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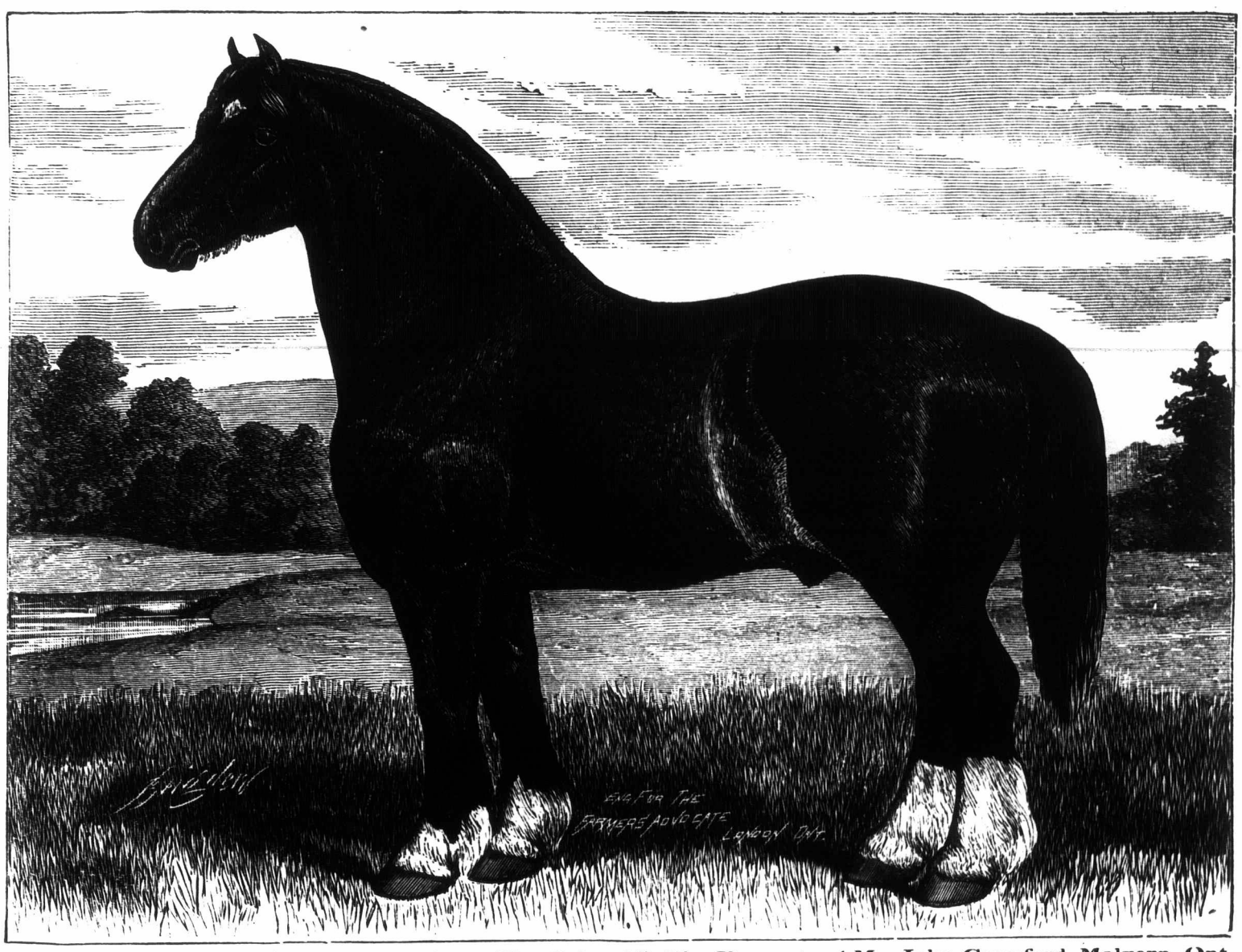

Prize Canadian-bred Clydesdale Stallion, "The Colonel."—The Property of Mr. John Crawford, Malvern, Ont.

When at the Industrial Exhibition in Toronto, we asked one of the practical farmers present what part of this exhibition he considered the best. "Why, there it is," he said, pointing to a show ring of about a dozen three-year old Clydesdale colts. "There," said he, "is something useful and meritorious. Why, you cannot pick out a bad one among them, and the Canadian bred animals are just as good as the imported stock." "Who do you consider the oldest and best breeder of this class of animals?" "Well, there are several good breeders exhibiting. There are Beith Brothers, of Bowmanville, and Mr. Jeffrey, of Markham; but perhaps John Crawford, of Malvern, might claim the palm, as he has been breeding this class of horses for over 20 years, and is a good judge of a horse. There he is."

We had a conversation with him. He is a plain, practical farmer; a breeder—not a speculator. We spoke to several more of our breeders, and we here had some conversation with one of the most honorable veterinary surgeons and horse judges, and others, and from what we have been able to glean we are led to quote the words of what we consider to be a truthful person and an excellent judge, who had passed through one of the stables of one of our greatest speculating companies, and had examined the stock of imported Clyde horses, namely: "They are a lot of poor half-breeds, hardly a passable horse among them. They are to catch the green farmers with." What a contrast! A stable full of imported Clydes with scarce a good animal, and here a field of Canadian bred Clydes without a bad one. The ADVOCATE will positively refuse advertisements or illustrations of a class that are considered dangerous or injurious to farmers. There has been far too much stress placed on the name of imported and importers, and far too little attention called to Canadian bred stock and our real practical breeders.

"The Colonel" is five years old, sired by imported "Wellington" (4108), Clyde Book G. B., dam "Wigton Maggie," 725 C. S. B. G. B,

THE FARMER'S ADVOCATE
—AND—
HOME MAGAZINE.

WILLIAM WELD, Editor and Proprietor

The Leading Agricultural Journal Published in the Dominion.

The FARMER'S ADVOCATE is published on or about the 1st of each month. Is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners or stockmen, of any publication in Canada.

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Our Monthly Prize Essays.

Our prize of $5.00 for the best original essay on *How could the Middlesex Agricultural Counc l utilize an Experiment Ground for the best interests of the Farmers?* has been awarded to Mr. Thomas Elmes, Princeton, Ont. The essay appears in this issue.

A prize of $5 will be given for the best original essay on *Advantages and Disadvantages of the Proposed Model Farm for the Dominion.* Essays to be handed in not later than October 15th.

A prize of $5 will be given for the best original essay on *How can Public Expenditures for Agricultural Purposes be Turned to the Best Interests of the Farmers?* Essays to be handed in not later than November 15th.

We have much pleasure in observing that so many of our subscribers have already taken advantage of our unprecedented offer. All who have not yet commenced the canvass should do so at once.

On the Wing.

AGRICULTURAL EXHIBITIONS.

