Colonial Farmer.

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Miscellaneous.

A city young man who read: "Now is the time for husking bees," chased a bee fifteen minutes to ascertain what kind of a husk it had on.

A poor young man remarks that the only advice he gets from capitalists is to "live within his income," whereas the difficulty he experiences is to live without an income.

"Did you know," said a cunning Yankee to a Jew, "that they hang Jews and jackasses together in Portland?" "Indeed! then it is well that you and I are not there," retorted the Jew.

A good little boy who was kicked by a mule did not say naughty words or go home crying to his mother. He just tied the mule within five feet of a bee-hive, backed him round to it and let him kick.

Nellie has a four-year old sister Mary, who complained to mamma that her "button shoes" were "hurting." "Why, Mattie, you've put them on the wrong feet." Puzzled and ready to cry, she made answer. "What'll I do, mamma? They's all the feet I've got!"

STRENGTH OF VEGETABLES.—A short time since the asphalt flooring of a skating rink in London appeared to be "blistered" in several places, and it was found that this was caused by the forcing up through seven inches of concrete of some asparagus plants the roots of which had been left in the ground, which had been part of a garden.

DOSING VERMIN.—"Several correspondents write to announce the complete extirpation of rats and mice from their cow-stalls and piggeries since the adoption of this simple plan: A mixture of two parts of well-bruised common squills and three parts of finely chopped bacon is made into a stiff mass, with as much meal as may be required, and then baked into small cakes, which are put down for the rats to eat."—*English Standard.*

GREGORY'S SEED CATALOGUE.—Our readers will find the catalogue of J. J. H. Gregory's well known seed house advertised in our columns. To handle seed with such conscientious care as to dare to warrant their freshness and purity, is of that class of bold, brave acts which the public appreciate. Though the warranting is of necessity limited to refunding the value of the seed purchased, still, under it, Mr. Gregory must sell good seed or make a dead loss.

Mr. Atkinson is a farmer. He wrote to a commission house: "I will send you the finest butter next week you ever saw. The first lot will weigh about sixty pounds. Will divide the proceeds of the sale with you" Encouraged by the liberal terms of the offer, the firm announced to their friends on 'change that they were prepared to receive orders for the finest butter ever sent to market. The butter arrived as promised, but it was in the form of a most ferocious goat of enormous size, who was no sooner liberated from his crate than he commenced a career of the most unbridled villainy.

DOMESTIC HINTS.—It has been commonly stated that germination would not take place in seed below the freezing point of water. M. Uloth, however, states that seeds of triticum, and indeed other seeds also, were found to germinate when placed in grooves formed by blocks of ice.

Put potatoes into boiling water salted to the taste, and keep them boiling till a fork can be passed through them. Drain off the water, uncover them and let the steam escape, and if they fail to be mealy nothing will make them so.

WINDOWS IN STABLES.—The matter of windows in stables is one of vastly more importance than some farmers think. Animals, no more than vegetables, can thrive in the dark. Our long winters are sufficiently trying to the constitutions of our farm stock, under the best circumstances, and an animal upon which the sun scarcely shines at all for five or six months will come out in the spring in a bad state of health, even though the feed, ventilation and temperature have been all right.—*Plowman.*

Oatmeal is an important and valuable article of food. With the exception of Indian corn, it is richer in oily or fatty matter than any of the other cultivated cereal grains, and its proportion of protein compounds exceeds that of the finest wheaten flour. So that both with respect to its heat and fat making, and its flesh and blood making principles, it holds a high rank.

HORSES SHOULD BE TAUGHT TO WALK.—It is easier to find horses which can trot well than those which can walk well. Whether for farm use or the saddle, horses should know how to walk well. The farm horse has to do most of his work in a walking gait, and it is great satisfaction to the rider, for a saddle horse to have a fine and sprightly walk.—*Pen and Plow.*

The Hartford *Courant* says that at a recent breakfast in a Massachusetts town an elderly gentleman, having been aided by one of the ladies present in some trifling service, asked the old question, "What should we do without the ladies?" and received the customary answer: "Have a stag nation." Shortly afterward one of the ladies was honored with some pleasing recognition, eliciting the inquiry, "What should we do without the gentlemen?" when a Hartford lady responded on the impulse of the moment: "Have a doe nation."

