent preventive, as it is also against other vermin. If the disease has started in the flock, then wash the turkeys with a mixture of one-half water and one-half kerosene. Repeat the application in a week if a cure is not effected by the first wash. Do not use the wash too strong lest it cause swelling of the legs, or even paralyze them. In a very bad case separate the diseased fowl from the others, use the solution weaker than above, and repeat in three days.

Full-grown hens will eat very nearly one bushel of corn each per year. The larger varieties being less active than the smaller ones, are content with about the same quantity of food, though with other stock the amount of food consumed is generally in proportion to the live weight. Some poultry keepers claim that there is but little difference in the amount used in the first year of the life or the second, the voracious appetite of the half-grown chicken making up for the amount saved while they are small. Four dozen eggs at 25 cents a dozen pays the hen's keeping when corn is a dollar a bushel, and a hen one year old, if well taken care of, ought to lay ten dozen eggs during the subsequent year.

Feeding Young Chickens.

Fanny Field says on this subject:—We begin with hard boiled eggs and stale bread moistened with milk. After a few days of this we feed cooked oatmeal, cornmeal, and cooked potatoes, and as soon as they can swallow the grains, cracked corn and wheat. We feed every two hours for the first week, and afterwards five times a day. The early chicks that are kept indoors are supplied with gravel and green food, and all our chicks, early and late, have all the milk they can drink. Occasionally we give a little cooked meat, but with the milk it is not absolutely necessary. All the food is slightly seasoned with salt, and an occasional dose of pepper in the food will tend to prevent gapes. Twice a week we feed bone meal at the rate of a heaping tablespoonful to a pint of cooked food.

The coop for young chicks must be dry, free from vermin, and should often be moved to a fresh spot of ground.

Egg-Eating Hens.

Most poultry raisers have agreed that the only cure for an egg-eating hen is to eat her. But a correspondent of the *Ohio Farmer* has found another cure in clipping their bills, and tells how to do it as follows:

"Take either a sharp pair of hoof-clippers, or a very sharp pair of small shears—I prefer the latter—and cut the longest bill off, whether it be the upper or lower. You will find the upper the longest generally. Do not cut more than one-tenth of an inch above the pink line running near the point of the bill, and do not cut above that line if you can clip the sharp point off without. You will not, probably, find it necessary to clip all your hens, for out of twenty-five not more than ten may be egg-breakers, though all may be eggeaters. You can tell the worst ones by the feathers of the head and neck. They will be dirty, and with yolk adhering in places. You may be inclined to argue that this is cruel. I agree, but it will not hurt it out their bills off, we shall have to cut their heads off. What makes it seem most cruel to me is that it must be repeated once in two or three months, as their bills will grow out sharp again."

ONTARIO AGRICULTURAL COLLEGE

Results of the Midsummer Examinations.

GUELPH, July 3.—The results of the midsummer examinations of the above institution are as follows:—

PASSED IN ALL SUBJECTS.

First Year (ranked according to standing in general proficiency).—1, Carpenter, P. A.; 2, Macdonald, W. A.; 3, Wark, A. E.; 4, Ballantyne, A. W.; 5, Black, P. C.; 6, Hubbard, W. W.; 7, Miller, J. P.; 8, McKay, J. B.; 9, Wroughton, T.; 10, Sharman, H. B.; 11, Little, W.; 12, Powys, P. C.; 13, Lehmann, A.; 14, Butler, G. C.; 15, Ardagh, A. E.; 16, Thornton, T.; 17, McPherson, D.; 18, Westlake, G.

Second Year (ranked according to standing in general proficiency).—1, Robertson, W.; 2, Willis, W. B.; 3, Jeffs, H. B.; 4, Slater, H.; 5, Fotheringham, W.; 6, McPherson, D.; 7, Garland, C. S.; 8, Schwartz, J.

HONOUR LIST—FIRST YEAR.