During the past month we attended the Dominion and Provincial Exhibition in London; the Industrial, at Toronto; Central, at Hamilton; the Aylmer Township Exhibition, and saw a little of the County of Oxford Exhibition, at Woodstock. We met with many and warm friends, and many kind invitations were received, which, for the lack of time, we were obliged to decline. What we saw and heard at these exhibitions should furnish us matter to reflect on, and to talk and write about, until the next fall exhibitions. If we judge by cash alone, we must give the laurel crown to the Industrial Exhibition of Toronto. Here the efforts of the leading powers of the Dominion were united. The Dominion was represented by Sir Charles Tupper, General Middleton and the Gatling gun, and the Province by the Lieutenant-Governor and Hon. O. Mowat. The city of Toronto made a great and successful effort, and the industrial and productive resources of the country were well represented. The managing committee had left no stone unturned whereby they could make the Fair pleasing, entertaining and profitable. The railroads furnished increased accommodation and cheap rates; the weather was as fine as could be desired. The grounds were neat, ornamental and attractive, the buildings commodious, and the visitors and exhibitors were generally well satisfied. The managers were business men, and no more selfish than other men. Their aim is to build up Toronto and themselves; they are accomplishing the end in view, and are candid in their remarks about it. The parliamentary and other interests add their strength by lending their influence towards its advancement. This institution has been gaining the two elements of success which the Provincial Agriculture and Arts Association has been losing, namely, *money* and *popularity*.

The people need recreation and amusement, and Toronto has undertaken to supply them; she has succeeded, and deserves all the credit. It is not claimed to be an agricultural exhibition, but an industrial fair. This admits of all kinds of amusements, and its object is to make money; it combines a holiday and a market day for anything and everything.

Some of the managers of this institution have condemned the means we have taken in exposing some of what we considered to have been improper steps taken by this institution in securing possession of what appeared to us to be the rights or property of the farmers. Your ADVOCATE would be undeserving of its name or its existence, were it not to attempt to maintain your rights. Despite all the united powers that may oppose such a course, duty prompts the following remarks: Whereas political, military and entertaining influences are all necessary, and the combination of them with agriculture may cause greater gatherings, the question may arise: Are such gatherings for the interest of agriculture or agriculturists? It is mostly our agriculturists who pay; the others are the recipients. Yet, by the combining influences of other powers the real interest and influence of the farmer, if not totally disregarded, are at least made subservient to all other interests. Even many leading farmers are entrapped or inveigled by the other interests to such an extent as to use their influence to serve the interest of designers, and against the real interests and requirements of the farmer; thus instead of the exhibitions becoming a strength and benefit to farmers, are they not becoming detrimental? The uniting of all influences at Toronto, and the great success that attends this undertaking, will most assuredly be followed by all agricultural exhibitions. The plan is now commended by all office holders and office seekers, from the Governor-General down to the smallest officer. The farmers' lands and rights and influence are being taken from them; they are fast becoming serfs and slaves to the tax collector.

We give the accompanying illustration to show what our agricultural exhibitions must be unless our legislators' minds can be turned. The accompanying attractions were seen in Toronto this year. Probably the best acrobatic feats that have ever been seen in Canada; perhaps the best ladies' band, the best lady riders, the best lady aeronaut, the best lady acrobat, the best lady skipper, and the best male contortionist. You see the man standing on the chair; he first stood erect facing the grand stand, bent his head and body backwards, facing the spectators at his back, drawing his head under his body, and again facing the grand stand as seen. The Hon. O. Mowat and General Middleton were amongst the admiring spectators; and this is the main attraction of the masses to this the most successful industrial exhibition of the season.

The impetus has been given and taken hold of by the public, and whether we may be right or wrong in having opposed the combination of the race course and all other speculative or even demoralizing influences, we must submit to the powers that be, and avoid too harsh a censure of what we believe to be a growing evil, and say to you that are the managers of other exhibitions, that to draw the largest crowds you must now stoop to the demands of the masses, that is: give us amusements and pleasures without stint, and we will patronize you. If you attempt to oppose it you will be condemned as a crank or a fool; you may be tyrannized over, you will not be wanted in office, or asked out; and if you are an exhibitor, if you have the best, you will have to be satisfied with a second or third or no prize, and you will be falsified and maligned; therefore, your only hope, unless you make a martyr of yourself, is to do your duty as quietly as possible, and await results. The hippodrome has been the great educator of those nations whose walls and people are now no more.

Every institution, and every man, and every enterprise should stand on its own merits. We leave the Provincial and Dominion Exhibition to another pen.

THE AYLMER TOWNSHIP EXHIBITION,

in the county of Elgin, was a grand success. The ladies' work was astonishingly good and extensive. Some of the horses compare favorably with the best at other exhibitions, but we thought the Shorthorn exhibit not as good as in some other parts of the country, where the lands are heavier and pastures richer than many in this party of the country.

In proportion to the cost, we should consider this exhibition to be doing quite as much good as the larger ones, and consider that these township shows should receive quite as much support as the larger ones that are more for the benefit of other citizens than farmers. Perhaps the most important part of the exhibition was the walking match for general purpose horses. We believe there were 13 entries; all did not start, but the display was a praisworthy feature, and one that should receive greater attention at other agricultural exhibitions.

THE OXFORD COUNTY EXHIBITION

was also a grand success, despite the fact that which was the display of traction engines; three very efficient engines were exhibited. The attendance was good.

Dominion and Provincial Exhibition.

After arrangements had been completed for the holding of the fortieth Provincial Exhibition in this city, the Dominion Government, at the fag end of its session, granted $10,000 for the purpose of causing the Fair to partake of a Dominion character. The catalogue of the Agriculture and Arts Association had already been issued, so that the unexpected Dominion grant necessitated a special meeting chiefly for the purpose of revising and enlarging the prize list. The lateness of this grant, coupled with the earliness of the exhibition, had a depressing effect, the time for advertising and preparing having been too short, and there were indications of too much bustle throughout the whole affair.