A police inspector, being informed that a restaurateur was serving game out of season, visits the restaurant in plain clothes and orders dinner.

"Waiter, partridge for one." The inspector finishes his dinner leisurely, and then says to the waiter, "Ask the boss to step this way a minute." "What for?" "I wish to notify him to appear in court to-morrow and answer for selling partridges out of season. I am the police inspector, and have secured the necessary evidence against him." "It wasn't partridge you had." Police inspector, (uneasily.) "What was it, then?" Waiter (cheerfully.) "Crow."

GREEN FOOD FOR HENS.—A daily ration of green food is actually necessary for laying hens. Vegetables, either cooked or raw, are much relished also, and serve in some measure to supply the place of green diet. Onions chopped fine and mixed with their food are exceedingly wholesome, and if not a cure are certainly a preventive of disease in many instances. Growing chickens are more anxious for green food than laying hens. They crave it, and when necessary to be housed from it on account of inclement weather, it should be provided for them. There is no green food so wholesome for them as onion tops cut up fine.

THE BREAKFAST TABLE is one of the very best humorous papers published in this country, and strongly merits the phenominal success it has received. Aside from its quaint and original humorous department it is a first-class family newspaper in every respect. Pure in tone and healthful in influence. It is widely quoted, and the person who has not had a hearty laugh over its witty sketches is behind the times. The paper may be obtained through any newsdealer, and we presume the publishers—E P Brown & Co., Cincinnati, Ohio—will cheerfully send specimen copies to all applicants enclosing stamp for return postage.

FOOD FOR SITTING HENS.—The requirements of a sitter differ from those of other hens. Owing to her keeping quiet and without exercise, not much is required to sustain vitality, and that should be of such nature as to digest slowly. For this reason whole grain is preferred and corn is thought to be much the best. Soft feed of any kind is soon digested, and the hen becomes hungry, and either leaves her nest too frequently or else becomes very poor. The advantage of corn over other grain is that it is more oleaginous and not so likely to stimulate the production of eggs, and, being hard and compact, it digests much slower than other grain. A run upon the grass is always beneficial to sitting hens. Meat should be avoided.—*Journal and Record.*

THE ALDERNEY BREED OF CATTLE.—The Channel Island breed of cattle, popularly known in England as "Alderneys," consists of two classes of the same breed. The Guernsey is the larger of the two, usually of a light fawn color, patched with white. The Jersey class is smaller, and the popular color is a dark or "dun" deer. In the United States the name Alderney is no longer in general use, but each class is called simply Jersey or Guernsey, as the case may be.

The best English authorities now admit that the Alderneys were descended from some Swiss mountain breeds, of which many fine specimens have been exhibited at live-stock shows in Paris—dark and light fawn in color, and fine in head and horn. Others have contended, without tenable grounds, that the Alderneys were an offshoot of the Normandy breed, or of the Ayrshires; but there is no resemblance to the first, and it seems quite probable that the true ancestors of the Ayrshires were Danish.—*American Cultivator.*

Ice Necessary in the Dairy.

A paper was lately read before the French Academy of Science which give the results of many experiments. The milk having been exposed at various temperatures varying from 32 degrees to 212 degrees Fahrenheit, elicited the following summary of facts:

The rise of cream is more rapid as the temperature to which the cream is exposed approaches (32 degrees) the freezing point.

The volume of cream is greater when the milk has been effectually cooled.

The yield of butter is also greater when the milk has been exposed to a very low temperature.

Finally, the skimmed milk, the butter and the cheese are of better quality when prepared under the above circumstances.

THE POSITION OF THE AMERICAN FARMER.—F. G. E., in *Western Farm Journal* says:—In no country is agriculture so despised as in America. The Emperor of China holds the plough one day in the year as a mark of respect to agriculture. But, says the fast Yankee, "China is barbarous." China has better agriculture than America. She has the largest population, the longest canal, the widest bridge, the deepest well, the greatest wall, the longest avenue of large trees in the world—she dates back in authentic history before our Christian era—furnishes a good deal of our best scripture sayings—but is barbarous. A tenant farmer in English society ranks higher than a proprietor of land in America. France does not, like America, legislate against her agriculturists, but leaves them free and untrammelled and is commercially very successful. Her agricultural population are peaceful and prosperous, and would so continue if political demagogues would let them. Here we have demagogues and political quacks both to contend with.