Agriculture.—Class I.—1, Macdonald, W. A.; 2, Carpenter, P. A.; 3, Ballantyne, A. W. Class II.—1, Little, W.; 2, McKay, J. B.; 3, Hubbard, W. W.; 4, Sharman, H. B.; 5, Black, P. C.; 6, Lehmann, A., and McGregor, J.; 8, Ardagh, A. E.; 9, Wark, A. E.; 10, Miller, J. P., and Wroughton, T.; 12, Powys, P. C.; 13, Shaw, E. E.; 14, Buckingham, F.; 15, Black, D. A.; 16, Westlake, G., Courbarron, F. H., and Jordan, A. W.

Geology.—Class I.—1, Macdonald, W. A.; 2, Wark, A. E.; 3, Carpenter, P. A.; 4, Sharman, H. B.; 5, Lehmann, A.; 6, Ballantyne, A. W.; 7, McKay, J. B. Class II.—1, Wroughton, T.; 2, Butler, G. C.; 3, Little, W.; 4, Hubbard, W. W.; 5, Ardagh, A. E.; 6, Powys, P. C.; 7, Black, P. C.

Botany.—Class I.—1, Carpenter, P. A.; 2, Lehmann, A.; 3, Powys, P. C.; 4, McKay, J. B.; 5, Black, P. C.; 6, Wark, A. E.; 7, Macdonald, W. A., and Hubbard, W. W. Class II.—1, Steers, O.; 2, Miller, J. P.; 3, Wroughton, T.; 4, Ballantyne, A. W.; 5, McGregor, J.; 6, Sharman, H. B., and Little, W.; 8, Ardagh, A. E.; 9, Hannah, J.

Materia Medica.—Class I.—1, Miller, J. P.; 2, Carpenter, P. A.; 3, Hubbard, W. W.; 4, Wark, A. E.; 5, Macdonald, W. A.; 6, Butler, G. C.; 7, Ballantyne, A. W.; 8, Shaw, A. G.; 9, Black, P. C. Class II.—1, Wroughton, T.; 2, Little, W.; 3, Lehmann, A.; 4, Erskine, H. E., and Ardagh, A. E.; 6, Courbarron, F. H.; 7, Powys, P. C., Lane, H. R., and Sharman, H. B.; 10, Shaw, E. E.; 11, Braun, P. E.; 12, Smith, E. P.; 13, McGregor, J.; 14, Steers, O.; 15, Wilson, T. G.; 16, Mohr, A.; 17, McKay, J. B.

English Literature.—Class I.—1, Miller, J. P.; 2, Black, P. C.; 3, Carpenter, P. A.; 4, Macdonald, W. A. Class II.—1, McKay, J. B.; 2, Powys, P. C.; 3, Courbarron, F. H.; 4, Wroughton, T.; 5, Shaw, E. E.; 6, Shaw, A. G.

Mensuration.—Class I.—1, Wark, A. E.; 2, Little, W.; 3, Sharman, H. B.; 4, Carpenter, P. A.; 5, McKay, J. B.; 6, Ballantyne, A. W.; 7, Wroughton, T.; 8, Macdonald, W. A. Class II.—1, Westlake, G.; 2, Powys, P. C.; 3, Butler, G. C.; 4, Hubbard, W. W., and McGregor, J.; 6, Erskine, H. R.; 7, Black, P. C.

SECOND YEAR.

Agriculture and Live Stock.—Class I.—1, Jeffs, H. B.; 2, Robertson, W., and Willis, W. B.; 4, Fotheringham, W.; 5, Slater, H. Class II.—1, Garland, C. S.; 2, Saxton, E. A.; Holcroft, H. S., and McPherson, D.; 5, Rennie, E. A., Austin, W. E., and Luton, E. E.; 7, Smith, L.; 8, Mathewson, G.; 9, Tourangeau, A., and Ross, S. M.