We have never seen success and failure so completely jumbled up. So far as the exhibits were concerned, either in number or quality, the show was a grand success. But it failed to draw. The managers had made up their minds to shut out all objectionable attractions, but these have become so thoroughly incorporated with the concern that the powers are no longer able to resist them. Accordingly, the seekers of pleasure were numerical and enthusiastic, especially on the opening day, when the representatives of royalty with dazzling retinue were so loudly heralded. Level-headed prophets did not expect many farmers, or others who were bent upon seeing something useful; much of the harvest was still out, and great anxiety was manifested with regard to its security. However, there was a fair attendance of farmers after the heavy rains of the fore part of the week, caused by their being unable to prosecute their harvest operations. The cause of the financial failure of the Exhibition has been laid to the charge of the unfavorable state of the weather, but this view is only approximately correct. The last two days were exceptionally fine, and yet the attendance was meagre. The truth of the matter is that farmers have now become thoroughly convinced that their interests are being ignored and that the ringleaders are contriving for the interests of speculators. So long as the Western Fair remained under the control of farmers, it proved a grand success, both financially, morally and educationally, and the citizens of the city had no reason to complain. Now confidence is lost, and it is questionable if the London Fair can, agriculturally, ever be resuscitated. Farmers have lost all sympathy with the whole concern, and even the citizens of the city are now opening their eyes to the fact that they are not benefited as a body, all the profits being thrust into the pockets of the wire-pullers. The most notable feature was that the Exhibition was a total failure as a Dominion concern. Apart from the Manitoba horticul

MODERN AGRICULTURAL EXHIBITION.

there was no speeding of horses. Perhaps the cause of this proper omission was more of a necessity than a virtue, as we presume the cause of its not being on the programme was because the grounds were not large enough to allow of the necessary space. We would advise them not to enlarge if they want the exhibition to be a moral, educational institution, and one that will stand when the hippodrome shall have become disgusting, if not extinct.

THE HAMILTON EXHIBITION

surpassed all others in the fine supply of fruit, and the order in which the roots were placed, these exhibits being placed in rows, side by side of each variety, thus every one could judge them at a glance. The display of stock, particularly the horses, was very good. A fair display of implements, the most conspicuous of

tural display, and a few minor exhibits from the Maritime Provinces, the show was almost entirely Provincial. In truth the growth of these monster exhibitions have been abnormal; they require more stimulants every year, and the more they require for their present success the greater is the certainty of their final destruction.

THE DAIRY EXHIBITS.

There was an unsually good display of butter and cheese, and the exhibit of creamery butter showed the increased interest taken in creameries. But, as is the case at all dairy shows, the judging was a farce, no advantage whatever being gained from an educational standpoint. A surging crowd learns nothing from seeing an assemblage of cheeses and butter tubs at a distance. Unless some reliable standard for judging be adopted, the show will continue to be useless to the dairymen, and even to the judges.

Great curiosity was excited over the Model Farm department. Machinery was erected for the separation of cream from milk by centrifugal force, under the supervision of Prof. Barrie, including the making of butter. Tests of the milking breeds were made under the eye of Prof. Brown. Two of the Burmeinster & Wain separators were used. We were astonished that none of the De Laval separators were on the spot, which are so highly spoken of by many of our best dairymen. The truth of the matter is that the Government has been used as a tool for the purpose of booming up this separator at the public expense, and doing free advertising for the agents. Following this precedent, all the manufacturers of machinery in the Province will expect the Government to run their exhibits at future shows; it is surely better to encourage home manufacturers than foreign ones at the public expense.

We are pleased to learn that the Government is showing signs of improvement in its methods of testing dairy breeds. It is beginning to see that its best agricultural policy is to work in the interests of the farmers. We publish the results of these tests, believing them to be approximately correct, so far as they go, although the standard adopted is not what it should be. The cows tested were all on the exhibition grounds, and the conditions of the tests were all alike, except that the owners fed their cows according to their own individual judgment.

TABLE NO. I., SHOWING THE PERCENTAGES OF CREAM.

HOLSTEINS:

Test No. 1	8.2	12	14.8	16	13	12 8	16	9.8
Test No. 2	10.8	14	15.9	14.1	14.3	12 9	18	11.5

AYRSHIRES:

Test No. 1	15.2	8.4	14.8
Test No. 2	21.6	9.8	17.4

JERSEYS:

Test No. 1	12.8	24
Test No. 2	23.2	25

SHORTHORN GRADE:

Test No. 1	12.4	17.3
Test No. 2	14.3	13.

It will be seen from the above figures that there were in the competition eight Holsteins, three Ayrshires, two Jerseys, and two Shorthorn Grades. The two tests were made on separate consecutive days, and the milk stood twelve hours at each test in deep tubes set in ice water at 40° Fahr. The percentages of cream are by measure, not by weight. The figures in both tests are placed in the same order, so that in each case the figures in No. 2 placed under those of No. 1, represent the same cow. It will be seen that no cow stands two tests alike, and the difference in the individual is sometimes greater than the difference in the breed. This may be partly accounted for in the difference of temperature, the day on which the first test took place having been cold and wet, while the succeeding day was fine. The variation in the quality of the food, and in the worry incident to the journeys, have also had considerable influence.

The same cows were further tested with regard to their respective butter producing capacities, the results being shown in the following table:

TABLE NO. II., SHOWING THE MILK, BUTTER AND CHEESE POINTS SCORED BY THE TESTED COWS AND BREEDS:

Breeds and Breeders.	Milk in 24 hours	Time since calving.	Per-cent. of butter	Percent. of curd.	Total Points.
HOLSTEINS:	lbs.	days			
H. M. Williams..	26.00	75	2.86	13.12	40.22
Wyton Br. Ass'n.	23.60	109	2.65	20.	48.00
H. M. Williams..	30.90	133	2.37	19.37	51.97
E. Macklin & Son	26 25	83	3.62	16.87	52 62
J. T. Ferguson..	37.60	113	2.75	11.25	52 65
Wyton Br. Ass'n.	35.00	116	2 81	15.60	55.30
H. M. Williams..	25 37	207	3 36	14.62	64.29
M. Cook & Son..	28.80	153	3.31	16 .7	59.07
Averages.....	29 19	124	2.97	16 59	53.02
AYRSHIRES:					
A. Nankin	25.90	79	2.75	23.12	49.42
George Hill.....	29.50	138	5.43	21.25	83.85
T. Guy.....	18.12	161	4.53	23.75	68.27
Averages.....	24.51	126	4.24	22 71	67.18
JERSEYS:					
V. E Fuller.....	24 12	114	8 81	20 60	109 22
" "	27.00	86	5.75	20.	78 10
Averages.....	25.56	100	7 28	20.30	93.66
S. H. GRADES:					
W. Patrick.....	46 80	129	3.60	20.62	81 52
"	24.25	145	3 12	20 62	55.57
Averages.....	35.53	137	3 36	20.62	68.55

The standard of the scale of points was adopted from the Edinburgh show and follows closely that adopted by the British Dairy Farmers' Association. The system is somewhat ingenious, and although not very accurate, it is quite an improvement on the "boom" method already described in our columns. Where are those prodigious yields now? With regard to the quantity of milk, each pound counts one point, and as to the quality 3.5 lbs. of butter from 100 lbs. of milk is taken as the standard; the difference between this percentage and that actually given by each cow is then taken and multiplied by 10, the product being added to the points when the percentage given is above the standard, and subtracted when below. The English and American standards are 3 per cent.; that adopted by the Model Farm is 3.5, it being assumed that cows when imported to Canada give one-half per cent. more butter than if left in England or imported to the United States. Moreover, points are added corresponding with the number of pounds of curd from 100 pounds of milk, and one point is added for each 10 days after calving.

