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UNITED WITEI THE "LTRIP EAMMMER."<br>(PUBLISHED MONTHLY.)

## $m_{\text {arch }}$ number

New Series, Vol. 1, No. 4.]

[Toronto, March, 1889.


## AN OPEN LETTER.

## TO FARMERS EVERYWHERE, AT HOME AND ABROAD-

Gentlemen, -The time when you will cut your grass and grain will be here before you realize it: NOW is the best time to choose the machines you wish to do the work.

If you are looking for Harvesting Machinery that will give you the very best value for your money, we certainly can please you if anyone on earth can, for we honestly believe and unhesitatingly assert that we make the best working, best wearing, and best looking Harvesting Machines to be had. Our success at home and abroad fully attests this statement, for we have defeated in public field trials every machine of any note on the face of the globe.

Our splendid list for 1889 is as follows :-
SELF-BINDERS, - Toronto Light Binder No. 2- ft . cut ; Toronto Light Binder No. $3-5 \mathrm{ft} ., 6 \mathrm{ft}$, and 7 ft . cut ; Toronto Light Binder No. $4-\overline{\mathrm{ft}}$., 6 ft ., and 7 ft . cut ; Toronto Light Binder No. $6-5 \mathrm{ft}$., 6 ft ., and 7 ft . cut. Attachments-Toronto Sheaf Carrier, Toronto Transport, Toronto Flax Gatherer.
MOWERS, . - Toronto Mower No. 2-4 ft. 3 in . and 5 ft .6 in . cut; Massey Mower, 4 ft .3 in . cut; Toronto One-Horse Mower, 3 ft .6 in . cut; Massey-Toronto Buckeye Mower, 4 ft .3 in . cut.
REAPERS, - Massey Harvester and Massey One-Horse Harvester.
HAY RAKES, - Sharp's Rake, Toronto Rake and Ithaca Rake.
Our Mammoth Works have been ruming full blast and full time since September 1st last, and we have set our cap to make 14,000 to 15,000 of these High Class Harvesting Machines for the coming season-more than double the output of any other Canadian factory and about half of all the machines that will be built. Orders have been pouring in upon us from farmers at home and abroad and, Gentlemen, notwithstanding the enormous quantity of machines we are building, we will under no circumstances bind ourselves to fill any but early orders. If you want one of the Massey-Toronto World's Harvesting Machines you will do well to order it at once.

We build our machines from the bottom up. We do not buy them or any part of them. Other companes buy their Cutter Bars, Knives, and some even their Knotters and other portions of the machines; while we build them in every part even to Bolts, Nuts, and Washers, hence we can guarantee them in every detail. We are the only concern in Canada making Knives, Guards, and Cutter Bars complete. Our new splendidly equipped Malleable Fomilry is now under full operation and is producing the finest quality of iron. We are building our machines even better than we ever did before and anticipate the most successful year in our history.

We need scarcely advise you that full information may be had regarding any of our machines at any of our Agencies and Branch Houses in every part of the world, where also samples may be seen.

Very truly yours,
THE MASSEY M'F'G OO.


lew Series. Published Monthly.)

## ROUND THE WORLD,

## Run through the OCCIDENT, the ANTIPODES,

 and the ORIENT.(Extracts from a series of letters written to the employés of he Massey Manufacturing Co., hy W. E. H. Mabsber, Esq.)

## THE HAWAIIAN ISLANDS.

"hird Letter, dated S.S. "Zealandia," Dec. 7, 1887. (Concluded.)

The natives of these islands, like the North American Indians, the aborigines of Australia, the faori Tribes of New Zealand, and other black aces, have rapidly declined since the invasion of he white race upon their territory; and so rapid as been their decadence that it would seem the ace is to become extinct at no distant time. Upon Yook's visit they were roughly estimated at the probably exaggerated figure of 400,000 , while the eturns of ceasus of 1832 placed the population of both natives and foreigners at 130,313 . The last
larly fine musical organization of 35 to 40 pieces, and would not fail to delight the most critical. Whenever it is announced to play in the public parks, which it frequently does, crowds of these music-loving people assemble to hear it. Their love for flowers is evinced in a peculiar and very pretty custom of decking their friends or relations who are departing on a journey, be it long or short, with leis or garlands of ferns, leaves, and especially of flowers. Not only at departure but on other of flowers. Not only at
occasions these leis are presented, and not well-to-do people alone but the poorest of the poor will be seen going about the streets wearing around their necks or on their hats leis or wreaths of the choicest flowers which there abound. The taste, too, with which they are made up-the harmony of color, etc., is remarkable.
The lan. guage of the Hawaiian is very pleasing to the ear and may be termed a language
ensus (1884) showed a fearful decrease of Hawaiins, the natives only numbering some 40,000 . Of the causes for this I will speak later.
Far from being savages the Kanakas (natives) are - peace-loving, quiet, easy-going people and hospitble to the last degree. Their passionate love tor nusic and flowers is most significant of their charceteristics. The Royal Hawaiian Band, which I had many opportunities of hearing, is a particu-
of vowels, so very extensively are they used in its construc. tion-a direct contrast to the language of the Russians. The word for truth, for instance, is oiaio. In the alphabet proper there are but twelve letters, though others are used in case of foreign names. The language is rich in

"our cottace," and banana trees, honolidic. (From a I'lotographl iny Mr. IV. E. II. Massey.)
of 365. This tropical climate, with its invariable, warm temperature the year round, has a debilitating influence with which even foreigners are affected. Added to this the fact that living can be had with so little effort, tropical fruits being so alcundant, easily accounts for the natural and generally predominant indolence and listlessness of the race.

Fish, too, are very abundant about the island coasts and the Kanakas are good fishermen, and at rowing, boating, and swimming in particular, they excel-indeed, they are almost amphibious. Some kinds of fish they eat raw and say it is no worse than our eating raw oysters. But, while fish and fruit are so largely eaten, poi is the great national dish, and without this it would seem that Hawaiians could not exist. Poi is made from taro root and is veritably their "staff of life," no wheat whatsoever being raised. The taro is like a beet root in shape and size, and when baked and cut in two the cross-section looks like the cross.section of a large, coarse, sweet potato, and it tastes not un-
like a chestnut, though slightly litter. The piant is of the calladium family and resembles the species which has a very large leaf-that is, large to usand is sometimes used to ornament gardens at home. This taro plant is very extensively cultivated and has to be grown in marshy places or in irrigated patches. The average yield per acre is said to be $28,000 \mathrm{lbs}$. of paiai (cooked taro pounded to stiff pulp). Allowing 4 lbs . per day per mana liberal allowance-this will give to the square mile, or 640 acres, substance for 12,274 men for one year. A process has been devised by which the root can be diverted into flour and 25 lbs . of this flour is calculated to be ample for a man's supply for one month. The poi is made by beating the baked root, or the flour, mixed with water, into a thick paste about the consistency of "porridge." When in best condition for cating it has a peculiar sour taste, approaching a yeast taste, and is of a lilac color. One has to acquire a taste for it, but from the way in which even foreigners seem to relish the very nutritions and fattening dish it cannot be difficult. However, I struggled over a few spoonfuls. Eating poi "l lu native is quite an art, for they use neither spoons, knives, nor forks on any occasion, but employ the first or first and second fingers as a conveyance and in a manner quite surprising, so neatly and deftly is it done.
The grass or thatch houses of the natives, so cleverly made and once so extensively used, being admirably adapted to the climate, are fast becoming a thing of the past-the modern frame house taking its place. (Sre cut worr page.)

The costume of the women is somewhat uni $q_{\mathrm{l}}$ ue. It corresponds to the style of dress which we call the "Mother Hubbard" and to which the natives give the name haloku. It is in universal use and well suited to them and the climate-even resident foreigners have taken it up. (Sce Illustration, prage 11, "Houschold Department.") The men dress about as we do.
Amongst savages and caunibale, such as these Sandwich Islanders are supposed to be by the majority of the outside world, one would scarcely expect to look for much civilization - schools, churches, etc.; but a look into the hall of the excellent goverament building while the legislature is in session, and a visit to some of the

time pali, island of oilad, near honolulu.
schools and public institutions would astonish you - upon making such visits I myself was more than astonished. As far back as their history can be traced it is affirmed the Hawaiians were never cannibals, but whatever once they may have been, it is certain they have not been such for over a century. Idolatry was abolished by them in the early part of this century, but like the gods of the Greeks and Romans, the chief deity, Pele, of the Hawaiian mythology, is not forgotten in their songs and legends to this day. Of the different religions denomi-

diamond head, tear hovolude.

It will be most aurprising to you to learn the proportion of these people who are educated and can read and write, which, according to Prof. Zahm's report, is ninety per cent. How does this compare with On. tario? The great reason for this is the fact that education is compulsory, there being also a liberal provision for schools and teachers - a teacher for every 25 and a school for every 40 pupils in the land. I was surprised to find the number of Canadians resident in the islands, and it was through the kindness of one who holds an official position that I was enabled to procure a pass to the receiving hospital for lepers, the sad subject of which I now come to speak.
Leprosy, the dreaded plague of the islands, cropped out there some fifty years ago. It is probably the most terrible discase with which mankind is afflicted, it is so loathsome, so horrible, and so long, as a rule, in overcoming its victim. Notwithstanding the advanced stace to which modern medical science has attuined, no remedy has ever been found for this drealful plague. After the introduction of the disease into the islands, it began spreading with such alarming rapidity that the government found it necessary to resort to severe action for its suppression, and accordingly a settlement was founded on the Island of Molokai, to which the unfortunate afflicted were banished as soon as discovered-a rather harsh and stringent measure, but the only one that would accomplish the purpose.

Up to November lst, 1885, 3,101 cases had been taken to the leper settlement, the average present being about 700. A receiving hospital was instituted at Honolulu, where newly-discovered cases were first taken and afterwards sent to Molokai, though many cases are now kept there, there being 100 lepers present when I visited it. It was Thanksgiving Day, which is celebrated in the islands by resident Americans, and a thanksgiving dinner had been prepared for the poor afflicted creatures after the native style.

A native feast (lucut) is a sight in itself, but a native leper's feast was a rare and pitiably sad sight-one which I would be glad at times to efface from my memory. I shrink from describing the awful scene of these wretched plague-stricken men,
women, and children engaged at a repast-some with swollen and fearfully distorted faces, others pinched and haggard-some with the extremities of the hands shrunken or eaten away, others with the prominent features of the face frightfully disfigured. One, however, could not but notice the apparent cheerfulness and contentment of these leprous outcasts in spite of their dreadful condition. Strange as it may seem, they do not usually suffer acute pain until the eating process reaches a vital part, and while some die in the course of a few months, others live on for years-even until the extremities of the body are entirely gone. Meeting with a physician formerly assistant in charge, I had an excellent opportunity of inspecting the hospital and seeing some of the most typical cases. The disease does not affect every one in the same manner, for while in some cases the eyes are first affected, or the ears, nose, or other extremities begin to decay or shrivel away, in others great tubercles break out over the face, distorting it in a most hideous manner. I saw some poor little fellows but eleven or treelve yearsold, affected

hawaiman poi-dealer.
in the manner last named, who looked quite forty years. Indeed the fact of quite a number of children being present seemed saddest of all to mesome of them but slightly affected, with chances of living on for many years. But enough of this.

The hospital, which is clean and neat, and affords the inmates even better comforts than they would have at home, is in charge of some good Sisters of Mercy from Syracuse, N. Y., who have given themselves up to care for and work amongst these wretched outcasts of society. The great sacrifices these noble women have made in shutting themselves up to such a work cannot possibly be appreciated by one who has not visited this home of lepers, and truly their reward will be great. In this connection I must briefly mention the name of that noble martyr, Father Damien-a young Catholic priest who, some years ago, of his own free will, went to minister and comfort the lepers banished to die on the Island of Molokai, though be knew full well the imminent danger incurred in so doing. Here he has labored faithfully and well, attending to the ill-fated creatures during the last and awful stages of their disease-during their greatest suffering and death. Occasionally he vis-
iteá Honolulu, but about a year ago he wrote a touching letter to a friend, announcing that the awful scourge had at last made itself manifest upon him, and that he could never again leave that island, and further expressing a calm resignation to his dreadful fate. A true hero, indeed!*

The first whites who came to the Hawaiian Islands were a dissolute, godless set-whalers and refugees from justice from other lands, and the effect of their evil influences upon the simple natives can be easily imagined, and to counteract which was up-hill work for the missionaries.

The Hawaiians are given to intemperance and are a very licentious people; added to this their improper care of themselves, through ignorance of disease, though there is an improvement in this, particularly latterly, does not tend to longevity. These facts go a long way towards pointing out the leading source of the decline of the race. It is hoped and believed that the Christian influences being brought to bear, and education, are checking some of these causes of the race's rapid downfall.

Unfortunately limited time and other circum. stances would not admit of my visiting Kilauea, the great volcano, with its mighty smoking crater and lake of fiery lava; nor was I able to visit any of the other islands, some of which are said to be much more beautiful than Oahu.

I am indebted to several prominent Honolulu gentlemen, with whom I had the pleasure of mak. ing acquaintance, fo $\cdot$ much of the information contained in this letter, which I trust I have not made too matter of fact to be interesting. Many of the figures and other statements were taken from the "Hawaiian Almanac," a statistical annual; and from Prof. Zalm's "Letters on the Hawaiian Islands," and should be authentic.

This letter goes back to you on the same ship upon which I came out. In the sweet language of the Hawailian again I say, Aloha!