Handling and Judging Cattle.—Class I.—Willis, W. B., Robertson, W., Jeffs, H. B., and McPherson, D. Class II.—1, Fotheringham, W., and Luton, E. E.; 3, Saxton, E. A.; 4, Austin, W. E., and Mathewson, G.; 6, Schwartz, J., Rennie, E. A., and Garland, C. S.; 9, Smith, L., Slater, H., Ross, G. M., and Holcroft, H. S.; 13, Eddington, D. C.

Handling and Judging Sheep.—Class II.—1, Willis, W. B.; Fotheringham, W., and McPherson, D.; 4, Austin, W. E., Eddington, D. C., Jeffs, H. B., Luton, E. E., Robertson, W., and Saxton, E. A.; 10, Mathewson, G., and Garland, C. S.; 12, Holcroft, H. S., Paton, G. C., Rennie, E. A., and Schwartz, J.

Horticulture.—Class I.—1, Robertson, W.; 2, Willis, W. B.; 3, Jeffs, H. B., and Fotheringham, W. Class II.—1, Austin, W. E.; 2, Slater, H.; 3, Tucker, H. V., and McPherson, D.; 5, Saxton, E. A.; 6, Rennie, E. A., and Luton, E. E.; 8, Schwartz, J.; 9, Eddington, D. C., and Paton, G. C.

Systematic and Economic Botany.—Class I.—1, Robertson, W., and Slater, H.; 3, Fotheringham, W. Class II.—1, Jeffs, H. B.; 2, Willis, W. B.; 3, Garland, C. S.

Analytical Chemistry.—Class I.—1, Slater, H., McPherson, D.; 3, Robertson, W.; 4, Jeffs, H. B.; 5, Willis, W. B. Class II.—1, Garland, C. S.; 2, Fotheringham, W.; 3, Saxton, E. A.; 4, Schwartz, J.

Material Medica.—Class I.—1, Fotheringham, W.; 2, Robertson, W.; 3, Slater, H.; 4, Jeffs, H. B. Class II.—1, Willis, W. B., and McPherson, D.; 3, Garland, C. S.; 4, Rennie, E. A.; 5, Schwartz, J.; 6, Austin, W. E.; 7, Matthewson, G.

Veterinary Obstetrics.—Class I.—1, Robertson, W. Class II.—1, Jeffs, H. B., and Fotheringham, W.; 3, Slater, H.; 4, Schwartz, J.; 5, Willis, W. B.; 6, Luton, E.

Handling and judging horses.—Class I.—1, Fotheringham, W.; 2, Robertson, W.; 3, Willis, W. B., and McPherson, D.; 5, Garland, C. S.; 6, Holcroft, H. S.; 7, Jeffs, H. B. Class II.—1, Schwartz, J.

English Literature.—Class I.—1, Robertson, W.; 2, Slater, H.; 3, Fotheringham, W.; 4, Willis, W. B. Class II.—1, Tucker, H. V.; 2, Jeffs, H. B.

Surveying and road-making.—Class I.—Willis, W. B.; 2, Jeffs, H. B. Class II.—Roberson, W.; 2, Austin, W. E.; 3, Fotheringham, W., and Slater, H.; 5, Smith, L.; 6, McPherson, D., and Tucker, H. V.

Practical work in outside departments.—Class I.—1, Robertson, W.; 2, Jeffs, H. B.; 3, Willis, W. B.; 4, Fotheringham, W.; 5, Holcroft, H. S.; 6, McPherson, D.; 7, Paton, G. C. Class II.—1, Austin, W. E.

THE TORONTO EXHIBITION.

Meeting of the Association Board Last Evening—The Secretary Reports Progress—Indications of a Successful Fair.

A meeting of the board of directors of the Industrial Exhibition Association was held on Tuesday in their new offices, Free Library buildings, Mr. Wm. Rennie, vice-president, in the chair. There were present:—Ald. Leslie, Messrs. Jas. Fleming, G. McGee, R. Davies, G. Booth, A. McGregor, J. E. Mitchell, D. C. Ridout, W. G. McWilliams, solicitor to the association; and H. J. Hill, manager and secretary.