PEAS AS DECORATIVE PLANTS.—The *Revue Horticole* states that the common white Canada peas are being used with good effect as winter decorative plants. They are certainly among the last things we should think of growing for ornament, but the French learn how to utilize everything, and from their account, this plant is not to be despised. The following, which is their method of raising them, is certainly simple enough for any one to undertake.

Plant several peas in a pot filled with ordinary earth and sand. Water them well and place the pot in a dark cupboard, cellar, or any dark place where the temperature is mild and even. The seed will come up quickly, and under the influence of the darkness, moisture, and heat, they will soon spread themselves and produce an abundance of light leaves. When the plants are high they may be brought into the light, and placed wherever wished. Their white tufts have a charming effect among other plants. If well watered they will remain ornamental for six weeks or more. But as soon as they become green and coarse, they should be thrown away. Nothing is easier, however, than to keep up the succession of these plants, a handful of peas furnishing vines enough for the entire winter.

KILLING CANADA THISTLES.

I had on my farm a four acre field covered with Canada thistles. I say "had" because I am convinced the present season's treatment has made it too hot for them and I shall see no more of them. The land was strong—"it takes good land to raise good thistles." One-half the fields was seeded, immediately after ploughing and a thorough working with a two-horse cultivator, with soiling corn. This was put in drills, 30 inches apart, with a large one-horse seed drill—about 3 1-2 bushels per acre. By the frequent use of the cultivator the space between the rows was kept clean, and directly, in the row the few that have stuck up their heads look very yellow and sickly, being shaded by the dense growth of corn. The remainder of the field was seeded heavily with Hungarian grass. Timely showers have made the season favorable for this crop and it has grown readily, smothering the disagreeable former occupants of the soil. I do not consider this so successful a treatment as the former, because Hungarian grows so slowly on the start, and the thistles had an opportunity to gain a foothold. The crop is nearly ready to harvest. Here and there, in looking over the field, a thistle is seen, but a stranger would never mistrust how foul the field was seventy days ago. At any rate what few there are will be cut before they mature seed.—P. LITCHFIELD CO., *in Country Gentleman.*

HOW TO SWEEP.—Sweeping, for a well woman, is one of the best kinds of excerise. It calls in play especially the muscles of the upper extremeties and chest, and, indeed, it is a pretty good "thorough exerciser," almost too strong for any woman with a weak back, though this depends very much on what is to be swept. A painted floor and Canton matting sweep easily; an ingrain carpet is harder; a rag carpet harder still; while Brussels and velvets are "awful;" Well, then, in any case, cover your head, and if it is in the parlor or sitting-room, cover your furniture and books, dampen your broom, let it stand ten ten to twenty minutes, and then sweep carefully, but persistently. In the corners insert your brrom repeatedly (but not frantically) until quite clean. Heavy carpets are best swept with a quick, short stroke. In any case bring the broom towards you or even with you; do not flirt it in front of you. The motion kicks up a dust which is bad for the lungs. Some things, like straws, ravellings, and bits of paper, are best picked up the hand or with a small broom, to which they readily cling, and may be removed with the other hand. To conclude, have as few carpets as possible. They are dirty, unwholesome, and expensive. Painted or oiled floors and Canton matting are better.

Weight of Milk.

A city dairyman writes that his cow, which troubled him much to dry before calving, has recently come in fresh and giving nearly 30 quarts of rich milk per day, which he finds it takes a good deal of time for measuring; so he porposes to make a short cut by weighing, if he can learn how much a quart of milk should weigh. X. A. Willard, some months since, stated on authority of Gail Borden that an average quart of milk at a temperature of sixty degrees would weigh, if we recollect aright, a fraction over 2.14 pounds to the quart; but Dr. Sturtevant, in one of his public lectures, in which he urges farmers and experimenters to drop the practice of reporting milk by measure, as quarts vary so much that one never knows certainly how much a cow gives by the measure reports, and to adopt the weighing system instead, gave 2.15 pounds as his standard in practice, it being more convenient to use than the exact fraction, and near enough for all practical purposes. Since that time the public generally have adopted 2.15 pound as the practical measure for a quart of milk, usually, however, weighed warm from the cow. So a cow which gives 53 3-4 pounds of milk in a day is a twenty-five quart cow; but such cows are scarce. Few of us become very weary by the slow process of measuring our milk, especially when we have but one cow.—*New England Farmer.*

How to Make Hot-Beds.