We quote the following description of the great volcano of Kilauea from "The Boy Travellers in Australasia," by Thos. W Knox :-
"It is fully three miles from one side of the crater of Kilauea to the other; but you do not walk in a straight course across it, for the simple reason that you can't. The crater is a great pit varying

* We learn from the Missionary Revien that another heroic priest, Father Condrady, has recently sailed from San Francisco to care for him and eventually take his place.
from eight hundred to fifteen hundred feet in depth; its floor consists of lava, ashes, and broken rocks, the lava predominating. It is rough and uneven, and in several places there are small craters sending up jets of flame, smoke, and steam, and there are numerous cracks from which smoke and steam issue constantly. In many places the lava lies in great rolls and ridges that are not easy to walk over, and some of them are quite impassable. Consequently the path winds about a good deal, and you nay be said to walk two miles to get ahead one.
"The floor of the crater is hardly the same from week to week, and if I should make a map of it, and describe the place very carefully, you might not know it if you come here a year from now. In many places it is so hot that you cannot walk on it. Lavacools very slowly, and the thicker the bed of it the longer the time it requires for cooling.
"Over the floor of the great crater we picked our way for nearly three miles to the Burning Lakes; and what do you suppose these lakes are?
"Their name describes them, as they are literally burning lakes-lakes of fire so hot that if you should be foolish enough to try to bathe in them, or so unfortunate as to fall into their waves, you would be burned up in less than a minute. We had to climb up asteep bank of lava to get in sight of them, and then what a spectacle was presented!
"There were two little lakes or ponds, five or six hundred feet in diameter, and separated by a narrow embankment which the guide said was occasionally overflowed, and either covered entirely or broken down for a while. These lakes are on the top of a hill formed by the cooling of the lava, and at the time we saw them their surface was, perhaps, one hundred feet below the point where we stood on the outer edge or rim. The wind blew from us over the lakes, and carried away the greater part of the smoke and the fumes of sulphur; but in spite of the favoring breeze. we were almost choked by the noxious gases that rose from the burning lava, and the numerous crevices in the solid banks where we stood.
"The molten lava, seethed, bubbled, boiled, and rolled below us, its surface covered with a grayish and thin crust, out of which rose irregular circles and patches of fire that seemed to sweep and follow one another:from the circumference to the centre of the lake. Every minute or so the lava in the centre of the lake bulged up and broke into an enormous bubble or wave which sometimes rose twenty or thirty feet into the air, and then broke and scattered just as you see a bubble breaking in a kettle of boiling paste or oatmeal porridge. I know the comparison is a homely one, but I can't think of anything that will better describe what we saw.
"The bank of the lake down near where the lava came against it was red-hot, and so you may imagine if you can a mass of liquid fire rolling and surging against a solid one. One of the lakes was much more agitated than the other, and the liquid lava seemed to break upon its sides very much like a sea upon a rocky shore."

arass hodse, hawailan islands.



## On the Great Sledge Journey.

.The time of our leaving IIudson's Bay in the early spring of "7s on our long sledge-journey of a year's harl work we had forty two very fine Eskimo dogs to pull our three heavily-laden sledges over the hard frozen snows. Among the wid Eskimo we met on that distant trip, so far away that only a very few had cver seen any white men before, we added by purchase eighteen more good doge, making sixty in all.
When the year was gone and the journey ended with a bitter cold Arctic winter, and the joyful sight of our old home in Hudson's lay was again brought before us, we had out of the sixty but nineteen of the faithful creatures left. Nearly all the rest had starved to denth during the hard part of the trip where we had fought our way along, alnost starving ourselves.
When we started in the spring of ' 78 , we had enough good food for our forty-two animals for a number of dars. A funnr kind of food it was, too-great slahs of tough walmes hide, nearly two inches thick and covered with bristly hair. This we cut into strips about a fost long, and ahout a dozen of the strips were given to each dog. The animals were not fed

When our summer's task was done of following the lonely line of death and burying the bones, we prepared for our winter's sledge journey home to HIndson's Bay, whence next summer a ship would take us to the United States.
The first cold snap of wister-and in the Arotio regions winter sets in earlier than in our own comntry by two or three months-started the reindeer, now fat and in fine fur, to migrate southward where the climate would be a little milder: so we had to scurry around pretty lively to kill enough of them for conthing, bedding and meat until we should overtake them farther south again.
We were quite successful and early in November we started back, hoping and expecting to reach homo in a month or two at the most-an expectation that was dragged out two or three months, even longer than that, and gave us a sledye joumey through the whole of the winter, an undertaking hefore unknown even among the Eskimo.
Our dogs were good and strong and covered with fat when we started, and everything worked along happily enough while we were passing from one Eskimo villare to the other, where we could exchange trading material for dog-food.
The last village we left November 10. As our reindeer ment was fast diseppearing-we had not seen one of these animals since the seventh of Octoler-we did not feed our dogs again until the fourteenth of the month. This day we left the head of a deep inlet and thought that by the time another four days had passed we would be at the Dangerous Rapids at the mouth of Back's Great fish River, where matives catch fish and where we could therefore replenish our supplies for our dogs without using more of our precious reindeer meat. Still we were traveling across a wholly unknown country, and ererything was purely conjecture.

thermometer sank to $60^{\circ}-65^{\circ}$ and once $60^{\circ}$, and the gentlest zephyrs cut like razors. We had supposed we would make twenty or thirty miles a day on the level ice of the river and be home by New Ycar's. But instead of being better sledring it was much worse than on the rolling land, and we seldom made over five or six miles a day. So at last we left the river and started straightway across the hills.
On the third of January it was geventy-one bolow zero-one hundred and three degrees below freezing-the coldest weather on the trip and the coldcst ever endured by white men travel ing, for that day we moved camp ten or twelve miles farther on. Our fish were now rapidly disappearing, and coupled with the intense cold and hard work our poor dogs were faring badly. At the time we left the river we had lost one fine dog. We were stripped of all but nineteen when we reach Hudson a Bay. Worst of all our fatty food was entirely gone. With a goodly amount of this a perion or an animal can resist bitter cold; but the lean and blue reindeer neat gave but little sustenance to the poor brutes doing such hard work in suoh severe weather. There was none too much to give them either, so short were the days-but two or three hours long -in which our Eskimo could hunt them. All this told terribly. Hardly a day passed that we did not lose on dog or two.
They were through all this horrible time perfect respeoters of thoir human allies, and the little children used to go among them and play with them by pelting them over the back with their toy whips; and yet the same dogs were starving and should one of them die his commades would eat him. I notice this particularly as some sensational writers have tried to make their rearlers believe that the Fiskimo dogs are liable to become dangerous fellows even to a powerfully built man, when simply hungry, and to be worse than wild beasts when ravenous. It is true that so wild are they for food after long deprivation that their actions might be taken by people with timorous natures for intentions to devour a person; but any onslaught of Eskimo dogs is unknown among the northern natives where I traveled. It was pitiable in the extreme to see their sufferings as they so devotedly helped us along, many of them up to the rery minnte they had to be taken from the harness and abandoned on the road. Our Eskimo hunters made heroic efforts at hunting, but the Arctic day was so short and reinileer and musk-oxen so scarce that in owder to
again for two days. That is the rule on a journey, however much food may be on hand; and if there be a scarcity they may be fed only every third or even fourth day. Singular as this seems it appears yet more wonderful that the dogs will keep up their strength and spirits when doing ordinary sledging, day in and day out, and yet be fed only alternate days. I have lived directly among the Eskimo for over two years, just the same as one of them, and I never saw them feed their dogs oftener than every second day, unless it was to give them something that otherwise would be lost or spoiled. When the valrus hide gave out, as it did in about three wecks, we had to rely on game, principally the flesh of the reindecr, over five hundred of which we killed on our year's trip. Nearly all of these we secured through the vigilance of our Eskimo hunters. Had we all been white men I believe we never could have made the trip from Hudson's Bay to the Arctic Occan, and my belief is founded on many years' hunting experiences in the West. I feel perfectly confident that no average body of white men (we numbered seventeen in all, four being white) could have made the journey and supported the forty-two hard-working dogs with their voracious appetites. My sledge expedition would have been absolutely impossible without the aid of my Eskimo allies, and shows the folly of attempting Arctic enterprises without them and their means of life and trareling.
When we reached the Arctic Sea, we got dried fish from the natives to feed the dogs, and also killed a few seal on the ocean ice. All summer we thus kept them alive on King William's Land, and ourselves too for that matter; for we could only carry less than a month's civilized provisions and were gone within ten days of a year; therefore, when our starting-out supply was gone we had to live for nearly a year the same as the Eskino; the same as the dogs, in fact, cxcept that they would be stinted first in times of scarcity,
During all this long summer-rhen the sun never went down, when the only way we could tell midnight from noon was by noting that the sun was a little nearer the horizon at the former time although it was just as light-we were burging the scattered hones of a brave British expedition of over a hundred souls that visited that lonely island many years before and not one of whom ever returned to tell in what a dreadful way they were lost. As my little band carefully com. pleted the last sad rites for these remains I could not help but wish that their party too had been much smaller in numbers and had added faithful natives to it, 80 at least a few could have escaped mlong the dreary coast where we were living in plenty at the corresponding time of year when they were lost.


The four days faded into five, then sis. On the seventh my dog-driver, Toolooah, fed the dogs from the reindeer meat. I had felt as if I must have them fed before, but I fully com. prehended that he knew the best and I must let him have his way about the poor beasts.
Then came another long stretch of six days, till November 28, before the dogs were again fed; and now only ligitly.
Then came the thimd stretch without food-an interval of seven days, which ended on the fifth day of December when we reached the Rapids, and found a huge caim of fish put up by the Eskino. This we bought, and gave our poor polar puppies a most royal feed. The themometer had been as low as nimus forty degrees. We had traveled nearly two hundred miles, and the intervals of feeding had been, for three times, about a week apart-yet not a single dog of the nineteen in my sledige had succumbed, although each one had dragged over double his own weight through it all. Such a trip would have killed every $\log$ of any other breed but these from this part of Eskimo land, while white men pulling such a sledge with such a load would have atarved before they had made onethird of the way. Little enough do we know about winter travel in comparison with the northern natives. In as cunning a way as one could devise they cover the bottoin of their broad sledge runners with ice which makes it so slippery that a dog can pull four or five times his own weight on a sledge on the best snow; without this ice he probably could not pull one-quarter as much. One who has not seen this great aid to sledging cannot imagine what a help it is; and when $I$ read of the many Arctic sledge-trips by those who know nothing of it my admiration for their doing so well under such difficulties as many of them have had, is fully equal to my pity that they did not know how to wipe half or two-thirds their labors away. It is an intricate and delicate affair, known only to perfection among the Rskimo.
We left the kind Eskimo on Back's River December 12, hav. ing been joined by my other two sledges. lirom now on, the
give the poor dogs any we often had to reduce our own food supply which we cheerfully did.
As they dropped out along the way, we harnessed ourselves in their places to the sledge-traces, and it was only thus we were not compelled to abandon important parts of our load.

Abont the middle of Febmary, the wolves began to trouble us, and although they killed four of our nearly famished dogs at the very doors of our snow-houses, we rather welcomed the sight of them, as we knew their presence indicated our nearness to the reindeer-hunting grounds of the Hudson Bay Eskimo, and that we were therefore nearly home, and might fall in with natives we knew at any time. In fact, the latter part of February we saw a Kinnepetoo Eslcimo, and from him got help to reach our old home with our nineteen dogs, all that was left of sixty, about two-thirds of that loss being purely from starvation.

Frriderick scinwartia.

## Time.

A frolicking fellow is Time !
He stirs young hearts to a vague desire;
He blossons the rose; he buds the briur;
He frets the iry to start and climb;
He tunes the world to a summer rhyme. Oh, a frolicking fellow is Time!

A treacherous tyrant is Time!
Young hearts' desires he ne'er fulfills; He blights the rose, and the bud he kills. The garden gathers his gift of grime; The still pool sleeps 'neath his sheet of slime. $O \mathrm{~h}$, a treacherous tyrant is Time!

## A comforting comrade is Timè!

He heals young hearts of their plercing pain With his soothing simples and reatful rain; The bare world gives he a robe of rime, The bare world gives he a robe of rime,
Till it glisters far like a thing sublime. Oh, a comforting comrade is Time!

## 解)

## Sickness from Air Poisoning.

BY PROF. SCRUP.

HE worst and most fatal kinds of diseases are now generally conceded to. come from tiny organisms (gems) of various kinds which arise from decaying vegetable matter, stagnant water, badly laid drains, cesspools, etc., and which float off into the air and are thus taken into the bystem, or they may be carried into the system through drinking impure water. Soientific research has now proven that too great care cannot be excrcised in planning and building a home, to see that drains and sewer pipes are properly constructed and that no gases or vapors arising therefrom escape into the house. Ccllars should be carefully drained and thoroughly ventilated to prevent dampness. All cesspools, outhouses, and heaps of decaying matter should te kept a good distance away from dwellings, that poisonous genns coning from them may not get into the house through open doors and windows.
A wealthy fanily in the east fearing disease from their poorly constructed drains paid out a large sum of money to have their cellars and sewers re-constructed on the most ap. proved plan. Yet, ono alter another, their children died of diphtheria till six of thein had passed away. Upon investiga. tion it was found that near the open ventilator through which the air passed to the hot-air heater was a pile of decaying rubbish!!
But diseases from germs are not always sc virulent or sud.
the temperature moderates it becomes more or less contamimated according to the amount of decomposing matter present. These poisonous vapors, full of disease genms, are as invisible as the air itself and their presence may not even be detected by the senge of suncll; though the smell of votten. ness or decay always means that dangerous gases and still more deadly germs are present in the air.
Figure A represents a hoube where every facility is offered for the spread of disease. In the cellar may be seen bins or heaps of vegetaliles-potatoes, cabbaces, apples, etc.- many of which at this season of the year are likely to lo found in an advanced state of decompositionsending forth germs or gases in great quantitics. There being no means of ventilation these readily find their way up through the door or doors leading to the liting or sleeping rooms above and must inevitably breed disease or at least impair the health of the strongest individuals. In some cellars added to vegetable-decaying matter may be seen barrels of soap, soap grease, dried meats, in a state of beginning or advanced decay. The walls of suoh cellars are often covered with green mold, or festooned with masses of white fungus growth, which indicate in a most positive manner the extreme unhealthiness of the state of things present.
Special attention is drawn to the sink in the comer and its connection to the cesspool. As will readily be seen the deadly proisonous fumes from the cesspool find their way up into the building through the open drain pipe.
Now turn to figure B which shows a proper state of things. The cellar should be thoroughly well ventilated and kept scrupulously clean. It should be whitewashed, and if vege. tables and fruit are kept in it these things should frequently be looked over and anything showing signs of decay promptly