THE MANAGER'S REPORT.

Mr. HILL, the manager and secretary, reported on his recent visit to Chicago, in compliance with the recent instructions of the board. He spent two days in interviewing exhibitors at the Railway Exposition, and left prize lists with more than two hundred manufacturers with the view of inducing them to exhibit at the Toronto Exhibition, some of whom promised to instruct their agents in Canada to do so, others promising to send exhibits direct. Owing to the existing special arrangements made solely for the Chicago Exposition, he was unable to secure any of the old railway engines and curiosities, but Mr. Peters, the English Commissioner, kindly promised to bring the matter before the English railway companies represented there on his return home. Interviews were had with electricians and others on the subject of an electric railway, and as far as can be ascertained at present, there is every chance of having a complete electric railway at a very reasonable cost. During the past few weeks many manufacturers in the western portion of the province have been visited, and the prospects for a very large exhibit in every department are unusually good. In the machinery department there is promise of the best display ever had, nearly all the manufacturers who have been absent during the past three years having stated that it is their intention to make large exhibits. Every foot of space in the implement building has been applied for. The railway companies have promised favourable terms to visitors and exhibitors. Satisfactory progress has been made with the various electric light companies, and it is probable that some five or six companies will be exhibiting, both the "arc" and "incandescent" systems being represented.

ADDITIONAL PRIZES OFFERED.

An addition to the prize list for Ayrshires was made, three prizes of $30, $20, and $10, respectively being offered for the best, second, and third best exhibits of four calves under one year old, bred and owned by the exhibitor.

A letter was read from Mr. C. G. Houston, of Muskoka, representing the advantages of offering prizes for the best bred bull of any age and breed, and for the best herd, three females and bull, owned and used in the districts of Muskoka, Parry Sound, and Algoma, for at least twelve months, as it would tend to encourage stock-raising suitable for Toronto buyers.

Mr. HILL stated that it was against the rules of the association to offer local prizes. The York County Council had suggested that a prize should be offered solely for the county, but it had been refused for the reason he had mentioned.

The matter being considered an important one, Mr. Davies offered a prize of $25 for the best herd, and Mr. McWilliams a prize of $15 for the best bull.

MISCELLANEOUS.

A committee was appointed to consider the question of refreshment booths, with instructions to report at the next meeting.

It was decided to raise the floor of the machinery building, and to erect additional water closets in different parts of the grounds.

Designs for new prize tickets were approved of, and the meeting then adjourned.

NOTES.

The selection of Saturday, September 15th, as school children's day is meeting with general approval. The secretary has already received intimations from school teachers in twenty different places in the province to the effect that pupils from their schools will attend.

The question of having balloon ascents is receiving the serious attention of the board.

THE U. S. WHEAT CROP.

After a most persistent refusal to admit that any serious damage had been done to the American wheat crop, it is at last find several States authorities reduced to "accept the inevitable," and admit that they are not going to have a repetition of last year's crop. This was done in the first instance by the *Indiana Farmer*, which admitted the condition of wheat in Indiana and Ohio to be 65 per cent., and in Illinois 52 per cent. of an average on the 1st inst. Then we had the Cincinnati *Price Current* estimating the yield of fall wheat at 210 millions, and that of spring at 130 millions of bushels, or a total of 440 millions against 504 millions last year. Now comes the New York *Produce Exchange Weekly* of the 6th inst., confessing that—"The winter wheat crop in the United States will be considerably deficient when compared with the fine crop of 1882, but the output has now better promise than a month ago. What the deficiency shall be will not be determined till the threshing shall have been completed. It may be fifty millions or eighty millions bushels." And, finally, we have in *Bradstreet's* of Saturday a most elaborate review of the whole situation, based on mail advices from the larger wheat growing States, bearing a nearly uniform date of June 16. These are supplemented with special telegrams received on Friday from the principal winter and spring wheat-growing States, and which dwell particularly upon the changes since the middle of June. It is said that the chinch bug,