A correspondent of the *Cincinnati Times* says upon the subject:—As it will soon be time to make hot-beds for early cabbage and tomatoes, I will give some of my experience in the last ten years. Any one not experienced might think it a very easy thing to make a hot bed, but he will find after he has been in the business for years, he will sometimes fail. It requires a great deal more care and attention for early beds than for those later in the season. The first thing is to select a warm, sheltered spot, on the south side of some building, and it should be protected from the cold west winds.

After leveling the ground, haul your fresh horse manure (there should be considerable straw mixed with it), and put in a pile, off to one side, where you want the bed. In hauling be careful to have it well shaken apart, so there will be no lumps in it. After this has lain from one to three days, according to the state of the manure when hauled and the weather, commence and shake the manure evenly over the place prepared for the bed, till the manure is not less than twenty or twenty-four inches thick. It should extend eighteen inches beyond the frame on every side. Before putting on the frame, take a wide board, and begin on one side and go over the bed, laying the board on and pressing down by walking on it. This will keep the surface level. If the weather is cool, the manure should be covered as quickly as possible with earth. Common garden soil will be the best for the first two or three inches on the manure, as it will hold the water better than soil from the weeds, but the top should always be light soil from the woods, and rotted logs. It will not pack or bake after watering. The dirt should not be less than seven or eight inches deep; this will give the plants a good bed to make roots before reaching the manure. As soon as the dirt is on and leveled, put your sash on and cover up tight with boards or straw; then bank up your bed to the top of the frame with manure, and let it remain covered up for thirty-six or forty-eight hours. This will give the bed time to cool off from the first heat, and also any weed seed to germinate that may be in the dirt. Before sowing your seed, rake the bed, and pulverize all the clods; then mark out in rows, north and south not less than six inches apart; scatter in about five or six to the inch; water and cover up again, and leave till the plants begin to come up, which will be in from two days to a week, owing to the heat of your bed.

VETERINARY MEDICAL ASSOCIATION—HORSE CLIPPING CONDEMNED.—The usual fortnightly meeting of this Association was held on Thursday, the 31st January, the President, Prof. McEachran, in the chair. The first paper read was on *Laminitis* (inflammation of the feet,) by Mr. Daniel Lemay, who explained that it was produced by a variety of causes, especially over-driving, drinking cold water when heated, over-gorging the stomach. From experience in a large number of cases he favored the treatment followed at the College, viz.: removing the shoes, cutting down the crust out of pressure, hot foot-baths and poultices, purgatives and febrifuge medicines, followed after the subsidence of the acute symptoms by broad, heavy-toed bar shoe and cold clay. Dr. Cressy proposed a perpendicular incision into the toe of the foot with a saw to allow of the escape of the effusion of this lesion. Mr. McMartin next read a lengthy and interesting paper on skin diseases, in which he reviewed the writings of authorities on the subject. He also referred in deprecatory terms to clipping horses, during the discussion that followed the latter subject was fully considered. The President in summing up expressed great pleasure in finding that this dangerous practice was so unanimously condemned by the members, as he was convinced that in a climate such as ours it was more than cruel to deprive these poor animals of nature's warm covering, given to protect them from the wintry blasts. He was convinced that it was a fruitful source of disease, and instanced several cases now under treatment for rheumatism from this cause. He could scarcely conceive of anything more cruel than clipping cab and other working horses, whose duties necessitated their standing for hours in the streets.