DOMESTIC sOURCES Of AIr-poISONING.
At the present time, no inteligent person is ignorant of the fact that $n$ large number of the nost dangerous and fatal dis


Germs Attacking the Blood Corpuscles.
eases are fairly attributable to the mischierous work of minute organisms termed bacteria, microbes, bacilli, or more commonly, though less technically, germs. Some of these genns are shown in the accompanying cuts, in which they are represented as they appear when magnificd ly a powerful microscope.
These so-called genus are a low form of vegetable life closely allied to the fungi or molds. They are found to be universally present whenever any kind of decay or decomposition of animal or vegetable matter is taking place. When received into the system through the air we breathe or the water we drink, these gems often multiply in great numbers. The body is undoubtedly able to dispose of a small number of germs, or to resist their attncks upon the tissues. It is claimed, Indeed, that one of the important offices of the white blood corpuscles is to devour the mischievous germs which may find their way into the blood. If, however, the white blood corpuscles take up too large a number of these organisms, the gemus may destroy the corpuscles, instead of being themselves destroyed. Thus, in some germ diseases, the blood is found to be extensively disorganized.
The only safety, as regards gerns, is to keep them out of the body. Although invisible, they are by all odds the most dangerous foes to life and health. Gemns are always present whenever decay of any sort is taking place, as in the decom position of amimal or regetable matter. On this account they are the most abundant in cities and villages, and close about human habitations.
removed. If possible the door from the cellar should not open Into a living room-better into the shed or summer kitchenbut if it does, it should be kept closed and made to fit tight. so as to exclude all dampness and vapors. Note carefully the change in the connection of the sink to the cessypool. The drain pipe is made with an $S$ shape to form what is known as a "trap" in which water mas collect and prever.t the gases arising from the pool passing through into the house. A ventilating pipe should always be provided to house. A rentilating pipe should always be provided to allow accumulated fumes to escape from the cesspool into the open air, where they may be disposed of by natural agencies instead of being carried up into the house to be breathed; yet thousands of drain conneotions to cesspools are made as shown in figure $A$, and people wonder why they don't feel well or why they are siok ! Cesspools are not the most sanitary means lor the disposal of house slops, but in many instances are a "nccossnry evil." When they are used they should be made water-tight, and all drains leading thereto provided with "trapls" and the cessjool itselt provided with a ventilating pipe as shown, and which should le from 4 to 6 inches in diameter to allow all gasea to pass of freely. It should not be necesuary to aril that such a pipe must be of sutticient height and so located that none of the escaping rapors can possibly phss into the house through any of the upper windows.
We close our paper on this all-important subjeot by quoting from an artiole on "Domestic Sources of Air-loisoning," which appeared in Good Heallh, the following desoription of disease germs and whioh we have fully illuetrated:


Gorms of Chicken Cholera.
It is to be hoped that those readers of the Ililistinateo who havo hitherto neglected these all-important sanitary matters, will pay carnest heed to these our waruings, and so prevent sickness and ill-health. Scionce has revealed to us theso nover-failing laws of nature, and when wo broak Nature's lawe wo must most certainly suffer the consequences.

ply at reasonable figures must be great. The horse ranches are also doing well and a brisk and profitable trade with the old country is looked for in the near future.

During last year about $1,500,000$ boxes of cheese were exported from the port of Montreal, being the largest

## March.

Ithought that March was wildest in the twelve, With dreary fields whose shining garmeuts show But ragged edges left along the walls; $A$ siotous youth that cares but for his will, Scmding the dust awhirl with boisterous breat And wrestling with the elmus along the lane, Then seek to hide from him beneoth thoir veils, And wlth rude frilics sending old men's hats A merry race. No good I knew of him, Till once, quite sudden made his conlddante, 1 found that March, like many another, hides His sweetest and his fairest from men's sight. Within a forest nook where his wild winds Wre lulling breezes, covered by dead leaves, Swect-l) reathing, pink-chceked liabies curled asleep but carried in his breath urbutus scent but carried in his breath arbutus scent.


The importations of cattle, sheep and swine for breeding purposes last year were large. Among the Ontario imports were 29 Jerseys, 36 Holsteins, 11 Durhams, and 32 Galloways. In sheep the imports numbered 1,994 , of which 1,263 were Shropshires. Sir John Lester-Kaye brought into the country during the year for his Northwest farms 396 sheep, 65 swine, and 99 cattle.

Hon. Mr. Carling's report of the Agricultural Department laid before Parliament is of considerable interest in so far as it relates to immigration. T'he assisted iminigration system was discontinued on April 27 th last resulting in a rise in the emigrant passage rate on the ocean lines from $£ 3$ to $£ 4$, but despite this there has been as steady a stream of immigration as in formers years, the total arrivals being 174,474 as against 175,570 in 1887 . The number of actual settlers last year was 88,760 as against 84,526 in 1887. It is gratifying to know that the stoppage of assisted passages has brought out a very superior class of immigrants, the pauper element being conspicuous by its absence.

Tue official report on Canada's foreign trade should give Canadians cause for rejoicing. It is almost incredible that our exports to Great Britain have exceeded those to the United States by nearly $\$ 120,000,000$ during the last sixteen years, but such is the case. Our exports of cheese last year were valued at nearly $\$ 9,000,000$, and our export cattle trade aggregated over $\$ \overline{5}, 000,000$; while $\$ 813,000$ worth of apples, $\$ 127,000$ worth of poultry, and eggs to the value of over $\$ 2,000,000$ were exported. Farmers, by paying more attention to the production of these commodities and by combining to introduce factories for butter and cheese-making, would provide themselves with a profitable investment for their capital.

One of the most pleasing features of the report of the Dominion Minister of Agriculture is the progress of the ranches of our Northwest Territories. Besides supplying the local market they have had a surplus of between four and five thousand head of cattle to export to Eurupe, and it is gratifying to learn that good profits have acorued from these exportations where the animals were carefully selected and shipped. When the high price that had to be given for beef in the Northwest a few years ago is considered, the benefit to local consumers by now having an abundant sup-
exports in the bistory of the trade. Strange to say, the exports of butter were the smallest in the history of the trade, being only 22,000 packages against 78,000 packages in 1887, and 71,000 in 1886 . What is the cause of the marked falling.off in the butter export trade? Probably it is because our butter is too good for export and it is impossible to get a paying price in view of the cheap manufactured article, made from American oleo, thrown upon the English market.

The report of the Department of Interior was laid before the Dominion Parliament on February 26th. The report states that during last year in the Northwest 420,333 acres have been homesteaded which is the largest area homesteaded since 1884. During the same period 70,521 acres were proempted and 197,140 acres sold. The total area of land taken off the hauds of the Government was 678,994 acres. But 2,655 homestead eutries und 454 pre-emption entries have been cancelled, an unusually large number. The total cash revenue of the Department was $\$ 212,606$. The report states that the settlers have never had better crops and there has been practically no damage by frosts. The prospects for the future in regard to settlement are exceedingly bright.

The Vominion Parliament, on mation of Mr . Adam Brown, M. P., has appointed a special committee to enquire into frauds practised on farmers by bogus seed agents, lightning rod men, etc., and to devise means by which farmers may be protected from these swindlers. The appointment of such a committee has been made none too soon and it is to be hoped that the results of their investigations will be such as to put an end ouce for all to the systematic frauds practised on the farming community. The farmer, as a rule, is easily duped because he has only occasional dealings with other men and he has difficulty in learning to mistrust them. Other people by continually dealing with other men learn to be always on their guard against treachery, but not so the farmer, and it is a bitter experience when he finds his confidence made his bane. It is astonishing, however, that they are not thoroughly alert to the devices of these swindlers in view of the constaut exposures in the press of their modes of operation.
'There is a man in Brooklyn, N. Y., who is anxious to get his name handed down to posterity as a leader in the noble cause of the advancement of his fellow-beings. He has written to the New York papers propounding the interesting theory that men, women and children can acquire the power to wag the ears possessed by mules, horses, dogs and other dumb animals. He explains his theory in this way: "If the face be contorted into what is known as a broad grin, from ear to ear, as it were, it will be observed that the ears progress more or less toward the crown of the head; repeat, gradually suppressing the actual grin, and ullowing its force to expend itself at the ends, right and left, and the ears can be raised without any other change of expression." He believes that by assiduous practice on this line everybody will eventually be able to wag his ears as casily and freely as a mule in fly time. He does not say what benefit human beings will derive from the ability to wag their ears, which is to be sincerely regretted. Perhaps he thought that was unnecessary as one's imagination would supply the omission.

T'uere is not much legislation of special interest to the farming community to be dealt with at this session of the Ontario Legislature, Hon, Chas.

Drury has introduced an amendment to the Agricultural Act authorizing the Entomological Society to elect only five directors instead of thirteen, and to divide the thirteen agricultural districts into five groups, each of which must elect a resident as a member of the Board. Another amendment is to empower township and horticultural societies to unite their funds for exhibition purposes; while another amendment is to devise a scheme for organizing agricultural societies in unorganized districts by providing a judge to fill the functions of a reeve in that respect. Another bill is of interest to farmers along the north shore of Lake Ontario. It is to prevent the removal of stone, sand and gravel from the shores of the lake. Representations had been made to the government that the land was being washed away by reason of this natural protection being removed. The bill is to compel parties to get the consent of owners to the removal of stone, sand, or gravel, otherwise they will ronder themselves liable to puuishment.

The third Spring Stallion Show of the Clydesdale Horse Association will be held in the Drill Shed, Toronto, on March 14th. Entries must be made to the Secretary, Mr. Henry Wade, Toronto, not later than March 9th. From the large number of entries already made the show should prove a most successful one. Several very valuable prizes are offered. It is a pity that in such a large city as Toronto there should be such miserable accommodation for live stock shows. There has been considerable talk for some years about procuring a commodious and suitable building but it has amounted to nothing else but talk. There should be a building devoted entirely to the interests of agriculturists where liesides holding these shows there should be rooms in which to hold the annual meetings of associations and other bodies connected with the agricultural industry. Bitter complaints were made by those who attended the last annual meeting of the Central Farmers' Institute at the poor accommodation afforded them, and, if the citizeis of Toronto do not bestir thernselves and show some practical interest in their country brethren by providing them with a comfortable meeting place, they will find that some other vity will do so and thereby reap the benefits to be derived from the influx of farmers and others. The "Queen City of the West" has justly earned for herself an enviable name for rapid progress in wealth and population, but she should not in her pride and popularity neglect to do all in her power for the comfort and convenience of a community that has helped in no small degree to make her what she is.

We have received a communication in which the writer claims that the increased use of machinery is in danger of bringing about an over-production on the one hand, and a lack of employment on the other. We do not agree with this view. Our progressing civilization increases the demands of the people, and more laborers are required to produce what our advanced needs require. It cannot be denied that we dress better, have better furnished houses, and have more luxuries than our ancestors. Consider the number of new inventions such as the telephone, which has called for the services of thousands of men and women as linemen, operators, manufacturers of implements, inspectors, clerks, etc. It has also created and stimulated a number of allied industries such as wire making. Look into the statistics of the agricultural implement business, and the large number of men making mowers, harvesters, plows, cultivators, rakes, harrows, etc. Think of the large number of people employed in makiug pianos, organs, fine carpets, and other luxuries unknown in farmers' homes years ago, and the vast number of employés necessitated by the modern newspaper and the telegraph. Where an invention throws one person out of employment it is apt to make employment for a great many more. The only trouble is the confusion, caused by the temporary loss of business and disturbance sometimes arising by a new invention causing one to adapt himself to new conditions. The more the world progresses, the more we want, the cheaper and more accessible become the new commodities, and the more people it takes to serve us.

As predicted in our last number the Ontario Government has decided to withdraw the annual grant of $\$ 10,000$ to the Provincial Exhibition, after the current year. The Provincial in its earlier days no doubt served a most useful purpose, but now that each large city and town in the province has its own annual exhibition there is no further need for the Provincial. During the debate in the Local Legislature on the motion to abolish the aunual grant some of the speakers condemned the "side shows" at Fairs. We cannot see any sound objection to the introduction of "side shows," if kept within reasonable bounds. Take the Toronto exhibition as an example. During the days that something more than usually exciting or attractive is on the programme the fair grounds are packed with people, the majority of whom are from the country districts. People like to be interested and amused. Ample time and opportunity are afforded for visitors to examine the products of the soil, agricultural machinery, etc., and to witness the special attractions offered for their amusement, without the one conflicting with the other. Some people are cynical enough to object to horse-racing it country fairs, but let us ask what other exhibit ever filled a country fair ground like a half-mile track? We beg to enter a vigorous protest against the ahuse heaped upon "side shows," and long may they flourish, we feel sure, is the wish of every one who has the interests of the agricultural fairs at heart.

Instances are constantly cropping up which in themselves refute the statements made. by chronic grumblers that farmers in Ontario are worse off than their brethren in the States. Last month we referred to the great distress existiug amongst the farming populatiou in Dakota, and now it seems that the farmers in New Jersey are in a very bad way. A dispatch to the New York Tribunc of February sth, says: "Many of the best and oldest say they cannot make both ends meet and that the outlook is not encouraging. Many farmers have made assignments and others are in the hands of the sherift. To add to their discomfiture the tomato crop, which has been their main stay, has proved disastrous both as to quantity and price. lior two seasons the farmers have tried to form a 'trust.' Last year they were indifferent and but few could be persuaded to enter the combination to demand a higher price from the canning factories, and now the second scason's meeting for that purpose has proved a dismal failure. They say they will make their own sales for whatever they can get. The canners are consequently jubilant and are contracting with small farmers for $\$ 6$ per ton and less, this being even a lower figure than was paid last year." With a fine soil and excellent climate it is difficult to understand why New Jer. sey farmers should be in such a sorry plight when it is also taken into consideration that they have a market of sixty millions at their command. The condition of farmers in Illinois, Indiana, Iowa, Wisconsin and other States is not much better than that of the furmers of New Jersey. In view of these facts well may we ask "What's the matter with Ontario?"

