

THE PROTESTANT, AND EVANGELICAL WITNESS.

Farm and Garden.

Farm.—A few acres of land, indeed very little farm-work, save digging and sowing the late turnips, should be left until now. In some localities a portion of the crop is still unthreshed, and the grain not all threshed. Both of these need early attention, and then, having put all the tools away, another there, and having repaired the buildings against the biting wind and frost, the farmer may rest quietly, even if the sleet comes driving against his window at night. He is prepared for Winter.

Buildings, including those for carts and horses, should be put in complete Winter order at once. This is one of the best means to ensure saving of buildings and fences. Spots most liable to destruction of last year.

Gardens.—Now close alike destruction will meet them for the winter, but it will give them time to repair, just sufficient for their preservation, but not to waste. A good hay or straw cutter should be in every barn, and if capable of cutting even stalks, as much the better. For twenty or thirty cattle and pigs, a steaming apparatus will serve. Complete fattening the hogs as early as possible, before half the fat is exhausted in keeping them warm. Give all animals a good bedding of some sort, both to promote comfort and increase the manure heap.

Collars.—Keep ventilated as late in the season as can be done with safety. See that the water drain is perfect. Towards the close of the month, make everything secure against frost.

Cisterns and Wells for horses and hams may well be built, if not already provided.

Draughts is always in season, when the ground is not frozen or wet, until all swales, swamps, or low grounds are made the most productive portions of the farm.

Forest Leaves.—Continue the gathering commenced last month, until all that can be gathered are secured for Winter bedding of stock, for which they are excellent, as well as for manure.

Fruit.—The last apples and pears must now be taken to the cellar, a cold snap might freeze them. Keep dry and cool, and store them for winter.

Horseflesh and Mares.—Feed with cut turnips and straw, adding a little meal or carrots. Have the mare well shod by icy weather approaches, at the North. Provide blankets and care them. Give a good bedding at night. If standing on a plank floor, cover with several inches of mats, open-tan or sawdust, both to absorb the moisture and make a soft standing place. Ventilate well, using plaster to take off the strong smelling ammonia.

In-laws.—The long evenings and stormy days give an opportunity to read and think. Get down the back numbers of the Agricultural and re-read those articles which a more hurried season caused to be lightly perused. Sympathize with the children as they pore over their evening lessons, and lend them the assistance they require. A little interest in their studies will be of material benefit to them. Make home so attractive that they prefer it to going abroad where they may meet with vicious companions.

Maurises.—Follow the directions of last month, adding large quantities of muck, tan, leaves, loam, saw-dust, etc., to the contents of the yards and stables.

Permane improvements may now be made to good advantage, while waiting the approach of Winter. A few days' labor in building; stumps may be removed; stones may be picked up and laid to permanent fences, hedge cleared up, etc. These can profitably use up all the spare time.

Pine clavay lands just before the Winter sets in, will be turned up to fatten, and the freezing of the tops and sides of the furrows will serve the soil.

Poultry.—Provide them with warm quarters for winter. A barn or other cover where they can have access to scratch in, is desirable, allowing them access to the sun. Give them animal food, refuse meat, and boiled potatoes and raw cabbage. Keep rooms clean.

Schools are about commencing for the Winter, in many places. Have the out door work in condition to spare the boys at the beginning, to take their places at once in classes. Nor should they be kept at home except in important occasions. Regularity is essential to progress.

Tools, Implements, Carriages, Harness, Sleighs, Sleds, etc.—Put away no longer wanted, first repairing the broken ones. Do not have a plow to freeze in the furrow, and tools to be covered by a pressure snow. Have the harness cleaned and oiled; and put sleighs and sleds in running order.

SUPERPHOSPHATE OF LIME FOR TANNS.—Phosphoric acid has a mysterious influence on the development of roots, causing plants to throw them out vigorously. The most convenient way of employing this substance is in the form of superphosphate of lime—that is, a mixture of oil of vitriol and burnt bone. This compound, rich in the acid in a soluble state, mixed with a little dry mold, will be found a fertilizer of great use in transplanting trees. But it must be used in moderation, for plants, like animals, may be injured as much by over-feeding as by starvation.

Miscellaneous.

The Mother moulds the Man.—That is the mother who moulds the man, is sentiment beautifully illustrated by the following recorded observation of a shrewd writer: "When I lived among Choctaw Indians, I had a consultation with one of their chiefs respecting the successive stages of their progress in the arts of 'civilized' life; and among other things, he informed me that at their start they fell into a great mistake—they only sent boys to school. Those boys came home intelligent men, but they married uneducated and uncivilized wives—and the uniform result was, their children were all like their mothers. The father soon lost all his interest in both wife and children. And now, said he, 'if we should educate but one class of our children, we should choose the girls, for when they become mothers they educate their sons.' This is the point, and it is true. No nation can become fully enlightened, when mothers are not in a good degree qualified to discharge the duties of the home-work of education."