SAVING FARM IMPLEMENTS.—A correspondent of the *Ohio Farmer* says: "The manufacturers of farm implements and machines secretly rejoice to see the carelessness and neglect received by the machinery on the farm, for the greater the neglect the larger sales will they have, for it is a well known fact that it is not so much to wear and work, but far more to neglect, that can be traced the early uselessness of much of the improved farm machinery now used. Take, for example, the mowers and reapers. If a farmer would carefully aggregate the number of acres cut by the machine during its period of usefulness, before it had to be laid by to give place to a new one, it would cause surprise to find how few acres it had really cut. The mere wear caused by cutting that number of acres did not render it useless, but the neglect it received in the times intervening between the different harvests. But a small percentage of our mowers and reapers ever receive the care they should. Some are rendered useless by careless driving, and by not keeping the parts well oiled and screwed firmly to their places; but by far the greater majority are not attended to properly after the harvesting is over. Some are put away carefully under some convenient tree, there to remain for a year, while others are seen under a shed, with the dirt and gum all still on the different parts, and forgotten till again required for use. Is it any wonder that the manufacturers have to turn out so many machines annually to supply the demand and that the business is so brisk and profitable?

Salt in Agriculture.

Few persons realize the value of salt in agricultural operations. In large doses it is, of course, an injury, destroying everything vegetable it comes into contact with. In heavy soil it is also an injury, as the tendency is to make it still heavier, and thus whatever good it might have in one respect is outweighed by the other. But in light, sandy soils, or those elevated tracts of land not wet, but which are liable to become dry in summer time, it has been found of the greatest benefit, and this chiefly on account of the property it has of absorbing moisture from the earth in dry weather. It is for this perhaps as much as for any chemical quality that it proves so beneficial in these cases. Usually wheat does best on rather heavy though not wet lands; but where salt has been used on light soils, as good crops have been gathered as on the most favored heavy soils. In the far western States, where rain does not fall often, and the danger to crops is chiefly through drought in the summer time, salt in light doses ought to prove beneficial, and in the sandy soils of Delaware, Maryland and Virginia, it might be employed to a much greater extent than now with profit.

It is chiefly for the moisture it seems to draw from the atmosphere, that it has often been found of so much good for asparagus. The asparagus requires an immense deal of water in the make up of its stalks, though it does not like to grow in wet ground; and this moisture the salt supplies. It has also been found of excellent benefit in raising turnips, beets, cabbage and other succulent vegetables. But it must not be forgotten that it is an injury in soils already wet or heavy; and therefore good as it is in so many cases, an indiscriminate use of it will result in disadvantage. In this respect it is like lime and some other things, in which even "salt will not save it."—*Germantown Telegraph.*

Feeding for Meat.

The Boston *Journal of Chemistry* says poor animals consists of about two-thirds water, while fat ones only one-half, in the total weight, and compares poor animals to bog meadows. It adds, that when the fattening process begins, water commences to disappear, and fat or suet takes its place; and the increase in bulk during the process is largely of adipose matter. It is a curious circumstance that, during the fattening, the protoids or nitrogenous compounds, increases only 7 per cent. and the bone material, or inorganic substance, only 1½ per cent.

The cost to a farmer fattening an ox is much greater at the close of the process than at the commencement; that is, increase in bulk or dry weight at that period is much more costly. If it cost 3 cents a pound for bulk for the first month after a poor animal is put in the fattening stall, it will cost 5 cents the last month. If, then, a farmer consult his money interests, he will not carry the increase in fat beyond a certain point, provided he can turn his partially fattened animals to fair advantage. Farmers have, perhaps, learned this fact from experience and observation, and hence comparatively lean beef abounds in our markets.

While this is of advantage to the farmer, it is very disadvantageous to consumers of the beef, for the flesh of a fat animal in every case is much richer in fixed, nourishing material than that of the lean, and it is never good economy to purchase lean beef. It is better to purchase the poorest part of a fat animal than the best of a lean one. The best piece of a fat ox (the loin), contains from twenty-one to twenty-eight per cent more fixed material than the corresponding part of a lean one; and curiously enough the worst piece in the lean animals (the neck), is the richest in nourishing material. The flesh of the neck improves very little in fattening, hence, economy considered, it is the best portion to purchase, as its value in a measure is a fixed one.

The Progressive Farmer.