Two marters specially affecting the agricultural industry have been debated in the Dominion Parliament. One was a motion to abolish the duty on fertilizers or artificial manures, in the interest of the farmer, on the ground that the duty on these articles was a direct tax upou the whole agricultural community whose interest it is to be able to obtain whatever may enrich the soil at the lowest possible price. In opposition to the motion it was argued that there is in Canada an enormous supply of the raw materials which form the basis of agricultural manures and that we export every year large quantities of mineral phosphates, bones, leached ashes, etc., also that the duty on the manufactured article keeps out of the market a large importation of inferior stuff, competing in price with home made fertilizers of greater worth which, without duty, could not be sold at present prices, nor of as good quality. The other motion was to allow the farmers to have ai rebate of the duty they pay on corn for feeding purposes. It was argued in support of the motion that the farmers
have to import the greater part of the corn they use for feeding cattle for export on which they pay a duty of seven and a half cents per bushel. The distillers also have to import the corn they require to muke spirits for export, but tho distillers are allowed a rebate of duty. It was therefore asked that farmers should be placed on the same footing as distillers. Against this it was argued that the free importation of Western corn has always kept down the price of our own coarse grains which under the operation of the duty, are about ten cents per bushel higher than they otherwise would be; also that the Maritime provinces have an equivalent to this duty in other ways, and further, that the National Policy must be sustained, or set aside as a whole, and not bit by bit to suit particular interests. Both motions were defeated.

That the Permanent C'entral Farmers' Institute, or as it is termed, "The Farmers' Parliament," will yet prove a leading factor in all political and eco. nomic questions affecting not only Ontario but the whole Dominion is a self-cvident fact. Any one who attended the annual meeting held in Toronto last month could not fail to be struck by the intelligence, earnestness and ability displayed by the speakers while discussing the many important questions brought before the meeting. It is true, that some of them were inclined to volubility and to talk about matters irrelevant to the point under discussion, but they were the exception and will no doubt in time learn to appreciate the fact that "brevity is the soul of wit." It is not our intention to comment upon the various subjects dealt with but there was one thing that surprised us very much and we take the opportunity to touch upon it. In our January number we referred to the coming text book on agriculture for use in our rural schools and suggested that the government should appropriate a sum for the purpose of providing instruction by the professors of the Agricultural College, Guelph, to a certain number of select school teachers on the sulject of agriculture, thus equipping them for teaching the young farmers not only the methods of agriculture but the principles on which success depends. Mr. L. Woolverton, of Grimsby, apparently agrees with us, as he moved a resolution to the effect that public school teachers, after teaching a certain length of time, should take a course of instruction in the Agricultural College, Guelph, in order to prepare them for teaching agriculture in schools. The motion was defeated and did not receive either the attention or support that it merited. Our suggestion is not that all public school teachers should receive this special course of instruction but only a select few, say one or two from each county, and we are convinced that the powers that be will ere long see the advantages to be derived from such a scheme and will not hesitate to adopt it. We don't believe that school teachers will ever be converted into farmers, or become qualified to instruct farmers or their sons in the actual practices of husbandry, but we do believe that they could, by building on the foundation of a good general education, become literary experts in the matter of agriculture, and be able to direct the youthful mind in proper grooves. They could encourage the development of the power of observation, for which there is so much necessity as a training for every walk in life, and so much scope and material coustantly at hand in a country place. It is a notorious fact that boys are reared in. our rural districts without lnowing and without noticing intelligently the thousands of objects of interest that surround them. With broader education and an end of pedagogic fancy there would be less cause for the constant cry of "Why do boys leave the farm? "

## FARMERS, ATTENTION 1!!

It will be a matter of considerable surprise to farmers and others having the interests of agriculture at heart to learn that the Postnaster-General has in his wisdom decided that none but daily and weekly papers will in future go through the mails free. The bill is now before the House of Commons, but it has not yet become law, and we trust it never will. The monthly agricultural papers, we
venture to say, are far more entitled to the privilege of free postage than either dailies or weeklies. They devote their columns to the instruction and amusement of the farming cominunity-the backbone of the country-and are just as essential to the farmer as the daily paper is to the man of business or to the politician. We have no hesitation in saying that the bill, if passed, will do a great wrong to a class who are already heavily enough taxed and have too little consideration paid to their interests. If postage is insisted upon, publishers of agricultural jouruals will be compelled to increase the subscription price of their papers, and the sulbscribers-or in other words the farmers -will have to pay the postage. Farmers and others interested should bestir themselves and by concerted and prompt action take effective steps to prevent this gross injustice from being perpetrated. Let them speak out with no uncertain sound before it is too late. They are in the majority and their voice should be heard on such a question as this. Comparatively few farmers give any special thought to existing laws, or to the law-making power of the land, their thoughts being mainly centered on their farms, and so through indifference and lack of concert among them, laws. just and unjust are enacted for the government of the people. When it is too late they learn to their cost that laws have been enacted favoring certain classes or interests and inflicting great injustice upon them. If farmers would have their burdens lessened, if they would become on a level with all other classes, when seeking government aid and recognition, let them organize, and let them all pull together for the good of the class. We do not care whether they belong to either of the political parties or to none; we don't want them as party men but as farmers working for the benefit of farmers, They have now the opportunity to make their power felt, and we again urge upon them to take prompt steps by petitions to their representatives in Parliament and by other means to prevent the passage of this bill. It is preposterous to contend that a monthly paper is not as much a newspaper as a weekly. We have good reason to believe that the bill has been introduced for no other purpose than to please an organization which styles itself the Canadian Press Association. This Association is chiefly, if not wholly, composed of editors and proprietors of weekly newspapers who are jealous of the large circulation of the monthly agricultural papers. The Association is simply a laughing. stock to the majority of the members of the Fourth Estate. It has degenerated into an association for no other purpose than to obtain cheap fares from railway and steanboat companies for an annual blowout in the fall of the year. There are a few weeklies which are a credit to the country, as they are ably edited and contain much interesting and instructive matter, but the majority are filled with matter sent out by an association in Toronto, and a few paragraphs of interest to nobody else but the people residing in the town or village where they are published. Take any of the monthly journals devoted to rural interests, including Massey's -Illustrated, and compare them with the generality of weekly news. papers, and see which is the better educator and which is entitled to any privileges from the Postal Department. Now, farmers, all we want is fair play, and we call upon you-not in our interests, mind, but in your own-to rise up in your might and kill this most iniquitous measure. Lime is precious.
[Owing to a press of matter we are compelled to hold over yur third artiole on "Simple Studies on Interesting Subjects" till our next issue.]


Reward.
If farmers, who have discovered ingenious methods in connection with their work which would be of use to their fellow farmers, will write us and describe the same, furnishing a sketch when practicable, we will reward them by publishing them over their names, with an illustration when possible; and further, when we consider the plans or ideas advanced have special merit we will remit them amounts varying from $\%$ je to $\$ 5.00$, in proportion to our estimate of their value to our readers.

Banicitid manure is the basis of successful farming. Jt costs nothing but the saving, and is a complete manure for all crop productions, and therefore in growing food necessary for the stock the fertility of the soil can be maintained, which otherwise is always sure to deteriorate.

Has suticient ice been stored for summer? If not already harvested get the ice-house and sawdust ready and go ahead. March with its blustering winds and rain storms will soon break up the ice and no time is to be lost. Ice is no longer a luxury but is almost as much of a necessity on a farm as fuel for winter.
The agricultural editor of the Hartford Courunt says: "I have never known a farmer who was dissatisfied with his business, and was always grum. satisfiell with his busmess, and was always grumpressed lot, who kept any account of his operations." Did you? He adds: "Have we not, as farmers, beeu selling, year after year, certain of our crops far below cost, from the fact that, having our crops far below cost, from the fact that, having
no accounts, we did not know what the cost was?"
Owins to the comparatively light snow fall this winter the water supply will in all probability be short and it will therefore be necessary to exercise economy in its use. Grain should be got in as soon as possible this spring so that it night get as early a start as possible while the ground is moist. By doing this the crop gets a start from the spring moisture and not one half of the water is necessary that is required where the ground is allowed to dry out before the seed is put in,

Thi early spring is the proper season for grafting trees growing in the open air as the sap is then in inotion, previous to the leafage. Care should be taken to properly set the graft so that it will be secure against being displaced by the wind and to properly protect the place of union from drying or from external moisture by applying grafting wax. An important requisite is a healthy condition of the stock and scion. The ingredients used in making wax are rosin, beeswax and tallow, which are melted together in the proportion of three parts of the former to three of beeswax and two of tallow. In all out-door grafting care must be taken to exclude the air from the wounded parts. For dressing all faces a sharp knife with flat blade should be used and another one for other purposes.

Farmers should exercise great care in the selection of their seeds for planting. Money expended in securing a stock of pure seeds instead of those of doubtful quality is well invested. Of course there are some seeds that the farmer can properly raise himself if proper care is taken, but there are others which can be better raised by the seedsmen. It is not a bad plan to try in a small way novelties in seeds so as to test their suitability for next year's crop. Although as a rule farmers should look as. kance upon novelties which are offered each year in glowing terms some of them may be really de. sirable and therefore it might pay well to try a few. With regard to vegetables sow the main crop of tested varieties only. Send for seed catalogues. You will find where to send in our advertising columns.

Prothetion for a Fhrm Gate.-A constant source of annoyance on the farm is the destruction of gates by careless drivers. Let a new gate be put up and some one is sure to injure or cornpletely break it down sooner or Jater. The device suggested by V. T. Whitsett, Guilford Co., N. C., and illustrated below, although simple, will save much vexation and repairing. The damage is generally done by the wagon hubs striking the frame of the gate, often getting caught behind the cross braces of the frame; and by a sudden jerk before the wagon can be stopped. On every gate, bolt or nail firmly a plank twelve or fourteen inches wide and and not less than one inch thick, dressed on the outside the entire length of the gate.

was on hand. My quinine box was empty, and I was looking forward to a restless, sleepless night. In desperation I peeled a raw onion and slowly ate it, then went to bed, with warm feet and an extra comfortable, when, presto! I was asleep in five minutes, and awaked in the morning free from malaria and ready for the day's duties. Our home ly but strong friend will be appreciated in time as a medicine, and if agriculturists would turn their attention to raising a model onion, with the strong scent taken out that taints the breath so unpleasantly, families will be putting their "pills" in the cellar by the barrel, and the doctors would take to onion farming. The onion acts as a cathartic and diuretic and may help to break up a cold or lessen the bad symptoms. Said a doctor: "I always store a barrel of onions in my cellar in the fall. We have them cooked twice a week, and whoever of the family is threatened with a cold eats some onion raw. If this vegetable were gene rally caten there would be no diphtheria, rheumatisn, gout, kidney or stomach troubles. But bless you ! the young men and women are afraid to eat them. One young man went so far as to say to me: "If my wife ate onions I would get a bill of divorce.'"

The middle of the plank is arranged to be the same height as the hubs of au ordinary wagon-wheel. When the axle strikes this plank it meets no obstruction and is free to move on. Although simple and easily arranged by any farmer, this little contrivance will save many a good farm gate.-Ameri. can Agricullurrist.

The Carpenter Shop may be made one of the most valuable buildings on the farm, especially where there are boys with a mechanical turn. The number of useful implements and appliances that may be made here is large, and the time for this kind of work is rapidly passing. Teach the boys to first make a drawing of the article they propose to make, drawn to a scale, and then to work to measure. Among the articles to be needed are markers for different crops. Stone boats, or sleds to use in place of them, shoes to put over the points of plows while taking them afield, boxes to hold a bushel, and others a half bushel, extra whiffletrees, and gates, both large and small. Have oilcans to go with each wagon or seed sower, spare chains, extra plow points and duplicate parts of machines most liable to be broken.-American Agriculturist.

New Feed Box.-Almost every farmer has been provoked at times by reason of the "boss" cow, or steer monopolizing the feed rack or water trough, while other more hungry animals stood about patiently waiting for her ladyship or his lordship to become satisfied and move away. It has oc-

cured to me that by making a trough or box four or five feet square, and extending a stall or partition from the corvers, at least four animals could be fed or watered at a time, and could not materially interfere with each other. I send a rough sketch or plan.--C. E. F. in Rural New Yorker.

A writer in the American Garden thus points out the valuable qualities of the much abused and neglected onion:-One day I was taken with chills and headsche, signs that my old enemy, malaria,

## dive Stock.

Tre breeder's motto: Breed animals which are best adapted to the object you wish to accomplish whether it is speed or strength in horses or beef or butter in cattle.

During the stormy days of March horses are often made to stand in their stalls for days together. This should not be, as daily exercise is essential to the health and condition of every horse.

Colts should be halter-broken when following the mare; it helps to subdue them and supersedes the necessity of breaking them over again when grown up. "Once broken, always broken," is an axiom as old as the art of breeding. It is advis. able to break them to harness at two and one-half or three years old. They will receive no injury from careful usage in light vehicles.

A good cow ought to more than pay her way every week in the year. If she pauses two or three weeks in milk production before dropping her young, the loss of milk ought to be more than made up by the value of the calf. In thoroughbred animals, whose young are most valuable, the increase of stook may easily be worth nearly or quite as much as the milk or butter product for a year. Thus the farmer who keeps a dairy has a more constant source of income than one engaged in almost any other branch of the farming business.

The best food for fattening young pigs is milk, with equal quantities of bran and meal. At the early age of five months the muscular development is not mature, and should be encouraged by food containing much lean-making material or nitrogenous natter. If milk can be procured, it may be mixed with equal parts of bran or corn-meal so as to make a slop which might bo easily drank ; ten pounds in four quarts of milk and two pounds of the mixed meal may be given daily to each pig in such a mess.

In horses the pulse at rest beats 40 times, in an ox from 40 to 55 , and in sheep and pigs about 70 to 80 beats per minute. So says Wallacc's Monthly. It may be felt wherever a big artery crosses a bone. For instance, it is generally examined in the horse on the cord which crosses over the bone of the lower jaw in front of its curved position, or in the bony ridge above the eye, and in cattle over the middle of the first rib, and in sheep by pla ing the hand on the left side, where the beating of the heart may be felt. Any material variations of the pulse from the figures given above may be considered as a sign of disease. If rapid, hard and full, it is an indication of high fever or inflammation ; if rapid, small and weak, low fever, loss of
blood or wealrness. If slow, the possibilities point to brain disease, and if irregular to heart trouble. This is one of the principal and sure tests of the health of an animal.