It will be seen from the above table that the Jerseys scored the highest record, and that the Holsteins have not maintained the reputation they have won. There appears to be an excess of water in their milk. There were some "scrub" nurses admitted to the grounds as collateral security for baby stock. Would our farmers like to have seen them figuring in the tests?

LIVE STOCK.

Taking all the departments, the exhibits were the best we have ever seen in Canada. In cattle all the breeds were represented, and the increase in the number of Holsteins over past years was specially marked. The accommodation, which had been quite ample in pastyears, was insufficient, and temporary sheds had to be erected specially for the occasion. The Board was fortunate in being able to secure the services, as superintendent of cattle, of Mr. E. W. Chambers, of Woodstock, who performed his duties so efficiently that the stockmen presented him with a gold-headed cane—a recognition which his courtesy and ability richly deserved.

Most prominent among the features of the live stock exhibit was a five-year old steer of Jumbonian gigantitude, shown under canvas; boasted weight, 3,540 pounds; "heavier than all the cows in my barnyard—admission only 10c.—that is to say, one dime, just the tenth part of a dollar!" We can usually exonerate speculators when they drive the hardest possible bargain with their customers, but when a Board, elected by the farmers of Ontario to consult their interests, stoops to be made a prey—yea worse, a mere thing—in the rapacious maw of unmitigated humbugs, then all sense of duty and propriety is outraged. What earthly good can be accomplished in the encouragement of such monstrosities? The Board is hoary and experienced enough to know and feel that it is too weak to resist the future importunities that are likely to spring from this act of its servility.

HORTICULTURAL EXHIBITS.

The display in this department was unquestionably the best ever beheld in London. Mr. D. Nicol, of Cataraqui, was in charge of the exhibits, and we have never seen a more orderly and instructive arrangement. Every facility for gathering information was afforded. Mr. Nicol took special delight in imparting information to the visitors. Many farmers took specimens of fruit from their orchards and compared with those exhibited for the purpose of identifying them. In this they were greatly aided by the judges. We are convinced that a great deal of good can be accomplished in this way, it being to the interest of every farmer to be able to name the variety of every grain, fruit and vegetable which he grows. We notice one unpardonable blunder, however: the varieties of vegetables exhibited are not always the best selections. More confidence can be placed in the varieties of fruits. Exhibition prize lists would be a valuable class of literature for our farmers if the selection of the best varieties could be depended upon.

The Manitoba exhibit attracted special attention. Grains, grasses, and vegetables had been selected from different sections of Manitoba and the Northwest, and were hurriedly shipped to the exhibition without special preparation, and although many of the vegetables were harvested nearly a month before the opening of the exhibition, yet there was nothing from our own

Province that could be compared with them. Grain was shown in bag and in sheaf, and the straw was remarkably free from rust. Straw in the wheat sheaves was 57 inches long; oats, 62 inches; barley, 57. The display of native grasses was quite a curiosity for our farmers. The following list gives the names of the grasses with the length expressed in inches: Wild rye grass, 62; red top, 62; English rye grass, 61; blue grass (wild), 58; wild rushes, 90; Hungarian rye grass, 50; wild oat grass, 69; wild vetch, 119; blue joint grass, 82; prairie grass, 75; wild wheat grass, 75; there being also flax, wild peas, wild hops and wild sage included in the display. The potatoes especially were marvellous, and the exhibits of all the leading vegetables were excellent. It is to be regretted that the names of the varieties of grains and vegetables were not given.

AGRICULTURAL MACHINERY.

The exhibits were remarkable, surpassing anything that had previously been seen on the ground, both in quantity and in the number of new inventions, especially in the threshing and harvesting machinery.

Tests of Dairy Breeds at the Industrial.

It will be interesting to compare the following table of tests of dairy breeds, which were conducted by the Government during the Industrial Exhibition recently held in Toronto, with a similar table showing results of the tests conducted at the Provincial Exhibition held in London. The latter figures will be found in another column, and both tests were conducted on the same plan, as before explained:

TABLE SHOWING RESULTS OF THE TESTS:

Breeds and Exhibitors.	Milk per day	Time since calving.	Butter per 100 lbs. of milk.	Curd per 100 lbs. of milk.	Total Points.
DEVONS:	lbs.	days.	lbs.	lbs.	
Mr. Harper.....	33.	105	3.31	13.33	54.93
AYRSHIRES:					
T. Guy.....	23.	167	4 63	18.40	60.90
"	32.6	14	4.18	13.33	54.13
Mr. Smith.....	33.5	11	3.59	14.90	50.40
Averages.....	29.7	64	4.15	15.54	58.14
JERSEYS:					
V. E. Fuller.....	27.60	141	3.38	15.50	56.00
"	25 40	91	4 72	17 10	63.80
"	24 25	119	6.87	16.80	86.65
A. Jeffrey.....	17.75	195	6.72	14.90	83.35
"	13.62	145	5.34	16.80	64.32
W. A. Reburn....	31.62	118	6.41	17.10	89 62
Averages.....	23.37	134	5.57	16.37	73.79

Here it will also be seen that the Jerseys have scored the highest points. We have little faith in the accuracy of the points, but the other figures given indicate the superiority of the Jerseys. There is no ratio between the figures which make up the total number of points, and it appears that the figures indicating the percentage of butter count inordinarly high, thereby giving a relative advantage to the breeds which produce a large percentage of butter. The enormous difference in the results of individuals of the same breed is specially marked. It is to be hoped that these tests will prove a starting point for accurate results in the future.

I am pleased to see the FARMER'S ADVOCATE still taking the lead as a farmer's paper; every farmer should take it. ROBERT WILSON.
Gananoque.

Farmer, Stockman, and Speculator.

At the recent exhibitions we had an opportunity of meeting many of our old friends who are more or less concerned in our live stock industry. We were frequently asked why we called them speculators, and many felt indignant at our live stock policy. They informed us that everybody who made a business of buying and selling was a speculator, and it was unfair for us to stigmatize them in such a manner. Some stigmatized us by declaring that we were the champions of the "scrubs."

On the other hand, we met with farmers who nearly tore us to pieces for being so lenient with those "rascals," who wanted to tax the "scrubs," and stigmatized us for not championing their interests with more vehemence. One farmer related his case to us in the following language:

"I live in a cheese district and keep 16 cows. I raise four calves every year, putting four of my best cows to thoroughbred bulls. The other 12 calves I knock on the head as soon as born, and no man has any right to compel me to put these 12 cows to a $5.00 bull. If I find it to be to my interest to put more cows to more expensive bulls, that is my business, and the speculators, as you call them, have no right to dictate. I know something, too, about those booms. Not very long ago there was a sale of Shorthorns in my neighborhood. A good many farmers were present, but the bidding went slow. Finally, bogus sales were effected to interested parties at high figures, no transfers having been made, and in this way a few farmers were taken in, believing the bids to have been genuine."