In an article on Growing Forests, the *Prairie Farmer* speaks of the progressive farmer as follows:

The progressive farmer is he who looks forward with pleasure to that which planted now may in the future yield him a fit return for his trouble and toil; whose horizon is not bounded by the planting and sowing of mere annual crops. He breeds stock not only with a view to the natural increase, but at the same time with intelligent efforts to make it better and better, year by year. He builds sheds and barns for their comfort. These again he shelters with belts and groves if he already has them not. He plants orchards and cares for them. His garden as well as his farm is a model of neatness. It is true he is not found in the corner grocery, nor employed in mere gossip in the village streets. He is generally found at home—when not away on business—reading, studying, seeking pleasure in thinking how best he may introduce some added convenience for the comfort of his family, or the good of his stock. It is this class of men who are gradually coming to see the importance of timber planting as one of the means to the greatest success. These will yet come to know that ten to fifteen per cent of their farms planted to belts, as a protection, will add fully twenty-five per cent to the productive capacity of their farms. Thus their growing timber, if of the right varieties, while it is adding to the productiveness of their fields, will besides, give an added value to their farms at the end of ten years, of fully twenty-five per cent more. Meanwhile the thinnings from the timber will fully compensate for the labor expended in the cultivation. Thus while they will have left a most valuable legacy to their heirs they will have made themselves and their families comfortable during their lives.

Mingling the Manure of Cattle and Horses.

The accumulations of the horse stables, and also of the stables of cows and other neat cattle, should always be mingled together in the yard or compost heap. Hence stables should open into yards over which the litter from the horses and cows should be regularly spread every day. By this means alone will a good result be obtained. The respective merits of boxes and foldyards for fattening cattle in a great measure depend upon the quality of dung they turn out. The box is economical in the matter of straw, and will be esteemed for this reason in suburban districts. It is also favorable for the manufacture of good manure, as being under cover, the liquor is wetted by the droppings of the animals only. The byre, says the *Agricultural Gazette*, is still more economical of straw, but it is not favorable to the manufacture of good manure, owing to the animals being tied up. Litter from byres ought to be thrown out into courts and trodden down with young stock. Foldyards require much litter, as they are always more or less open, and are for this reason preferred in rural districts, where the value of straw is not yet felt. Excellent manure may be manufactured in small troughed folds, with a considerable portion of shedding. Cattle will do well in any of these forms of accommodations, but if tied up in byres it will be humane; as well as profitable, to have them brushed and curry combed daily. It must be remembered that animals thus confined cannot lick or rub themselves, and that they are deprived of the cooling effects of air and rain. The skin under these circumstances becomes irritable, and especially where, as is often the case in byres, dirt adheres to the animal. Brushing and cleansing the skin and attention to the state of the feet cannot be too strongly enforced.

The Lung Worms of Sheep.

R. H. Saunders, of Illinois, writes to the *N. Y. Tribune* on this subject, having lost from five to eight per cent. annually for three years of his lambs from tape-worm, and sheep from one to eight years old from parasites in the lungs, the latter being the more difficult to contend with. His flock, he says, are all in excellent condition with the exception of those affected. The affected sheep show no symptoms of parasites in the bronchial tubes, but are suddedly taken with dullness and loss of appetite; the wool becomes loose, many of them pine away and die in a few weeks; others become poor, their appetites return, and they live several months. In the latter stage of the disease a watery serum appears under the root of the tongue and dysentery sets in. Upon examination after death he finds thread-worms, from two to four inches long, coiled up in bunches in the air passages of the lungs. Do these parasites, he asks, have a separate existence, and do the pastures or water become infected, or are they due to the condition of the sheep. He has observed the sheep to have been more infected when confined several years to the same pasture.

In remarks in the same paper by Prof. Jas. Law, he says that 20 years ago the lung worms of sheep were almost unknown in England, whereas to day there is scarcely a flock in the southern and midland counties but suffers severely from their ravages. It is a mere question of the introduction of the parasites, as their eggs and embryos will live in almost any soil, and increase in proportion to the number of systems (sheep and goats) in which they can pass the adult period of their live. The most important points are that not only do these worms live in their embryo condition in water, soil, vegetation and fodder out of the body, but when once introduced into the system they will reproduce themselves without limit throughout the whole lifetime of the sheep without any new ingestion of worms or eggs; and, as they rarely prove fatal to old sheep, one infested animal may stock any number of fields with these destructive creatures.