Contindally grading up the stock is the most practical method for the average farmer. The experience of many stock groweers has often proved that the offspring of the best thoroughbred beef breeds of cattle sired on native cows will bring more money at three years old than an ordinary steer will at four. This makes a male thoroughbred very valuable, as he can much improve a herd. In grading up, the end in view must always be kept in mind, and the aim must be steadily at the selection of crosses, whether it is desired to in crease the size, perfect the form, weight of flesh, milk, or whatever quality it may be. Neither must it be forgotteu that there is constant danger of deterioration, which can only be avoided by care and vigilance, and that there is abundant encouragement for the careful breeder. - Western Brecder:

At this season, as lambing time approaches, it is important to have the ewes in the best condition of health, as thereby much trouble is saved, and vigorous lambs are secured. With the mutton breeds it is much the safest not to give the ewes any grain if they have been fairly well wintered on clover or mixed hay, with more or less turnips. If they have had insufficient keep, and need strengthening, it will be best to give very moderate rations of oats. In no case should corn be given. In our own experience nearly all our troubles at lambing time have followed grain feeding. The blond thereby is made too rich and heating, the udders become badly distended and caked, the flow of milk is often retained, milk fever is liable to sct in and the wool become loosened, the lambs are dropped in a weak condition, the ewe is restless, and the percentage of loss becomes very heavy. We would decidedly prefer to have ewes poor and weak. After the milk flow is established, oats and wheat bran can be given to great advantage, and should be in creased to about all the ewes will eat in connection with good clover hay and roots, if they cau be had Regular exercise is very important for ewes during gestation. - The Cultivator and Couutry Gculleman.

## Proportion of Butter in Milk as Affected by Feed.

Col. F. D. Curtis, in the Rurral New Yorker, says :-
It does not take as much milk to make a pound of butter when the cows are fed on hay, as it does when they are fed on grass, provided the bay was green when cut and was well cured and is of good quality. A cow would make more butter from less milk when fed on green, well cured clover hay, than from clover pasture from which she would make more milk. The butter is the product of the butter fats in the milk. The value of milk is in its solids and not in the amount of water. Rich, dry foods will make more solids in proportion to the water in the milk, and grass will increase the volume of milk and the amount of water in proportion to the solids. The kinds of hay and grass must all be taken into the account. When fed on good silage, cows will give more milk and make more butter than when fed all hay. The rule for feeding is, two pounds of dry fodder for every hundred pounds of live weight. As silage is full of moisture, two pounds more must be added, making forty pounds a ration for a cow of 1,000 pounds weight. I am sure forty pounds of good silage will make more and better butter than twenty pounds of any ordinary hay. Neither of these is a full or complete ration. They are only suitable as a maintenance or support ration. To get the best results from either hay or silage, there should be fed with them a portion of bran and either linseed or cotton-seed meal to make a better proportion of the nitrogenous and the carbonaceous foods or elements, so as to obtain a better digestion and assimilation and a better quality of butter and more of it. More butter should be made from a given quantity of milk in the autumn, when set anyway so as to get the cream all up. The cream does not rise as freely in the autumn, on account of its vis. cosity, or the thick, sticky condition of the milk. By putting in water heated up to 100 degrees, tho cream will rise sooner and with more freedom; that is, there will be more of it.

## The flonltry fard.

Femd the table scraps to the chickens instead of throwing them away.

Remember you must hatch early to get laving pullets, say by middle of April, else your birds will not begin to lay till early spring and thus be most unprofitable.

Are your hens eating eggs? The simplest and most effective way to cure them is to cook and eat them. They will mase a good pot pie, but are good for nothing else.

To make hens lay you may safely give an occasional feed like the following: Make a thick mush by stirring coarse Indian meal into boiling water, in which you have broken up one large seed pepper, or two sinall ones; let it cook an hour or so, and feed hot. Horse radish chopped fine may sometimes be added for a change. You will surely find an increase of eggs to be the result. Boiled apple skins, or potato parings seasoned with red pepper, or horse radish, is also good, and an occasional spoonful of sulphur mixed with the feed for every dozen fowls, will tone up their systems.-I'oultry Monthly.
"A Model Hen Hoose."-This is what Mr. F. F. Townsend, of Washington County, Iowa, calls the building as illustratel here. As will be seen by an examination, the building is $14 \times 20$ feet, with walls eight feet high. The walls are double-board-

ed up and down with tar-paper between the boards. In the three drawings, $A$ represents the place for roosts; B, a loor under the roosts to catch the droppings, and $C$, a trough into which the droppings can be scraped. D is a door and W W are windows. It will be noticed that the feed room is directly under the roosts, but fully protected by the floor that is built to catch the droppings. These must be cleaned from such a place every few days. It will be noticed that there are two ventilators on the house. These are always closed in winter.Rural New Yorker.

If you wish to grade up your flock so as to have a flock of hens that are not afraid to lay, writes the poultry editor of Mirror and Farmer, make a cross of Leghorn occasionally. That is use a Leg.
hom male about one year in three, and the prolificacy of the flock will be increased. There are some objections to Leghorns, such as lying over fences, combe freezing, small size, etc., but in infusion of Leghorn blood once in a while is always aitended with good resultes as 'far as egg production is concerned, and it also imparts activity, destroying sluggishncss and a tendency to fatten readily, which are objections pertaining to the larger breeds.

Poultry keeping for profit is the laudable ambition of the great majority of poultry keepers, and poultry is really leept to the profit of its owners, in the great majority of cases. Little account is made of fowls, and no account is kept of their expenses or of the income derived from them, and yet it is the settled conviction of the frugal housewife, who looks more or less after the poultry, and of the farmer, who sees how large a a part of the store bill is settled by eggs, and who brings home from market or from the shipper who buys the dressed poultry at Christmas time a satisfactory roll of bank notes, that poultry is really a paying farm crop.

Tue following is an extract from an address by J. W. Ludlow before the Birmingham (England) Poultry Society: "The test of a hen's fertility is a record of numbers and weight and quality of eggs per annum during her first, second and third years. Without this, or a knowledge of her pedigree, all (or nearly all) is speculation. But if you have not already discovered the fact I may tell you of an almost infallible indication of a good layer, and that is a big comb and wattles, no matter whether single or double, leaf, fork or rose comb, so that it is iarge and of brilliant redness, with equally large and ruddy appendages. Get this and depend upon it you have a good layer. This was amongst my earliest discoveries as a boy, and as often as my brother and myself could scrape together two shillings we went in for another 'big combed 'un,' and I have never for a moment had cause to ques. tion this test. A big comb is the outward and visible sign of great fertility. Look then for such, if you want good layers, and have it of peony red. ness; then you get health also. There are also structural indications in form; the best layers are the long-lodied races-heavy astern, big-bellied, wide stride, waddling gait-and yet of conspicuous life and activity. Thus you will see the layer is of decidedly baggy or 'otfally' tendency (as opposed to the lightand spare stern of the poulterer's aim). I think you will readily realize what I have tried to explain-viz., the futility of looking for the two cardinals in one strain."

## Pithily Put Pickings.

Growine colts and young stock should never be fed for fat.
It is not the farmer who feeds the most gram, but the nac that adapts it to the purposes desired, that has the best stock. ...Care and kindness to the lrood nute will bear fruit in the
oning generation.- Riurnl. New Yorker.
Sosse idea of the amount of patent medicine used, may be obtained from the fact that the manufacturer of a single medicine gave an order to a glass manufacturer for more than hree and one-half milion bottles, to be delivered within the next six monthe.-(iood Health
HARD, intelligent work, and keeping at it, insures success on the farm, as it does in all life's duties.... It pays to plow deep, harrow thoroughly, sow carefully, till dinigently, and artil is the ribe with ..... bost famm shols and in satistied ntil he is supplied with the best farm tools and implements he can obtain--Maryland Firmer.
There is nothing like dispatch in the routine of fann labor. ... Economy is praiseworthy of every farmer but stinginess is mn abommation.... Stay by your rural home and enjoy a raised in our conntry homes become the pracrical men and women of the land.-liocky Mounfuiu Ifusintheman.
"Wuan bad men combine the goal must associnte, else they will fall one by one, an unpitica sacritice a contenptible apply at all to the present?... The man who makes his farm pay- these days by the use of his brains as catpital has real talent, and should stand second to nene in the community where he lives....Sanlisoll was the strungest man, but it isn't reconded that he ever lifted a farm mortgage, - Farm stock and Home.
Make your farm euch that poor mimals would disgrace it make your animals such that a poor farm would be unfit for them.....If a little olearing, a little ditehing, a little emiching or a litte picking up is done cach year, the farm will stadil will soon run down.....No farmer need sit down and expeot some one to furnish hina a ready-mare systeml or plan of con duoting his farm; he must ninke it himself, is the opinion of an aoute agriculturist.-jarm $A$ phorisms.

## THE FUTURE OF SHORTHORNS.

## Interesting Paper by Mr. Riciard Gibson,

 of Delaware, Ont.Tus following interesting paper on "The Future of Shorthorns " was read by Mr. Richard Gibson, of Delaware, Ont., at the annual meeting of the Dominion Shorthorn Breeders' Association held in Toronto on 26th February :-
At your President's suggestion I offer you a paper on "The Future of Shorthorns." Believing as I do that it is the duty of every member of this Association to do what he can to malse the aunual meetings more interesting, to that end I have consented to prepare a paper on the above subject and so add my mite. Premising, however, that I do not wish to pose as a prophet or that I am able to see further into the subjece than my brother breeders-I do not pretend as much-but this I do know, that a great many breeders are feeling discouraged, and also that there is but little money to be made out of them now or prospectively.
It is to such I wish to address myself, and I trust I can give them some little encouragement. In the first place let us cast back for four or five years and notice the change in prices that has taken place in that time amongst the various other breeds of cattle. Herefords were booming as much as five, six, or seven hundred dollars were being paid for bulls for ranche purposes. That trade is gone. As milkers they are uot a success, hence of but little value in the thickly-populated States where milk, butter, cheese, and cream arc required as well as beef, and are only of value on the rich black soils within the corn belt of the prairie States, and their worth has depreciated so much that they are now of less value than the shorthorn, the breed they maligned so much, and that notwithstanding the amount of money spent in advertising and helping the boom in every way that tact and organization could accomplish. To stop importations they even went so far as to im pose a fèe of $\$ 100$ on cach imported animal offered for entry in their herd book. While the shorthorn breeder fought against every breed unassisted, he had also to fight those who should have been his friends, viz, other sholthorn breeders, that is, breeders of other strains of blood besides his own, and they were often his worst foes, whereas the Hereford breeders were thoroughly organized and disciplined and pooled their cattle and fought as one man, hence the secret of so many triumphs in the show rings.
What of the Angus? Notwithstanding their success at the Fat Cattle Shows their star is set, except in the corn belt of the prairie States. Have they not been worked for all they are worth? I venture to predict that within a very few months there will scarcely be a respeciable herd left in Ontario; they are not wanted liere, and the boom in the States is broken. No marching through city streets with herdsmen dressed in kilts leading the "Bonnie Doddies" with pipers at the head of the procession. No importations are being made, and last year, the first for some time, at the annual spring sales in Scotland the Shorthorns were not only in most demand but actually realized the higher figures.
I will not detain you continuing the parallel with Holsteins, Jerseys, etc. You all know they have depreciated in value more than the Shorthorn. But I would not have you assume that I predict a brighter future for the Shorthorn because of the depreciation in value of the other breeds, but only inasmuch as so many young breeders were cooxed away from the golden calf to seek after false gods in the shape of antagonistic breeds, and as these breeds have been tried and found wanting, in the future we may expect an exodus of young breeders who have hitherto, of late years, been persuaded to invest in anything lout Shorthorns. But there are signs that would indicate that we are now nearing the morn of a bright and prosperous day and 1 think the golden rays can now be seen instanced by the sale in Chicago last November, when 79 head sold for $\$ 43,320$, over $\$ 548$ each; and twelve head of one family sold for $\$ 29,050$, an average of $\$ 2,420$. Again there is the fact that Shorthorns are thoroughly useful-they are not a fancy article like a piece of old china, jut intensely practical and of every day utility. That they more nearly approach the general purpose cow than any other pare breed is unquestionable, and if any doubters
could only see the good cows now used in the large dairies in the vicinity of London, they would no longer be in doubt as to their value as milkers, and my firm belief is that even if the Hereford or Angus could take their place as beef manufacturers, their influence in the dairy coonomy could not be filled elsewhere, and they would be wanted for that purpose. I's may be objected that I am saying too much on this subject, but I feel it is one of the most important questions in connection with the breed to-day. Yon can have good milkers and good feeders. I've had them, and so can others. Though prices are not as high or the demand as great as we might wish for, Shorthoins can yet be bred profitably, and I wish you not to forget that in the natural course of events there must be times of denatural course of events there must be times of de-
pression ; there never has leen a business or industry of any magnitude that has been contivued for a length of time but what has met with reverses, and why should you expect the breeding of stock to be an exception. There have been periods in the history of the breed on this continent when the situation was gloomy indeed. Mr. Allan in his history of the Shorthorn writes: "With the year 1840, under the continued. depression of the financial interests of the country at large, the spirit so active during several previous years in cultivating the shorthorns gradually waned and further importatious ceased.