We may not have defined with sufficient perspicuity what we meant by the word "speculator," but we have shown no reason why stockmen should have taken offence. The latter are the men whom we specially desire to encourage, while if we thought it advisable to levy a special tax on any class of the community, we would advocate the imposing it on the poll of the speculator. We have not yet, in all our travels, met with a stockman who advocated a special tax on "scrubs," or any other class of stock. The stockman purchases superior stock chiefly with the view of improving his own herd, and, like the farmer, is a man of peace, not of war. He knows and feels that there is room for all who wish to do an upright business, and should he meet with temporary reverses he does not complain, for he has other specialties as well as stock raising. He puts as much, if not more, stress upon the improvement of his farm. The speculator, on the other hand, trades in fancy stock and fancy pedigrees, at fancy prices, and to him reverse means ruin. He is constantly waging war; he wars with the judges who fail to award him all the red tickets at exhibitions and fat stock shows; wars against all breeds except his own; wars against all who refuse to accept those dishonest pail records, or block performances of the magnates of his breed as evidence that all other breeds must go; in short, he never enjoys peace except in the midst of war.

Our policy is to grapple with measures rather than with men. We attack false principles and abnormal conditions, the men who suffer being of minor consequence. We are the champions of light and right. As we stated in previous issues, we will bring forward any breed that can be proved by honest records to be the best. We do not apprehend, however, any danger from the class legislation policy of the speculators, or their organ. Fearing the reproach of men of common sense, it has, in its last issue, denied that it said its "voice is still for war;" and besides, we have too much confidence in the wisdom of our Government to anticipate the revolutionary measures advocated by speculators and their organs.

Notice to Farmers and Amateur Fruit Growers.

We have had the good fortune of being able to secure the services of Mr. Linus Woolverton, Grimsby, Ont., in contributing for our columns a series of articles on fruits, the first of which appears in this issue. His writings are known and appreciated by all the leading fruit growers on this continent. He is eminently practical, being owner and manager of 100 acres of orchard in the finest fruit centre of Canada, and devotes his attention to the study and culture of the leading varieties of large and small fruits. He has also the advantages of a superior education, being a graduate of the Toronto University, and there is no detail in the science or practice of his business with which he is not familiar. You will be pleased to see that men of such high attainments take delight in the so-called drudgery of agriculture.

Every section does not possess the natural advantages of the beautiful and fertile territory protected by the Niagara escarpment, so that Mr. Woolverton will not confine his observations to his own experience alone, but will also present the experiences of reliable fruit growers in the less favored sections of the Dominion, whereby justice to all our readers will be done.

There are several reasons why we desire to pay special attention to fruit growing at the present. (Bear in mind that we still regard agriculture proper as being the most important branch.) We have great faith in the future of Canada as a fruit country both for home and foreign markets; bnt, unlike most other branches of farming, it takes several years to establish a growth. Don't be alarmed at low prices, these being regarded more as an advantage than as a detriment, for they increase consumption and improve market facilities. Even at the lowest prices we have had there are large profits in all fruits of superior quality, and all inferior grades can be profitably fed to stock. The lack of canning and evaporating factories is due to the small quantities of fruit grown in any given locality, as well as to the existing high prices. As soon as fruits are grown in excess of market demands, these establishments will flourish. Begin by procuring the best varieties for use on your own tables, and when you once get a start you can propagate at little expense. Hints on after-management will appear in the ADVOCATE in their proper season.

DEAR SIR,—Enclosed find my subscription for the ADVOCATE for the ensuing year. I would not willingly be without it. I can highly compliment you on the improvements you have made, and I think it is second to no other farm journal. I have much pleasure in expressing my thanks to you for the way you have fought for the farmer's interests.
Panmure. JOHN MOORHOUSE.

Middlesex Agricultural Council.

The regular monthly meeting of this council was held on Saturday the 19 ult., in the office of the FARMER'S ADVOCATE, the President, Mr. D. Leitch, in the chair.

The President read over the constitution and by-laws as published in the August issue of the ADVOCATE, and after a sharp discussion on some of the clauses, it was moved by W. A. Macdonald, and seconded by John Kennedy, that the constitution and by-laws be adopted without change. Carried.

Moved by John Kennedy and seconded by Joseph Johnson, that John Wheaton, George Douglas, and John Weld be elected as members of the Board of Control. Carried.

After a lengthy discussion on the question as to how the Council should dispose of the $100, or any part thereof, granted annually by Mr. Weld, for the benefit of agriculture, it was moved by Mr. Wheaton, seconded by John Kennedy, that a committee of seven be appointed to visit the Model Farm, and make a separate and impartial report to the Council, with the object of ascertaining what real practical benefits that institution was doing for the farmers of the Province, that the Secretary be instructed to acquaint Prof. Brown as to the time and object of such a visit, and that the expenses of the committee be paid out of the special fund of the Council. Carried.

It was decided, after some deliberation, that the committee should leave London for Guelph on Wednesday, Oct. 7th, on the 7.30 a. m. train.

The President then nominated the following members to act on the committee: Messrs. Leitch, Kennedy, Anderson, Wheaton, Johnson, Douglas and Pearce.

The newly appointed Board of Control proposed to retire for the purpose of deciding upon a program for the next meeting, but the Board and Council unanimously agreed that a discussion on the reports of the committee appointed to visit the Model Farm be the program.

The Council then adjourned.

On account of the number of high-priced cows that have lately been fed and milked to death for the purpose of producing "records," the New York Tribune suggests that the matter should be taken up in a decisive manner by humane societies. It is certainly a form of cruelty not less heinous than others which meet condign punishment. We would add that feeding for fat stock shows be included in the same category, the form of cruelty in the latter case being even more appalling than in the "record" outrage. In feeding for fat the cruelty continues for two or three years, while in feeding for large yields of milk it only lasts for several days as a rule. If the one produces untimely death what must be said concerning the other? Why doesn't some ambitious investigator test how long it would take to stuff a Christmas beef steer to death?

The Farm.

Farm Drainage.

NO. II.