The London Mechanic's Magazine states that there are very extensive works at Stepney Green, London, in which great quantities of artificial leather are manufactured. In appearance, it resembles common leather, and it is only by a very close scrutiny that the distinction between them can be detected. It is manufactured in web 30 yards in length and 41 feet in breadth, and is now much used for book-binding, and several other purposes for which tanned calf and sheep skin are employed with us. It is also used by saddlers for making harness, and may be made of any thickness desirable, and is capable of being stretched or contracted. India-rubber is the principal substance of its composition, but there are other ingredients mixed with it, whereby its leather qualities are secured. The method of making it is not given.

and it appears that this is kept secret; but that such a substance is now manufactured, sold and used, in large quantities, is a fact of too great importance to be overlooked.

Mineral Oils.

The manufacturers of coal-oils have increased with such rapidity that their development appears something like a phenomenon. About ten years ago, nearly all the oils that were employed in artificial illumination, were obtained from molasses of "the great deep," and our hardy whalers had the distant Pacific ocean and the South seas of the North their aquatic hunting grounds. But with every recurring year their dangers seemed to increase, while their products as manifestly decreased, and the supply was becoming so limited that general apprehensions were excited as to obtaining a sufficient quantity from any other source. It is true that oils from oleaginous seeds, resin and the fat of domestic animals were well known, and to a limited extent used; and although it was thought by some persons that they might be increased to a boundless extent, the feeling was predominant that unless some new discovery was made, a deficiency of oil would probably be felt. It was at this juncture that a discovery was announced which met the public requirements, and which, for novelty and usefulness, gave him any equal. This invention was nothing less than producing oil from "bottled-up sunlight"—the distillation of it from the submerged forests of former ages, which in the shape of coal, had been buried in the bosom of the earth for thousands of years. The light of the sun was necessary for the antediluvian coal-vegetation to condense carbon and hydrogen; hence it is this absorbed light of ancient days which now gives forth its cheering beams from our coal-oil lamps.

The first account which we have of this oil, is contained in the patent of J. Young, published on page 156, Vol. XIV. *Scientific American*; and although it has been said, that such oils were previously known, we have searched in vain for a record of the fact. It is now only 9 years since this discovery was made known to the world, and at that time (1850), not a pint of the oil had been manufactured in our country, nor was there any sale until 4 years afterwards, so far as we have been able to learn. What is the fact now? Many oils are made from coals in one week, in our country, than ever was obtained by our whale-fishers in the best year's fishing they ever enjoyed. At present there are oil manufacturers in the coal-fields of Virginia, Kentucky and Ohio, and a great quantity is now made in the neighborhood of this city. The oldest factory of this character in this region is the kerosene-works near the eastern district of Brooklyn, on Long Island. It is certainly a wonderful place, both on account of the original method of distilling the coals, and the vast extent of the premises. Three years ago, a few pounds of coal, according to the common methods, were here distilled in the old fashioned retorts, now there have been erected several rows of retorts, each of which contain 25 tons of coal, and this amount is worked off as a regular charge at one operation. The principle of action embraced in these retorts is totally different from all others; it is exactly the same as that of smoking a pipe of tobacco, and on this account it is called the "moerschaum." Each of these retorts is built brick, in the form of a huge pipe-bowl, and when the coal is packed in, the fire is kindled on the top with anthracite. The draft of the heated products down through the coal is effected by steam power, and the oil vapors that are carried off below are condensed into crude-oil and pass from a conducting pipe into a tank. The process is a strange one indeed; here steam is applied to a new purpose certainly—that of "smoker" on a grand scale for the production of oil for our lamps.

The operations are under perfect regulation to prevent the coal carbon undergoing combustion. At these works there is one such retort now in the course of erection, which will be able to smoke 100 tons of coal at one operation and there is no reason that can be urged against applying the principle on a still larger scale. By the middle of next September arrangements will be completed for making 5000 gallons of kerosene-oil per day at these works, or over 1,500,000 gallons per annum; and from this single fact the public will be able to form sonic idea of our great and growing oil manufacture.—*Scientific Amer.*

The San Juan Boundary.

There can be no doubt that the treaty of 1846 gave, and was intended to give, to Great Britain and the United States the free navigation of the Gulf of Georgia, and that this could be alone effected by making the channel which divides the two empires what it was always considered to be—the broadest strait which flows to the eastward of San Juan. This was the channel in those days when California had not yet been colonized, when British Columbia was yet unknown and unnamed, and when Oregon itself was a wilderness wandered over only by the hunter and the trapper. Nothing was thought of other channels between San Juan and Vancouver, possible, indeed, to the steamer of the present day, but never navigated in those times, and surely never presented to the minds of the statesmen who, map in hand, negotiated the treaty of 1846. This is the view of the matter according to the spirit of the treaty; but if we take the letter, it bears a very different meaning. The statesmen are, then, "the two shall be continued westward along the 49th parallel of latitude to the middle of the channel which separates the Continent from Vancouver's Island, and then southerly, through the middle of the said channel and of Puget Strait, to the Pacific Ocean." On these words the British Government is content to rest its claim, and it is mere surveyor's work to determine whether the line southward from the middle point of the channel, in 49 degrees north, and through the middle of Puget Strait, does or does not give the Island of San Juan to the British Crown.—London Times.