TREATMENT.—Turpentine may be given in oil for the intestinal worms, and sulphur fumes inhaled for the lung parasites. The affected sheep should be put into a close building and a pinch or two of flowers of sulphur burned on a piece of paper laid on an iron shovel, the sulphur being added pinch by pinch until the air is saturated as far as can be breathed without violent irritation and coughing. The administrator should remain in the building with the sheep, and thereby avoid the risk of an overdose. This should be kept up for half an hour, and should be repeated at least once a week. It is only partially successful, as eggs and encysted embryos will escape destruction and are ready later to start a new brood. Abundance of nourishing food, including oil-cake or dry grain, is an important element in treatment. A tonic mixture of equal parts of sulphur of iron, ginger, gentian and common salt, may be given at the rate of an ounce to every five sheep.

PREVENTION.—1st. No infested sheep should be allowed to leave the pasture alive. They should all be fed off and slaughtered where they are. If any loss is incurred, it ought to be met by the State, as the object is to prevent an extension of the parasite to other grounds. The propriety of this will be seen when we consider that the killing out of the lung parasites in a single animal is a long and uncertain process; that if the sheep are kept on the old pastures the worms are perpetually finding their way into the system from without, while if turned on new land they stock that with the parasites from their own lungs.

2nd. No other sheep or goats (camels or dromedaries) should be turned out on that land for several years, nor allowed access to water which has run through it. The land may be safely pastured with horses and cattle, for they do not harbor the lung parasite of the sheep. Hogs were also supposed to be exempt, but Mr. Saunders' experience seems to throw doubt on this matter. It would be better still to plow up the ground, and subject it to a rotation of crops.

3rd. The carcasses of those dying of the affection should be deeply buried or better still, the head, throat, wind-pipe and lungs may be carefully removed and subjected to prolonged boiling.

4th. Hay roots or other aliment grown on the infested pastures should on no account be supplied to sheep or goats, stored near fodder or litter designed for them, or in any place which sheep may afterward have access. Such would be the main elements in the absolute prevention or stamping out of this affection, but if a restriction of the increase of the parasites only is aimed at, and not their extinction, then suggestions may be obtained from the conditions above named as favoring the propagation of the worms:—1st. Let salt be eaten at will; this destroys the young worms if brought in contact with them. 2nd. Avoid turning lambs on land occupied or vacated by the old sheep. 3rd. Avoid overstocking. 4th. Drain wet land. 5th. Don't sow clover for sheep pastures. 6th. Shut out from water coming through infested pastures. 7th. Keep lambs off pastures when covered with dew. 8th. Give artificial feeding when necessary to keep up vigorous health. 9th. Fumigate frequently, both old and young, with the fumes of burning sulphur.

ST NICHOLAS.—*Scribner's Illustrated Magazine for Girls and Boys.*—The *London Academy* of December 22nd, 1877, says: "In *St. Nicholas* we welcome the best stamp of juvenile literature that we have yet seen. * * We have no hesitation in saying that both in the letter-press and in the pictures this American magazine has no rival."

In *St. Nicholas* for December, the grand Christmas Number, was begun a charming new serial story by Miss Alcott, "Under the Lilacs," which is to be illustrated by Miss Hallock, and to continue during the year. This same Christmas Number, of which one hundred thousand copies were printed, contained the opening chapters of A "Robinson Crusoe" Story for boys, "Tower-Mountain," by Gustavus Frankenstein, also poems by Longfellow and Bryant, a portrait of Miss Alcott, half a dozen short stories, pictures, poems, etc., etc. It is the handsomest number of a child's magazine ever issued. Send 25 cents for a specimen copy, or $3.00 for a year's subscription, beginning with this grand Christmas number.

Besides Miss Alcott's serial for girls, and the three serials for boys, to follow each other in rapid succession, *St. Nicholas* for 1878 will contain a short serial story by the author of "The Schonberg-Cotta Family;" and an article, "Around the World in a Yacht, Boys!" has been promised by a brilliant writer, now on the actual tour of the world in his own yacht. There will be contributions by a daughter of the famous Peter Parley, and a letter to Young Americans by George Macdonald.

The "How" series of instructive papers, by various authors, will tell how to bind your own books; how they mine coal; how to enjoy yourselves at home; how to be an agreeable guest; how to entertain company; how to be a carpenter; how to make an ice-boat; how to build a house; how India rubber is gathered; how matches are made; how to be