Having described the different conditions of water with regard to the soil, and having pointed out that plants live on the moisture and nourishment obtained from the water found *within* the soil particles, and not from that found *between* them, it is now in place to consider:

1. *The Effects of Surface Washing.* It being well known that most waters contain appreciable quantities of plant food, it is important that the water be so regulated that the soil, or rather the plants, obtain the greatest possible benefit therefrom. Now if the surplus water produced from excessive rains be allowed to wash over the surface of the field, not only will the plant food in the water itself be lost, but the finer particles of soil and the soluble plant food in the surface soil will also be washed away. These particles, called silt when found in running streams, consist mostly of clay with decayed vegetable matter, and are the most valuable portions of the soil; sand, which is coarser and less valuable, remains behind. This silt contains valuable fertilizing matter in solution. The silt-carrying capacity of water depends upon the depth and the rapidity of the flow. It is now plain that if silt-water overflows your field, and is allowed to percolate through the soil, the land will be of inexhaustible fertility, for most of the fertilizing matter will be retained in the soil, the drainage water containing very little of its original plant food. It will now also be seen that if this drainage water, or in fact any water that has once soaked through the soil, overflows your land, it will contain very little fertilizing matter, and so should be got rid of in the most effectual manner and with all possible speed; it is only useful in supplying moisture in a dry season, and has little or no value from a fertilizing point of view. The other source of water, namely, from the rain, is intermediate in its character; it contains appreciable quantities of plant food before it soaks through the soil, and if it forms silt water it becomes specially valuable as a fertilizer. Few farmers, however, are concerned in being enriched by silt water at the expense of their neighbors, or in being impoverished by a surplus of water from underlying springs, so that the question is practically limited to the disposal of water from rains, and we have shown that the surplus should not be allowed to wash over the surface of the field.

2. *The Effects of Water Percolating through the Soil.* The advantages of drainage depend largely upon the value of percolation, and we shall therefore be somewhat detailed in our observations. We cannot obtain a true estimate of its value without knowing the causes of fertility and exhaustion. We must also know how to distinguish between soluble and insoluble plant food, as well as the sources thereof, and be able to take account of the gains and losses that are constantly taking place.

The broad question is that all fertility derived from rains and dews has primarily ascended from the earth, for none comes down to us from other planets. In our articles on manures, our statements to the effect that plants contained a large number of elements and compounds, will be remembered, but we only treated specially of three, viz., nitrogen, phosphoric acid and potash, for all the others were rarely deficient in any soil. We shall now be equally circumscribed, confining our remarks mainly to the effects of drainage on these constituents.

When exposed to decay, all animal and vegetable substances gradually revert to the original elements or constituents of which they were composed. It is a process of slow combustion. The constituents of the plant which came from the air return to the air, and those which came from the soil return to the soil; dust to dust, and air to air—part remaining in the earth as a solid or a liquid, and part escaping by volatilization in the form of gas. The re-union of these constituents produces vegetation, and there is a constant interchange of fertility between the soil and the atmosphere. The carbon, which forms about 50 per cent. of the plant, escapes united with oxygen, forming carbonic acid gas, and returns to build succeeding vegetation through the leaves, never through the roots. All the other constituents of the plant nourish it through the roots, although much of this sort of plant food is washed into the soil from the atmosphere by means of rain. We shall here say nothing about the disputed question as to whether much, little, or no nitrogen be taken into the plant through the leaves, merely mentioning that all soils deficient in this element are greatly benefited by the application of nitrogenous fertilizers, which proves that large quantities are absorbed by the roots. This is the practical view of the question, and we shall not indulge in speculation.

It is now important to know in what forms nitrogen exists, both in the soil and in the atmosphere, and the affinity which different soils have for fertilizing compounds. The decay of animal and vegetable matters is the source of nitrogen. When this element unites with hydrogen it form a gas called ammonia, and afterwards, when oxygen is added, it forms nitric acid; this is a liquid, but it readily unites with lime, potash and other bases to form nitrates. If there is much decaying vegetable matter (humus) in the soil, the ammonia is retained; if not, this gas escapes into the air, and will perhaps come down on your neighbor's farm. Bear now in mind that nitrogen in the form of ammonia can scarcely ever be washed out of the soil into the drainage water, while if left to the action of heat and moisture till it is converted into nitric acid, it is then washed into the drain in large quantities, unless there is a growing crop on the field to absorb it. This nitric acid does not escape alone, but carries with it large quantities of lime from the soil, the loss being largely in the form of nitrate of lime. Small quantities of mostly all fertilizing matters may sometimes be lost in drainage water, but no appreciable waste can occur except in the case of nitric acid. This loss can be prevented by skillful management.

The supply of nitrogen from the atmosphere now remains to be considered. Atmospheric nitrogen also exists in the forms of ammonia and nitric acid. These descend with rains and dews, but ammonia is also absorbed from the air by the soil during warm, dry weather. Carbonic acid also descends with the rain, and al-

though this gas has no direct fertilizing value, it increases the solvent power of the water, thereby making insoluble plant food more soluble. Rain also furnishes small quantities of sulphuric acid and alkaline substances, but these are too unimportant for consideration in a brief series of articles.

We desire specially to urge upon farmers the importance of nitrogen in its relation to drainage, for this is not only the most costly article of fertiliiy, but also the most liable to be wasted in the handling of farm-yard manures. We have previously pointed out how the nitrogenous substances can be preserved in the manure heap; you can now see how to preserve them in their relation to drainage.

With regard to the relation of phosphoric acid and potash to drainage little need be said. These salts are furnished by the soil and feed the plants through the roots. They are rarely found in drainage water, owing to the absorptive and retentive power of most soils for them, and to the fact that they are retained in the soil by chemical affinity and not by mere mechanical adhesion, as is the case with the nitrates. Sandy soils, being coarse, have less retentive power than clay, so that clay is always richer in phosphoric acid and potash than coarser soils, but nitric acid is easily washed out of all soils—except when a growing crop has sufficient luxuriance to appropriate it.

Value of Cisterns.—How to Make a Cheap one.

The quality of water, like that of food, varies with the locality, and custom educates the tastes in both cases. Water is water only when pure; it is the impurities that change the quality and do the flavoring. Canadian farmers, as a rule, would rather drink unwholesome spring water than wholesome rain water; they are educated in this manner, and believe that the water which has the brightest appearance is the most palatable and healthful. The clearest and most silvery looking spring water may be tainted with impurities. What then must be said with reference to the water in a large percentage of our wells? When dug in the neighborhood of barnyards or water closets, wells are a convenient receptacle for many impurities which filter through the soil into them, and are a fruitful hot-bed of disease to those who drink the water. Streams are apt to be impregnated in the same way, and running, as well as stagnant, waters contain organic impurities, the product of decaying vegetable matter, which are injurious to the health.