The Seeds of Consumption.—The terrible mortality caused by bronchitis, pneumonia, and consumption, which together kill in England and Wales only a hundred thousand people every year, being one-fourth of the entire mortality from more than a hundred other causes in addition to themselves, should make us think a little seriously of many things, and not least seriously of the freaks of fashion which set climate at defiance. Why do we send children abroad in damp and cold weather, with their legs bare, submitted, tender as they are, to risks that even strong adults could not brave with impunity? Customs has in many instances familiar and trifling, but it is not out of place to say that the denial to young children of proper shifts to their clothes and warm covering to their legs, has given the seeds of consumption in thousands and thousands; and is, of many dangerous things done in obedience to laws of fashion, the one that most thoroughly and most cruel. It is in the child that consumption can most readily be planted, and the child that the tendency exists, it can

be conquered, if at all. It is to be fought against by protecting the body with sufficient clothing against chill and damp, by securing a plenty of wholesome sleep—not suffocative sleep among feathers and curtains—plenty of fresh air without prejudices of water icey cold, plenty of cheerful exercise short of fatigue, plenty of meat and bread, and wholesome pudding. Those, indeed, are the things wanted by all children. Any a child pinched in health upon a diet stinted with the most nutritious. But the truth is, that it is not possible to protect a child with simple wholesome sustenance. It can be attempted to excess, the destroying of rich dainties; and with a stomach once fairly depraved, it is hard to bring it to any kind of diet again.

It is to be fought against the destruction of rich dainties; and with a stomach once fairly depraved, it is hard to bring it to any kind of diet again. Some body should be appointed to say when it has had too little or too much, or too much; but a child fed on whole-some things knows better than man can tell it when it wants more; it can eat a great deal; but not only to sustain life, but to add height and breadth to the stature. Fortify it, then, against variations of climate, by meeting freely with the demands of its body; give it full animal vigor to resist wholsome impressions. Especially let the good housewife who has a young family to feed, learn to utterly reckons as to the extent of her milk's value. Somebody has declared a pint of milk to contain as much nourishment as half a pound of meat. Be that as it may, it is the right food for little ones to thrive upon, and may save much subsequent expenditure for cod liver oil.—*Dicken's Household Words.*

Social Dancing.

The fact, stated in No. 491 of the tract of the American Tract Society, is unquestionable, that "the great mass of the most worthy and devoted ministers and private Christians believe dancing to be ministerial sins."—*W. H. Goss.*

Relatively, public dancing is a greater evil than social; absolutely, however, both are objectionable; neither can be justified on the principles of the Gospel. Both tend to the misappropriation of time; to impair our Christian influence; to unfit the mind for higher pleasures; to substitute earthly enjoyments for those which are spiritual and heavenly; to turn the soul from, rather than attract it towards, the fountain of living waters. Would we, then, be consistent, we must lay the axe at the root of the tree, and not claim for ourselves an indulgence in one form, which we condemn, when practiced by others in a form which appears to them equally unacceptable. Total abstinence has long been conceded to be the only safe and true ground in the matter of temperance; and we know no other in regard to dancing. The tract mentioned above makes the true issue on this point, with a brief extract from which we leave the subject to the prayerful consideration of all who exercise themselves to keep a conscience void of offence towards God and towards man:

"It is said that when more privately done, the evils of dancing are avoided. Were this true, can it be so? However privately begun, can it be stopped? The dance must be concealed when first kindled, but it will burst forth unless speedily extinguished. Set up a theatre in your own dwelling, and will not your children, true to the visited taste you have nourished, seek more public gratification? Indulge them in the social gaiety at home, and will they not seek it elsewhere? So the social dancing-party is the private entrance to all the dissipation of the ball room. How often, by this deceptive device, do parents draw forth a passion they cannot control, and which, when it is finished, brings forth death." When will they learn, that the end over which they mourn is but the natural consequence of the beginning they approved.—*Congregationalist.*

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Bath the Ointment and Pills should be used in the following cases:

Bad Legs Cancers Sore-throats

Bad Breasts Contorted and Stiff Skin disease

Bad Mouth Jaundice

Bad Eyes Scrofula

Bad Hands Fistulas

Bad Feet Soft Corns

Bad Nails Glandular swellings

Bad Hair Tumors

Bad Skin Ulcers

Bad Mouth Piles

Bad Teeth Wounds

Bad Skin Vaws

Bad Nails Corns

Bad Lips Gore Nipples.

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