There was little or no encouragement for breeding Shorthorns. Under this depressed condition of aftairs hundreds of well-bred bull calves were castrated for steers and many cow calves spayed and reared for the shambles. Prices for the best-blooded animals were merely nominal, public sales were scarcely made at all as in the past years and private sales infrequent, nor was the depression for a few years only but continuous or neurly to quite the year 1850. In Keutucky, New York and New England Shorthorn values were no better and many breeders who had begun rearing them but a few years before became disgusted with their stock, turned their choice-bred cows into the dairies, put them to common bulls and sold off their calves remorselessly to the butcher. During. this depressing period numerous good pedigrees were lost as not being worth preserving, and many valuable tainilies of this lordly race became almost, if not wholly, extinct." What a picture! And yet in the year mentioned, vi2., 1850, we find a sinall bevy of American gentlemen crossing the Atlantic, and attending a sale held at Kirklevington in May, where they succeeded in purchasing three females, and again three years later at the 'Tortworth sale, the same with other Americans laid the foundation for a herd whence a single cow realized very much more than the whole 68 animals bought at Kirklevington-a herd that at public auction realized $\$ 380,490$ for 108 head! Then let us take heart of grace, let us not be discouraged. The signs are right and the good time is coming. There never has been within my memory a time when a breeder could so easily set himself right if on the wrong track. Never a time when a foundation ior a herd could be procured at such a small cost and never a time when money in vested in well-bred animals at the current prices seemed so certain of being gafe and profitable. Just as sure as summer follows winter, so sure will depression be followed by bouyancy; and just as sure as Ontario is worth farming, stock must be the leading feature, and if so the Shorthorn must take that high position to which he is entitled both by his lineage, prepotency and intrinsic worth.
[We are obliged, owing to want of space, to omit Mr. Snell's excellent pajer on "The Milking Properties of Shorthorns."


CONDOCTED by J. b. Habris.
Two very large and enthusiastic excursions left Toronto on February the 14th and 21st respectively, for a trip around the world. The organizer and conductor was Mr. Walter Massey, who in this role, as in all others he has uddertaken, was eminently successful. We say was, for the excursions are over, the excursionists all safe at home, and de-
lighted with their trip. From Toronto, over the prairie-through the Rockies-to the Golden Gate -far across southern seas - beneath Hawaiian Palms-across Australian meadows-to Suez-to Alexandria-to Jerusalem-to Bethlehem-to Naz-areth-and so homeward-all in eighty minutes! A wonderful journey among wonderful scenes, rendered strangely familiar by the presence of wellknown faces looking out from unexpected corners over all the world. The employés of the Massey Company and their friends are indebted to Mr. Massey for two delightful evenings. Mr. Samuel McNab presided on the first evening and Mr . Thos. Owen on the second, two evenings being necessary on account of the hall holding only: some 700 people.

We were favored some evenings since with an invitation to be present at the closing exercises of the first term of the Parkdale Art School. Dr. May and several gentlemen from the city were present, and all seemed delighted with the progress made by the young people during their first three months. Free hand, mechanical, architectural and other drawings, together with oil and water-color paintinge were on exhibition, some of them being very creditable indeed. Mr. Bell-Smith, the Head Master of the school, delivered an address of an eminently practical character, in which he depre. cated the idea of "manufacturing" artists at so much per head in a given period. He was of the opinion that a faithful study of art will be of benefit to a man in any position-that it tends to inculcate more methodical and clearer habits of thought; that the intellect as well as the hand is educatedthat although only a few will become eminent, the time spent in the pursuit of artistic knowledge will not be lost to any one, always supposing such time to be honestly used. There is no royal road-all must patiently climb from success to success, never being satisfied with present attainments.

We were favored a few days ago with a visit from old friend Harry Watson, who once occupied a prominent position in the office of the Massey Co. This young gentlemen has decided to cut the counting-house in favor of a profession, and is now engaged fitting himself to cut and otherwise maltreat human beings. It is exceedingly dangerous to approach Mr. Watson now. He is an enthusiast in whatever he undertakes, but has never reached the acme of enjoyment until the present moment. He is continually on the watch for "subjects;" and any abnormal growth or other peculiarity even on the person of his bosom friend will render that frijend liable to be made the victim of an "opera. tion" at sight.

Among the members of the Domivion Shorthorn Breeders' Association who attended the annual meeting on the 20th February the following visited our works on the invitation of Mr. H. A. Massey, President of the Company :-Messis. J. R. Martin, Cayuga; Aaron Shantz, Haysville; Daniel Shantz, Haysville; James Ballantyne, Sebringville, and Colin Campbell, Crosshill. They were driven to the works and were received by the members of the firm and conducted through the works by the Superintendent, Mr. Johnston, and Mr. Morrison, editor of the Illustrated. They were loud in their expressions of admiration and astonishment at what thoy saw, and their only regret was that they had not more time at their disposal to thor: oughly examine the mechanical wonders displayed in each department. The company extend a gen eral invitation to visitors from the country to inspect their works, who will receive every atten tion and consideration.

condocted by aunt tuto.
(Comnumications intended for this Department should bo addressed to Aunt Tutv, care Masary Presb, Massey Street, Toronto.)


周OW much does the baby weigh? is almost the first question asked when the news of a bahy's arrival is heralded forth; and certainly it is a most important bit of krow. ledge, for it is the starting point of what should be, I think, a system all through babyhood-a system of regular weighing and recording of the weight.
There is nothing in a visible way, if faithfully and systematically carried out, that will be such a guide and indicate so clearly the ups and downs of health as this system of regular weighing. It is like a registering themometer, indicating at a clance the state of health of the little one; should the food disagree or fail to nourish properly, the weight will show it at once; if the baby is overfed, the scales will discover it; if sickness is slowly coming on or health is returning, this registering thermometer of systematic weighing will indicate it at a glance.
The accompanying chart indicates and sets forth the system I have adopted for registering weights, and the line as seen is the actual record of ny baby for the first twenty-three weeks of her me. The plan is on the same principle of charts made to show the fluctuatione of markets, the changes of temper-
Lbs.

chart showing weerly ingrease or demrease in weight.
ature and of those also used in cases of severe sickness, and it is unique in that it marks the growth of life by time. The horizontal lines in the chart below represent halt pounds and the perpendicular lines represent weeks.
My system is to weigh the baby every week (usually Sunday) at the same time, on the same day, without clothes and register the same by carrying the line to the point reached. There is almost always a slight falling oft in the weight of a baby in the flrst week or two of its life, but alter that, in a healthy ohild, if the food is right and the baby is right, this line will begin its upward mark, and in perfect health should never point downward, although such a record probably was never secured. The accompanying chart has a depression on the fourth week, owing to indigestion, and again, the eighteenth week, of three ounces, which was the resnit of vaccin. nation; at the time of teething further depressions were shown later on.
Now, the uses of this sys tem are these: The doctor is called in and has the facts of progress or otherwise before him at a glance. Does the food agree with the baby? does she gain or lose? Answer by showing him the chart.
Second, it detects the beginning of disease - "prevention is better than cure." If the line takes a downward turn something is wrong; look into it before matters get worse.
Third, it is a chart for reference. In case of subsequent children, and also in comparing progress with others of the same age, many quicksands can be avoided at times where they appeared before. It is also a good thing to insert at different times along the perpendicular line incidents of in. terest, such as the first "going out" or the "first tnoth," when vaccinated, etc.; such records are invaluable for refererice.
I would advise every parent to adopt this system of not only regularly weighing the baby, but of keeping this chart record of the weights; it will be a picture of the ups and downe, a sort of tracery of the baby's journcy through the early years of life, until baby itself can speak and tell all its own troubles. -Gro. I. Carpenter, in Babyhooid.

## Helpful Household Hints.

Solled and faded black cashmere may be made to look almost like new if the following cleaning be used. Wash your material in soap sude, rinse in water, and then put in water with 80 much bluing in it that it looks like black. Leave your cloth in this water for some time over night, if it is much faded. Do not wring the cloth after tak. ing from the water, but hang up to dry in a shady place. If your dress is elaborately trimmed, the trimuing may be better ripped off and treated in this way separately. Dark blue cashmere can be made to look beautiful if renewed in this way.
To make calicos wash well, infuse three gills of salt in four quarts of boil. ing water, and put the calicos in while hot and leave them till cold. In this way the colors are rendered permanent and will not fade by subsequent washings.

Soda Crackers are much better to be heated for a few moments in the oven before using.

## Dress of Hawaiian Women.

The accompanying illustration shows a group of native Hawaiian women. The climate is so mild that heavy clothing is unnecessary and owing to the climate being so warm it could scarcely be worn. The dress of the women can hardly be called picturesque but after being seen a few times its oddity is not apparent as at first. Most of the women go bareheaded, or with wreaths of leaves and flowers in their hair. Their dress hange from the shoulders without being gathered in at the waist, and is not unlike the morning wrapper ladies wear in our own country. Black, dark shades and often white or pink are the usual colors, while on festive occasions gayer colors are used. The Hawaiian women carry themselves with considerable grace, which may probably in a woman be attributed to their flowing dress. (See Ietter on Maraii, juge i. )


## The Feet in Winter.

gome suogestions as to tileir consideration ano cahe.
Sose one has remarked that "self-acting rubbers, on and off with a kick, are the grandest life-preservers of the age." And it is also related that poor Mrs. Caudle, the good lady whose curtain lectures so long kept her patient husband awake, came to her death through no more serious cause than a pair of thin shoes; she could talk to the men about their carelessness, but after all she died, and Job, thanks to his thick cowhide boots, lived to "mourn her loss." From October until May, the care that we take of our feet will go a long way towards securing for ourselves both comfort and good health. No one can with impunity negleot the condition of their feet during these months, and it now has become a well established fact that wet and cold feet are a prolific source of diseasc.
There are three thinge necessary in order to securo the most healthy condition of the feet; they should bo kept warm, dry and clean. The first requisite is obtained by wearing suitable stockings. In selecting the material we should remember frst, what fabric is the best non-conductor of heat, and second, which is the most comfortable to the wearer. Experience has taught us, that woolen is the most perfect non-conductor, therefore it is more generally used for winter wear than cotton or silk. Care should be taken to use only one kind during the season; it is not wise to wear cotton to-day and woolen to-morrow, and thus alternate from one to the other, as in this way it is very easy to eatch cold. But the choice of either material must be left to the wearer. The naturat heat of the hody caused by the activity of the circulation will sug. gest which is best for his own individual use. Thus for one who has a large amount of natural heat, woolen rotains this surplus of heat, profuse perspiration is induced which so0n becomes condensed by the cold which comes through the boot or shoe, and the feot are thereby kept clammy, damp and most disagreeably cold; but if cotton or silk hose are worn, the extra heat is conveyed away, still leaving enough to keep the feet comfortably warm.
The dryness of the feet depends largely upon the kind and quality of the boot or shoe worn. Shoes are better for ordinary every-day use than boots, especially for those people who walk. For riding or when obliged to stand or travel through the deep snow, boots are the best. A cheap pair of shoes is
dear at any price. It pays in every way to get a good shoe; it looks better, wears longer and gives better satisfaction. A reeent writer has given the following directions for the preservation and utility-of boots and shoes: "Take a pound each of tallow and resin and put in a pot on the fire; when melted and mixed, apply hot with a painter's brush until neither the sole nor upper will soak any more. If it is desired that the hoots should immediately take a polish, dissolve an ounce of wax in a teaspoonful of turpentine and lampblack; this should be applied a day or two after lut not before the fire. Thus the exterior will have a cont of was alone and shine like a mirror, at the same time affording antiseplic protection to the tallow and resin which will prevent them from rotting the leather." Another inportant consideration is not to wear a shoe after the outer or frst sole is worn thruugh. It is conducive to both health and comfort to get it tapped. Rubber boots, overshoes or rubbers should he woin only while riding and walking, and not when in the house, the store, or in church.
As to the matter of cleanliness, it should be remembered that the pores of the soles of the feet are much the largest in the whole body, it is therefore of special importance that they be kept open. At least once a weck during the winter, the fect should reccive a good soaking in wam water, and if convenient twice or even three times a week is none ton often.
Perhaps no class of men suffer more from cold fect than those who are obliged to remain out in severe winter weather who from the nature of their work are compelled to stand or sit in one position most of the time, as for exanple, horse-car drivers, conductors, hackmen, teansters, etc. To such and others, the following method of warming the feet may be of practical service.
It is one of the rules of what is known as the "Swedish movement system," and is as follows: Stand erect, and very gradually lift yourself upon the tips of the toes so as to put all the tendons of the feet at full strain. This should not be done spasmodically, but slowly and gradual, the slower the better, and remain standing in that position as long as possible, then return slowly to the natural position. Repeat this several times until a sutficient and lively circulation is set up.
In closing we would offer a word of caution to mothers, and that is, do not allow your children to go to bed with cold feet; see to it that their feet anid legs are warm and dry. This will not only make them comfortable and serve to ensure a yood night's rest, but also may prevent suffering and perhaps a serious illness.-Good Howsekeqping.

Strose black coffee, to which add a few drops of ammonia, is said to be excellent for cleaning a black cont that needs a thorough renovatiug.
Wine making a new carpet never throw away the ravelliugs, for in daining the carpet on some future day you will find the colors will match much better than any yarn you will likely he able to find or buy.
When your wash dish gets gummy by using hard water and soap, wet a littlepiece of cloth in kerosene, and rub the dish inside and out with it; then wash, and you will be surprised to see how nice your dish will look. It is much
better than soap. $\qquad$

## Mother. <br> mi mbidk mass.

0 thou whose ever loving heart Pillowed my infant head,
dud from my childhnod's earliest start My tottering footsteps led.
If words were jewels sparkling bright As diamonds flashing flame,
I'd seek for genns of purest light In which to set thy name.

That name, so sacred and so dear, Enshrines the purest love
That dwells on earth, to henven 'tis near Allied to saints abore.
Mother: Ah, that tender word Chams like the magi's spell; Afection's deepest font is stirred Where holiest memories dwell.

Far back on time's half blutted page, Hew inuch we would erase, From childhood through maturer years Our follies we cen trace.

A mother's love my guiding star On lite's rough sea shall be, And, brightly shimmering from afar, Shall lead to heavon and thee.


Willie Wilson's Farming.