In some countries spring or well water is not drunk by the inhabitants, even when found in its purest state, rain water being preferred When the taste becomes educated to the latter, the former is not relished, it being too saline to the palate. The prejudice against rain water is mainly caused by the filthy condition in which the cisterns are kept. Rain water, in the usual method of preservation, is often impurer and filthier than the water from ordinary wells, springs or streams. Cistern water can be controlled by the farmer; other waters cannot, as a rule. Many farmers have good enough water for family use, but rest satisfied with impure water for their stock, forgetting that the dairy products from cows which drink filthy water may be about as injurious to the health of the consumer as if the impurities had been consumed directly. No farmer can make an excuse for having impure water for his family or his stock.

If the cistern is to be dug in a stiff clay soil, the best plan is to dig bottle-shaped; that is, make an opening about the size of an ordinary well, greater or less, according to the dimensions of the proposed cistern, and when the excavation is two or three feet deep, commence to widen by degrees until the desired diameter of the cistern is reached; then proceed in a perpendicular line to the proposed depth.

In this kind of soil no brick or stone work need be built, but a good mortar of lime and sand mixed with cement, and plastered on the sides of the cistern, will make a cheap and durable structure. Even the lime may be dispensed with, and a durable material made by using one part cement to four or five of clean sand. A second coating may be made of a mortar consisting of half sand and half cement, and then a finishing coat of pure cement should be applied. If greater hardness and durability are required, less sand must be used in the cement. When the soil is sandy or otherwise loose, a wall of brick or stone must be built, using ordinary mortar; but the plastering must be done with cement.

The next precaution is the arrangements for keeping the water pure. If it is allowed to stand long in the cistern in dry, warm weather it acquires an offensive odor, which can be prevented by proper ventilation and filtration. Put a bushel or two of broken charcoal into the bottom of the cistern. This will aid somewhat, but when greater purity is desired, the water should be strained through some sort of filter. A good filter is as cheap as an inferior one. Take an ordinary water-tight barrel with perforated bottom and lay in a layer of gravel; upon this put a layer of fine, clean sand, and then a layer of broken charcoal—the thicker the stratum of charcoal the purer will be the water that filters through; then put on another layer of sand, and finally another layer of clean gravel. This barrel may be kept near the cistern and the water filtered through in the quantities required. The chief value of drinking water is its character as a solvent, and pure rain water has the greatest solvent power When you become accustemed to drinking it, you will relish it even when kept at a comparatively high temperature, and there will be no necessity for the use of ice. Proper ventilation can easily be secured by means of a tube inserted below the cover of the cistern, covering the outside end with wire gauze, so as to prevent the ingress of extraneous matter. Wire gauze should also be securely fastened to the ends of the eave-troughs, or to the tops of the sprouts connecting them with the cistern, so as to prevent insects or other injurious matter from entering into the cistern. The cistern cover should be so tight that there will be no danger of obnoxious matter falling into the water. For household purposes, the cistern should be cleaned out at least once a year, but when the water is used for stock, there will be no danger in leaving them untouched for several years.

Deep vs. Shallow Plowing.

This question has been discussed threadbare, and yet there are many farmers who adhere tenaciously to the one or the other side of the question without taking the various conditions into consideration. In our last article onthe subject, we treated of it with special reference to the cleaning of the land; we shall now refer to other important considerations.

The first inquiry should be: what is the character of the soil and the subsoil? What is the quantity and nature of the manure, if any be applied? The last question is auxiliary to the first. It must also be borne in mind that fall rains and winter frosts only act in the clayey portion of the soil; the vegetable portion is converted into plant food by the action of heat and moisture. It will now be seen that the clay fields should be the first object of attention, and that the beneficial effects depend (1) upon the quantity of clay exposed on the surface, and (2) upon the depth loosened up to the action of the frost, so that the rougher the surface the greater will be the area exposed, and the deeper the plowing the greater will be the cubic dimensions acted upon by the frost, and a minimum frost will produce a maximum effect in the unlocking of the insoluble constituents of plant food. These remarks are based upon the presumption that the subsoil is not inferior to the soil on the surface; a small quantity of stiff bottom clay will receive the greatest benefit by being exposed to the surface over winter.

When farmyard manure is spread over the field before it is plowed, it will, by leaving the clay more open, make the soil more susceptible to the action of the frost; but if the manure lies spread evenly over the field until it has received a considerable quantity of rain, the soluble matter in the manure will be more evenly distributed in the soil than when plowed in before any rainfall. Manures are not beneficially acted upon by frost; like the vegetable portion of the soil, they require heat for their conversion to plant food. From these considerations it will also be seen that late plowing is more beneficial than early, for the soil will not likely be so compact; the more compact the soil the more frost proof it will be. In order that the frost may have its greatest effect water must not be allowed to stagnate; and even if the soil is not drained, the water will usually escape at least to the depth of the plowing. The better the land is drained the more it will be benefited by deep plowing.

No farmer can plow intelligently now without knowing what the succeeding crop is to be. It takes twice as much manure to fertilize the soil ten inches deep as five inches, and if the coming crop is a surface feeder, and if the manure is scarce, there may be an advantage derived from shallow plowing. It will take twice as long to exhaust ten inches of soil as five, other conditions being equal. But then it must be remembered that shallow soils are favorable to drouth. In many respects feeding soil is like feeding stock, and it is a bad practice to stunt it for several years and then cram it all at once.

The main points, therefore, for the farmer's consideration are: pay attention to the stiff fields in the fall, leaving the mixing of the soil and the getting of it into proper mechanical condition for the spring work.

Care of the Cellar.

A wholesome cellar is at the bottom of healthy living, says Dr. Kedzie in N. Y. Tribune. One reason is that the air and floating germs of the cellar find their way to every room in the house. Many of our most destructive diseases are supposed to be caused by minute germs floating in the air and finding lodgment and a congenial home in the animal system, their development causing disease. Mildewed cellars and mouldy closets are nurseries of disease. Even in their dry form the spores of these low forms of life often cause serious sickness. The worse attack of catarrh I ever had was caused by inhaling the dust arising from overhauling a pile of mouldy rubbish.

A friend told me of a similar attack from handling the fungus-spotted firewood which had been piled in a way that prevented complete drying. "The dust choked me, and my nostrils and throat were on fire for a time, and it all ended in the worst cold in the head I ever experienced." If these spores in the dry form are active cause of disease, what will be the result of living constantly in an atmosphere filled with these germs in their living and active forms? Is it remarkable that diphtheria and croup find a ready home in such dwellings?

The cellar should differ from the living-room mainly in being colder and darker. The custom of making the cellar the family storeroom for milk, butter, meat and vegetables which require a cool, and some of them a dark room, is too firmly established and too economical to expect any change. But none of these domestic supplies are benefited, and most of them seriously damaged, by a musty and close atmosphere. The air should be as sweet, odorless and pure in cellar as in parlor. Butter and milk rapidly absorb foul odors, and no after treatment will remove the stink.