## a troe story.

Willie Wilson was left fatherless at the age of three months. His father, dying early in life, did not bave time to accumulate much property and he left but small means for his wife, little Willie and an older brother. Eight years elapsed when his mother was wedded to a farmer and being a man who believed in work, in working himself and having everything at work around him, every child, when not at school had to go to work as the hired men did. His object was to teach the children how the dollars came and to finally make of them men of business No favors were granted and everything moved like clock-work on the farm. Willie learned the art of farming both by theory and practice. Corn and peas and everything needed he cultivated in abundance, and was taught that farming could not be a success without making it self-sustaining in all departments as near as could be with hired labor. Willie did not have the opportunity to secure a high school education, as many young boys do now, but had to go to a district school when work was slack. Time went on, as it always does, and at the age of twenty Willie began farming on shares with oue of bis aunts, a widow, and during the first year he made as his part $\$ 500$. The next year he rented his annt's farm and stock and for two years was quite successful. Being in a prosperous way he took unto himself a wife, an excellent girl, the daughter of a neighboring farmer. His chief aim every year was to make the farm self-sustaining but the fourth year came reverses, crops were poor and it was difficult to procure help on the farm. Everything was given up except a cow, a horse and wagon and sonie seed but not a cent of money was saved. Being endowed with more than ordinary energy, Willie decided to try another location which he considered more fertile. So he rented a small farm and his "better half" also taking in the situation both determined to free themselves from all embarrassing circumstances. They hired labor and worked hard themselves, he looking after the plows and plowing himself from sunrise till sunset, while his wife was never idle attending to the many duties devolving upon her. In five years Willie and bis wife were able to luy a tract of land comprising 600 acres. This cauc from his fixed pur-
pose when a boy, and from which he never wavered, to make his farm self-sustaining. Such was Willic Wilson's farming career and it shows what a poor boy, full of grit, can accomplish on the farm. It is an example worthy to be followed by our boy readers.

## Anagrams.

A pleasant amusement for the evenings is the game of Ana grams. Procure a box of the cardboard letters made tor the purpose. Those lettered on both sides are the best, as they facilitate selecting the ones desired; and can be purchased for the guall sum of fifteen or twenty cents. Then, picking out to form them into one word, shitting then apout for the pis pose. It onc cyades your efforts put it aside and try another A pood-natured rivalry can give zest to the game by making $a$ list of the answers and appending to each the initials of the person solving it. The winner may be presented at the close of the conteat with some trifiling prize it desired. The game also whiles away the tedium and solitude of a sick-room when the patient needs quiet amusement, as it can be played by one as well as more players.

ONR JUNDRED ANAGRAMS.

| 1 A nice pet. | 51 A snnil's tonc. |
| :---: | :---: |
| 2 Base cue. | 52 Kip pencil. |
| 3 Fort Erin. | 53 Dan darts. |
| + Great help. | 54 Wild den. |
| 5 Mint seed. | 55 The curb. |
| 0 Blain coat. | 58 Core us. |
| 7 No pegs. | 57 End is pert. |
| 8 Safe in act. | 58 Tug so. |
| 9 Cram it on. | 60 Tom shed it. |
| 10 No suew rivet. | 60 I can net. |
| 11 Lip gems. | 61 We do ma. |
| 12 Base clot. | (i2 Shun cat. |
| 13 Arah brain. | 63 Oil hest. |
| 14 Came shut. | 64 Tore car. |
| 15 Gone had. | 05 Raise toil. |
| 16 Some rags. | 68 Said cent. |
| 17 See cinder. | 67 Trim on cape. |
| 18 I see a worm. | 68 Ha ! tags. |
| 19 Force tin once. | 69 Peach it. |
| 20 Turn in stem. | 70 Teach lit. |
| 21 I chop rust. | 71 'Tis lute cage. |
| 22 Tin coif. | 72 Wad Fred. |
| 23 Nicer ale. | 73 Learn ice. |
| 24 A deep rest. | 74 Given rose. |
| 25 Its chest. | 75 Lo mad Fin. |
| 26 Tie lean dog. | 76 I cast near. |
| 27 Lies rest. | 77 A robe tale. |
| 28 Date in mug. | 78 Rob lean sea. |
| 29 Me cut hair. | 79 Gale ten. |
| 30 Lone raps. | 80 His prow. |
| 31 He past more. | 81 Place bruin. |
| 321 used oil. | 82 Corean gin. |
| 33 Tidy sale. | 33 Spun tea. |
| 34 Han's bird. | 84 Miet a liar. |
| 35 A mere dot. | 85 Lit coach. |
| 36 Ben's camel. | 86 A nun's rice. |
| 37 Ripen coal. | 87 I roast suds. |
| 38 If a rule. | 88 Air a lord. |
| 39 Big hrace. | 80 Sea side. |
| 40 lacy tail. | 90 Pace oils pain. |
| 41 IIe wilts. | 01 Mag in cap. |
| 42 Claim tune. | 02 Shone mad. |
| 43 Far rents. | 93 His leg. |
| 44 liun raged. | 34 Mere pen act. |
| 45 Coil it rash. | 05 Sort cider. |
| 46 Am spite. | 96 Neat rig. |
| 47 Cries pun so. | 97 Start nine. |
| 48 Dim rays. | 98 Faint in room. |
| 4) Coin rules. | 00 I say pinch. |
| 50 Late mit. | 100 A tory Jim. |



extract from a sermon
of tile
Rrv. Sim Goobebhrry, 'Pobsum Botion, West Va.

"Jer' why dah am only ten comman'ments, an' some ob dent mighty sho't, in my 'pinion, is 'cause de stones dat ole Moses had long wid him on de mountain ribout. Dah am lots ob oder t'ings dat you'd a-hea'd about if dah'd been mo' stone.
"Wha' am de comman'ment 'bout sleepin' in chu'ch?
"Wha' am de comman'ment 'bout sneakin' out ato' de collectionstook up?
"Wha' am de comman'ment dat you got to hab a hymn book ob yo' own 'stead ob usin' yo neighboh'san' lettin' on you don't see him lookin' fo it?
"De wo'ds ob de tex' am: 'Thou
malt not steal.
"Dat anm cut mighty sho't. Dah am some kinds ob stealin' at ole Moses would hab put down de specifications ob, ef he d hal mo' roon. Dah ani some kinds ob stealin' dat de people of dis world t'ink am honest stenlin-dey ain de honest fieves.
"Dah an borrowiu' ob liooks, an' nebber gibbin" 'em back.
"Dah am de borrowin' ob an umbrella, an' gettin' it mixed "4 wid yo' own.
"Dah am de axin' fo' a qua'tah fo' a day or so, when you don't arn a qua'tah in a mont'.
"Dah ann de aayin' dat you'll pay when you come back, when you know you is gwine to walk 'round befo' you'd go back dat wray.
"Dah am de lorrowin' ob de apple-buttah stirrer, an' sendin' it back home wid de handle broke.
"Dah an de borrowin' ob your neighboh's hoss fo' to go to funeral, an' goin' right off to a pienic.
"Dah am de tellin' a gal dat you gwine to trade hea'ts wid her, when you haint got nothin' but a sin-box fo' to fool her wid.
"Dah aun de stealin' de Lo'd's day fo' to go a-fishin'.
" Dah am de stealin' de Lo'd's money-puttin' a penny in de "ollection box, an' payin' ten cents fo' a drink.
"Dah am de stealin' yo' neighboh's good name, 'cause yo' $n$ is wore out.
"Dah am de takin" oh de delble's money to' to gib it towa'd "uildin' a chu'ch.
"Dah am de robbin' de dead-disputin' de will 'cause you ian't get gib enough.
"Dah am de keepin' ob yo' share ob de preachah's salary fo yo to de circus wid.
"Dah am de koepin' do Lo'd's prayers back-puttin' peppah nde stove ob de sanctua'y.
"I tell you, Moses hadn't enough stones by a whole grabe. ad full!
"'Thou shalt not steal!' Dah am some ob you sinnahs dat ink you kin set down wid de debhle an' hreak five oh de com. nan'ments, an' den go make it up wid de L.o'd, a-showin' Him tow nice you kin keep de five dat you don' keer to' to break. "Dah is Bruddall Evan Collins; he is one ob dat kind. One hy las' summah, I was comin' long de road ober yonder by lister Ca'pentah's melon patch, an' dah was Bruddah Evan Collins lookin' ober de fence at de watahmelons. I knowed de in dat was in Bruddah Collins's hen't. I knowed dat de sin Bruddah Collins's hea't was puffin' it up to jes' de size obde ggest watahmelon in dat patch. I stepped up to him, an' I : ' Bruddah Collins, Thou shalt not sténl.'
"Bruddah Collins he jes' kep' on lookin', an' he sny : 'Brudah Gnoseberry, I ain't stealin'; I is covetin'.'
"'Dat's jes' ez bad,' I tol' him. You is breakin' de commanint. You come 'long wid me.
"An' he come. But dat very night he was cotched in dat atch wid de biggest watahmelon undah his a'm.
"De "nex' time 1 seed Bruddah Collins, I ycz: 'Bruddah Collins, what fo' you steal dat watahmelon?'
"Sez he: 'Bruddah Gooseberry, didn't you tell me dat it was jes' ez bad fo' to covet dat watahmelon ez it was to steal him?'
"' Yes,' I sex, 'Shoo it is.'
"' 'Arter you done tole me dat,' sez he, 'I didn't want fo' to covet dat watahmelon, no mo'. I jes' took him fo' to stop covetin'.'
"De debble's makin' tracks mighty olose ahin' Brudidah Colling."-P'uch.

## Married People Would be Happier

If home troubles were never told to neighlors.
If expenses were proportioned to receipts.
It they tried to be as agreeable as in courtslity days.
It each remembered that the other was a human being and not an angel.
It fuel and provisions were laid in during the high tide of summer work.
If both partics remembered that they married for worse as well as for better.
If masculline bills for Havanas and feminine ditto for rare lace were turned into the general fund until such time as they could be incurred without risk.
It men would remember that a woman cannot he always smiling who has to cook the dinner, answer the door bell half a dozen times, and get rid of a neighhor who has dropped in, tend a sick baby, tie up the cut finger of a two-year-old, tie up the head of a five-year-old on skates, and get an eight-yearold ready for school, to sny nothing of cleaning, sweeping, dusting, etc. A woman with all this to contend with may claim it as a privilege to look a little tired sometimes, and a word of sympathy would not he too much to expect from the man who, during the honeymoon would not let her carry as much as a sumshade.-Western Plowmen.

## The Hindoo widow goes up pyre

Sage advice-Dire:tions for dressing a turkey.
Men who have horse sense know when to say neigh.
Common scents-Calbage and onions from the kitchen.
Nature's serial story-the spinal column, continued in our necks.
A baby always helps to make home happy-particularly when the baby is asleep
There is a considcrable difference between a key on the seaboard and a $C$ on the keyboard.
A glass eye has one compensation-cverybody else call see through the device, if the wearer can't
Sir Isaac Neuton earned fame by seeing an apple fall. Some people make money by keeping an apple stand.
Because a man slceps well it is no sign that he has an easy conscience. He may have got tired out committing sin.
There is a rock ahead in life for every young man, and if he is a married young man it is apt to be a rock-i-bye balys
Youth is the time of hope. When a man gets a little older he stops hoping, and beging reaching out for whatever he can get.
"Not lost but gone beef-ower," as the hutcher said when he learned that a customer had skipped without settling his meat bill.
Lovers ahould never go sailing together, because it would be 80 dangerous to have a love spat. A boat is a bad place to have a falling out.
"Many are the ties that call me home," sithed the barnstoming actor, as he resumed his locomotive efforts on the railroad track.
The proper time to give a child his dinner is when it is ready. The child will probaly let you know if he is ready before the dinner is.
Education, says a contemporary, begins the gentleman, but rending rood company and reflection must finish him. Wher does the doctor come in.
Woman has been defined as "An essay on goodness and race in one volume, elerantly bound." But she docsn't like to be put on the shelf, all the same.
A philasopher observes that a man's conduct is largely regu ated by his environment. This is particularly true if his en viromment happens to be the walls of a prison.

A Californir cletgymon recently threw books and chairs from the pulpit among the congregation. He woke everybody up except one deacon, who was superintendent of a boiler factory.
Fashion authorities say that large checks in men's suits will be the fashion in the spring. If the checks are in the poekets and properly signed and emdonsed, the style will be gladly welcomed.
"How did you get alony at school to day, Tom?" asked the old man at the supper table. "Papa, our physiology" say that conversation at menls should be of a pleasait character, replied Tommy. "Let's talk about the minstrels."

Teacher-Now, children, 1 will give you three words-hovs bees and bears; and I want yout to compose a sentence which will include all three words.
Small boy-I have it.
Teacher-John McCarthy, you may give us your sentence. John McCarthy-Boys bees bare when they goes in swim min'.-Harper's lhazar:

In Southern archipelagoes he'd fought the bloody cannibal ; He'd skinned and tanned the orocodile and found him very tauable;
Not a word of fenr he'd utter, not a word and not a syllable, When he killed the Bengral tiger, and he found him very kill able.

He claimed his strength was very great, for bears and lions suitable;
He used to boot the grizzly bear, and found him very bootable;
IIe claimed in killing monstrous snakes that he was very capable,
No boa-constrictor could escape, for he was unescapeable.
In fighting hippopotami, he said he was invincible
No jaguar could make him wince because he wasn't winceable; He made the ramping elephant no longer recognizable, And pulverized the roating bull, and found hin pulverizable.

Just then his wife came in and said: "I'd think it quite commendable,
If you'd come and 'tend the baby, and you'll find him very tendable."
The way she took him by the ear will make this poem read able;
She pulled him out and led him home, and found him very ledable.

## A Quinine Tragedy.

Recently a man went forth to a rural drugstore, and purchased fitty two-grain quinine pills, and took them home for chased fitty
his malaria.
He thought he
looked like inside. So he tried to crish one between his teeth. Instead, he ivories Then he which proves that quinine is bad for the ivores. anen he put it on the hearth-stone and set his hee reachst it, and let all his weight down. It didn't stop till it likened the floor, because the pill shot out from under him like a spool, and he shot off it as from a cake of soap. In order to get over the effects of one two-grain quinine pill, he was oblired to so ounces of arnica. He had heard that quinine pills were sold cheap as an advertisement heard that quinine pills were sold cheap, as an advertisement, and he concluded they did bring a good trade to the apothecary, when he sent out for a bottle of ${ }^{*}$ a little while later.
He concluded he would utilize the quinine pills as duck-shot, so he filled both barrels of his gun, to be all ready when he went forth in the morming. That night he heard it noise in the yard, and, peering out, saw a man standing under a trec surveyor the premises. IIe was not a regularly ordaine surveyor, but a burglar deciding which window he should try, to see how it would seatter. So he tried it, only to discover to see how it wond scatter. So he tried it, only to discover tempted to scatter, but was scattered all around. A surreon wapsummoned, who proled for the pills but securerl only few. The burglar, who had never before been sick, died a few days later, of malaria, supposed to have been brought on by the quinine pills.

* Name of medicine left out because it doesn't adrertise in Puck.


## Conundrums.

Why is a man who makes pens very wicked? Ife makes people steal pens and says they do writo
Why is a city official like a church bell? Oue steals from the people and the other peals from the steeple
Why is it dangerous to go out in spring? Because the trees shoot, the flowers have pistils and the bullinsh is out

What is the difference between a dor's tail and a rich man? One keeps a wagging and the other keeps a carriage.
What is the difference between a soldier and a pretty wo. man? One faces the powder and the other powders the face.
What is the difference between an engineer and a schoo teacher? One trains the mind and the other minds the train.

Polish helps a man in society, but not when it is on his coat.
Metaphorically and rudely speaking, a man is always the chilliest when he gets hot.
"Virtue (sings a wise old poet) though in rags will keep me warm." Not in this climate ?
Working the growler-making your husband hang out the clothes on a freezing washing day:

When there is a commotion in school, the wise tencher pours oil on the troubled waters-whale oil.
The answer to a suppressed conundrum is that Gemmany is like Oliver Twist becanse it wants Sannoa.

Delays are said to be dangerous, but a large precentage of debtors seem determined to incur danger.
When coal is worth $\$ s$ a ton it is better to let your neighbors at warble all night than to pelt her with anthracite.
Speaking of tramps, why is one of the hirsute fratemity like barrel of cider? Because he is sour after he has worked
The man who discovers a granite quarry on his vacant building site has reason to rejoise that his lot is a hard one.
The English language is very inconsistent. A man who plunders is $\AA$ plunderer; a man who makes armor is a armorer, but a man who makes saucers is not a sorcerer.


A Summary of News for the Past Month.
1st.-United States Senate rejects the proposed extradition treaty with Great Britain. . . Scheme approved for the expenditure of $\$ 3,000,0010$ on Harbor Improvements at Mon

2ml.--New York IFertlil starty an edition in London, Eng. \$2,000,000. Disastrous fire in Wells Strcet, Buffalo, N. Y., loss
4th.-Steamer Glencoe of Glasgow, Scotland, sunk in a col 4ision.-Steamer Glencoe of Glasgow, Scotland, sunk in a
ling Head and her crew of 52 men drowned. Opening day of the Montreal Ice Carnival.
5th.-Action brought by Mr. Parnell against the London Times in the Scotech courts disnissed with costs. Supreme Court at Ottawa reduces the verdiet in the famous libel case of Latlamme $v$. The Mail to $\$ 0,000$.
(ith.-Famine reported in China, 250,000 persons starving in Chen-Kiang. . . I Iady Madonald gives an "At Home" at Ottawa in honor of Madame Albani.
7th.-The Council of the Dominion Alliance at a meeting in Ottawa pass a report censuring Lieut.-Governor Royal for ssum! incenses in the Northwest Territories. Toronto, for $\$ 150,0 \cup 0$.

8th.-Manitolsa Legislature decides to abolish all registry offices on November lst and to introduce the Torrens system.
9th.-Wm. Holden, a painter, murdered in Montreal by Luther mograth through jealousy. ©uebec, banquelted by the city council and citizens on the occasion of the 25 th unniversary of his wedding.
10th.-Severe storms in England and Scotland accompanied by serious loss of life. Works of the Standard Oil Company at Constable IIook, N. Y., burnt, loss $81,000,0100$.
11th. -The Call, Winnipry, censes publication. ronto audience gives Madame Alhani a margificent reception.
12th.-The Russian Government grants a concession for 81 years to a company with a capital of eighty five million franes to join the Black Sea and the Sea of Azov he thinks will come al out naturally:

13th.-Death of E. E. Gilbert, head of the firm of Gilbert \& Co., contractors and engine makers, Montreal. . . . Japan stablishes a inodern form of government.

Masonic block, Brandon, Man., lurnt, loss $\$ 55,000$.
14th. -The French Government defcated and the Cabinet ressigns. . . Death of John Carruthers, the wealthiest citizen of Kingston, Ont. . . Retaliation Bill against Canada introduced into the United States Congress.
15th.-Ex-Ald. Jacques Grenier clected Mayor of Montreal by acclamation. Bill introduced into the United States Congress inviting Canada to join with the South Amer-
ican Republics in sending delegates to Washington to discuss the question of Commercial Union. Washington to discuss slow, England, Sir Charles Tupper declares his conviction that Canada will always remain British.
16th.-A portion of Peck, Benny \& Co's factory and the grain elevator occupied by the Ira Gould Mour Manufacturing Co., Montreal, burnt, loss about $\$ 100,000$

Sudden death of C. J. Brydges,
peg, from heart disease.

18th. - Collapse of Ghe Park Central Hotel, Hartford, Conn., and over filty persons killed. . . . Sir lichard Cart wright's motion in the House of Commons in favor of Canarla having the making of her own treaties defeated by a majority of 28 .
19th. -Tremendous conflagration in the business centre of Philadelphia, loss estimated at a million dollars. Famine reported in the interior of Russia and many persons dying. .-. Wm. O'Brien, M. P., sentenced at Tralee, lre land, to six months' imprisonment for violation of the Crimes Act.
20th.-The Bishop of Ontario, married at the British Emhassy, Paris, France, to Miss Ada Leigh, a well-known philan bassy, Paris, France, to Miss Ada Leigh, a well-known philan-
thropist. . . . President Cleveland signs the Nicaragua canal lill.
21st.-Death of James C. Flood, the California millionaire, at Heidelberg, Germany. - . The Imperial Parliamen feated in the IIouse of Commons by a vote of 86 to 58 .
22nd.-A new French Cabinet formed. . . . Rev. Charle purgeon returns to London, Engos, in excellent health States of the Union, Washington, Montana Nor to almit as and South Dakota.
23rd.-Paris, France, visited by a blizzard.
emman ironclads ordered to immediately sail for Sanio Fou 25th - Explosion of gunpowder in a squib manufactory, Ply mouth, Pa.; ten girls instantly killed and seventeen injured.
26th.-Complete break down of the London Times case against the Parnellites; the letters upon which it based its charges acknowledged to be forgerics. . . . Death of Prof, Young, Toronto University.
27th.-Eleven people killed and over thirty injured by a rail way accident at St. Qeorge, Ontarin. . The London Times publishes an umple apology to the Parnellites.
28th.-Rev. T. W. Jeffery, Western Methodist Church, To. ronto, honorably acquitted of the charges of drunkenncss and lying lrought against him.

conducted by l. harmer.
Launceston, Tasmania, Jan. 12th, 1889:-
We are now daily entering into the most interesting and anxious period of the agricultural industry. The quantity and quality of the forthcoming crop demand the attention of both producer and consumer. We cannot recollect of a season when the prospects have varied so much as the present one. Early crops are the most to be relied upon as a rule, and up to October they had the advantage this year. It was then thought that the late crops would be a total failure. In November the early crops had the appearance of premature ripening, while it was thought the late ones would never come into ear, but the timely rain in November materially altered the state of affairs; in many instances the early grain had too far matured to largely benefit by the rain. $\qquad$ Where it fell the growth in the green ficlds has exceeded expectation. From what we can gather the crops at Evandale, White Hills, and Breadalbane are fairly good.

Bishopshourne and the Oaks are fortunate in having some late grain and have shared in the abundant growth caused by the rain. The caterpillars have visited the valley of Glenore and Whitmore to a large extent and the damage cannot be fully estimated until the corn has passerl through the threshing machine.

Australia :-
We take the following from the Weckly Times, Melbourne: "In the Kaniva district the yields are very good considering the season, the average may be considered to be about 12 bushels per acre. At Budgerun, Lower Avoka, harvest is nearly over, that is with those who have any. Many thousands of acres have been eaten off, but on much of it a beast could not get a mouthful; several farms of 200 to 300 acres will not return one grain of corn; farms that produced from 600 to 700 bags last year, with a considerable increased area under crop, will get from nothing up to 100 bags. Werona complain of the early ripening and drying up, but taking the district all round fair yields of wheat and oats are visible. Byaduk report the crops are not up to expecta-
tions. Barley and oats are light, while the wheat will pull through better than expected a short time ago.
The year 1888 closed (says the Syducy Mail) with parting gifts in the shape of heavy rain, which was distributed in several parts of the south. Albury received 120 points, Deniliquin 75 points. Some parts near Euston, heavy showers. Urana 350 points, Wagga Wagga, 280 points, and Corowa 402 points. Other parts also benefited to some extent. Harvesting is now nearly finished. The results, as anticipated, are not satisfactory, but against this there are the reports that the summer sown crops are in a fair way, and that the grape crop is likely to be over the average of yield; with the exception of the far out back blocks, the pas. toral country is passing through the warm season satisfactorily enough. The losses, so far, are not heavy, at least not a fourth of what were imminent last month. It may be said that 1889 opens with bright prospects for both agriculturists and pastor. alists.

Boenos Ayyre, Jan. 20:-
The Plate for the last six month has had a spell of most extraordinary weather, intermittent rains having deluged all the low parts of the country from the Alto Parana ind Paraguay rivers to the plains of Buenos Ayres. The colonies have suffered considerably and the brilliant expectations of two months ago are now reduced tifty per cent., in view of the losses in wheat and flax. The maize crop however, profits by the rain, and the harvest promises to be a phenomenal one in corn. In spite of the losses in wheat, it is expected that there will still remain a heavy surplus for exportation. All the camps of this province are luxuriant carpets of soft grasses, and animals are fat; there is a danger of too much grass, a superabundance that may entail disaster in the winter months. The season so far has been one of the most satisfactory on record.

## 

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## REPORTS OF THE TRIALS.

St. Arnaud, held Nov. 30th, 1888 ........ Toronto, lst Yrize ; McCormick, 2nd : Buckeye, 3rd ; Howard (Grand National Trial) 4th ; Deering, $\overline{\text { jth }}$.
Nhill Trial, held Nov. 15th, 1888 ......Toronto, lat Prize ; Hornsby, 2nd; McCormick, 3rd; Deering, 4th.
Stawell Trial, held Nov. 22nd, $1888 \ldots$. . Toronto, lst Prize; Hornsby, 2 ind ; Buckeye, 3rd.
Murchison Trial, held Nov. 21st, $1888 \ldots$...Toronto, 1st Prize; McCormick, 2ud; Osborne, 3rd.
Little River Trial, held Dct. 12th, J888.Toronto, lst Prize; Buckeye, 2nd.
ムrakat Trial................ ....TToronto, lst Prize; Buckeye, 2nd; Deering, 3rd; Osborne, 4th.
Albury Thial, held Dcc. 12th, 1888.......Toronto, lat Prize; Hornsby, 2nd; old style Coronto, 3rd. Whittlesea Trial, held Dec. 13th, 1888 . Toronyo was awarded all three Prizes, lat, 2nd and 3rd. Charlfon Trial, held Nov. 19th, 1888.... Hornsby, 1st Prize; Toronto, 2nd : McCormick, 3rd. Ballarat Trial, held Dcc. 10th, 1888... Hornsby took lst Prize, the Toronto, owing to prejudice, being placed after the Hornsby, but nevertheless defeating the Woods, Buckeye, Howard, and Deering.

Verbatim report from the Launceston Earminer of Jan. 12th, 1889 :-

## MASSEY'S TORONTO BINDER.

A trial of Massey's Toronto Reaper and Binder was held yesterday on Mr. John Boutcher's farm, near the Hagley railway station, in the presence of several leading and experienced agriculturists. The trial was thoroughly satisfactory, as the machine worked in excellent style, and the general opinion was that it is the most complete Reaper and Binder which has yet been introduced into Tasmania. To sum up briefly, the opinion seemed to be that the machine was one farmers have been long looking for.

## Hagley, Tasmania, January 11, 1889.

The Massey Manufacturlug Company:
Gentlemen-We, the undersigned farmers of the diatrict, having witnessed a trial of your Toronto Light Binder, under the superintendence of your Messrs. Yott and Shields, at Mr. Jno. Boutcher's farm at Hagley to-day, wish to express our satisfaction at the manner in which your machine has done the work. The cutting was very clean, and as lov as any mower could havo done it; the binding was excellently done, the sheaves bcing well tied, and not likely to come loose. The gearing of the machine is strong, but at the same time appears to run light. We believe that the provision of the third packer in the place of tho butter, and the relief rake at the end of the knite are great additions to your minchine, and a saving of labor, which is not to be found on any other maker's machine. The mechanical construction pleases us, and the machine appears to be light of draught and easy to handle. In conclusion we may say that the machine pleases us in every respect at this, the first trial of your machines in Tasmania, and we think the purchaser will find he has got value for his money.
We think your transport a perfect arrangement-one man unloading the machine and fixing the pole ready for work in less than five minutes. We think it is next to perfection.

Yours truly,
William Badicock,
Join Fresch, J. P.,
Thomas Glles,
Hennry Mitcirla,
J. P. Nriwton,
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Mr. Carter Beatty, Palgrave, Ont. I like your paper very much and herewith enclose you my own subscription.

Mr. Harry Baker, Harrison River, B. C. I am well pleased with your paper and hope to send you more subscribers in the next.
Mr. Wm. Drybdrgh, Little Current, Manitoulin Island. Receive my thanks for the copies of your nice paper you have sent me. I shall try and do something more for you.
Mr. W. S. Snhlgrove, Camborne, P. O., Ont. Having seen a copy of Massey's Illostrated and thinking it a very fine paper for the money I hereby enclose my subscription for the year 1889.

Mr. Geo. Sanderson, Yatton, Ont. I never knew the Massey Manufacturing Co. to do things by halves and they have not done it this time. The paper is handsomely got up and of choice reading matter. The prizes are very liberal; I never heard of such liberal offers for a fifty cent paper.
Mr. John Malcolm, Houghton, Ont. I am in receipt of a copy of your paper, Masser's Illostrated, and think it should take the place of Farm and Home, a paper that a great many are taking around here.

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