It is not carbonic acid which is the source of danger; but dampness, putrescence and fungus growths are the real dangers. Carbonic acid does not gather in the cellar because it is heavier than air, for then every valley and depression should hold a pool of carbonic acid; nor does it cause beads on the floor-timbers or clamminess to the walls. It is excess of moisture which plays the mischief, and affords the conditions for putrefaction and the development of fungus growths. The prevention lies mainly in good ventilation and the immediate removal of all decomposing animal or vegetable substances. By thorough ventilation excess of moisture is removed, and the putrescible effluvia which support fungus growth.

By carrying a separate shaft, 12x12 inches, from the bottom of the chimney—which goes down to cellar bottom—to the top alongside the smoke-flue, and leaving a hole 2x12 inches in the side of the ventilating shaft at the bottom of the cellar, good ventilation will be secured at all times, and the cellar kept wholesome. If no such provision was made in the plan of the house, then ventilating shafts of galvanized iron tubes four or five inches in diameter should be carried from the bottom of the cellar into some chimney, or up through the roof to discharge into the open air. If the pipe can empty into a chimney where a fire causes a good draught, the results will be more satisfactory.

One good agency for keeping the air of the cellar sweet and wholesome is whitewash made of good white lime and water only. The addition of glue or size or anything of this class is only a damage by furnishing organic matter to speedily putrify. The use of lime in whitewash is not simply to give a white color, but it greatly promotes the complete oxidation of effluvia in the cellar air. Any vapors that contain combined nitrogen in the unoxidized form contribute powerfully to the devlopment of disease germs.

Lime powerfully promotes oxidation, especially in damp situations. I have seen cellar walls where the mortar was covered with a white efflorescence of nitrate of lime. So powerfully does lime accelerate the oxidation of nitrogenous matter for the formation of nitrates that it causes the "lime rot," in the foul alleys of cities. The nitrate of lime is very soluble and the rain soon washes away the lime of the mortar leaving only the sand to hold the bricks together. The same tendency to oxidation may keep the cellar free from foul odors by oxidizing the volatile nitrogen compounds into innocent nitrate of lime.

PRIZE ESSAY.

How can the Middlesex Agricultural Council Utilize an Experimental Ground for the Best Interest of the Farmer?

BY THOMAS ELMES, PRINCETON, ONT.

We have arrived at an age when agriculture has of a necessity become a science, which every one engaged in it must study to have the least hope of success. The virgin soil that produced excellent crops, no matter how or when put in, has become impoverished through the constant drain upon it by our system of farming in the past.

Our changing seasons, which from year to year seem to be more trying, and the numerous insect pests, demand our most careful study and consideration. It is impossible for any one individual to give that attention it requires to cope with the vairous formidable difficulties now placed in the pathway of the agriculturist, so as to be able to give to his fellows that advice which would insure their success in their profession.

In consideration of this we are pleased to see the farming community are awaking to their best interests, and forming themselves into agricultural councils, which, no doubt, if properly conducted, will have a very brilliant future, and will be of untold benefit. The founding of experimental stations is a step in advance of anything yet proposed. It is a well known fact that seeds, no matter how good, do not do equally well in every locality, but different varieties are best suited to certain soils and locations. In the first place, the Council should secure for experimental grounds, land suited for the growing of grain, not such as has been chosen at the Guelph Model Farm, which is only suited for pasture or hay, and would have been of untold benefit to the country, instead of, as it now is, a bill of expense and a complete failure.

After suitable land has been selected, a person should be chosen who is in every way suited, and has his very soul in the business, and determined to make it a success. The land should be laid out into suitable plots, and as grain is the foundation upon which our existence depends, too much attention cannot be paid to it.

Different varieties should be collected from every quarter and tested thoroughly as to their value. I have found, after considerable experience, that all seeds coming from the old country, or any other warmer clime than ours, are almost invarably a failure the first year or two, while those coming from a cold or colder climate, are a success the first season. Introduction and experiments in grains are very essential for our prosperity, as our changeable seasons soon take out all the vitality of our best varieties, necessitating the change of seed every few years, even if we really secure good varieties.

Again, so much imposition is practiced on farmers in new grains, that it would be a great saving of money and feelings if all new grains were tested and reported on by the Council, before being purchased by the people. It is something serious that our best grain producer, clover—especially the red variety—is passing away on account of the insects preying upon it, and something should be done to find a substitute or a cure. This is something which should occupy a very important place in an experimental ground, as it is the cheapest, best, and most convenient manure we can use. Indeed, it seems almost impossible to farm without it. If nothing else can be found to fill its place, we believe that even red clover seed can still be raised successfully, as we have done the last two years, by adopting a new plan, the old plan having proved a total failure.

Mixed grasses for pasture and hay should be experimented upon, to ascertain which varieties are the most durable and yield the heaviest crops. We must have mixed husbandry. Stock of all kinds are absolutely necessary to raise grain; indeed, perhaps the most profit is in stock. It is lamentable in passing through the country to see stock grazing on the natural grass, year after year, on the same ground, working hard twenty-four hours in the day to maintain an existence, when, by judicious seeding, the same land would produce ten times the feed and corresponding profit.

Several plots should be devoted to roots of all kinds, to ascertain which are the best and easiest raised, and have the greatest feeding value; also to find the best time to sow and best remedies against the various enemies with which they have to contend. It would be well also to set apart a portion for vegetables, as this is a very important item. As the time has arrived when we must use artificial fertilizers, these should also have special attention, so as to ascertain which are the best on different soils and different crops; much doubt exists as to what to use, when to use and how to apply them to various crops, whereby much injury and disappointment are occasioned.

The Council should consist of practical farmers, who are obliged to get their living by the sweat of their brow, not doctors, lawyers, professors, &c., who would spend a fortune and be of no practical benefit whatever. If proper men are chosen as managers and go heartily into the work, no doubt such reforms will be secured as will bring increasing prosperity to our Dominion, protection or no protection. We hope the day is not far distant when each county will have its experimental ground, and a wide awake Council to manage and report on the same.

The Dairy.

Plan and Description of a Model Creamery.

The accompanying illustrations represent a cheap and convenient creamery, having a capacity for 2,000 cows or more. The size of the main building is 30x40 feet. As will be seen in Fig. 1, the building is erected on the slope of a hill, the dotted line representing the slope, the mound and stone wall being represented as torn away in order to gain an insight into the interior of the basement. Fig. 2 is a plan of the basement.

The cellar, used for storing the tubs of butter, is under the cream room; there are steps leading up from the churning room to the cream room, and other steps, which start from the same point, going down from the cream room into the cellar. The stone wall at the back is 14 feet high, extending forward the whole length of the cellar; but the remaining part of the basement is only 10½ feet high, the cellar being therefore 3½ feet deeper than the churning room, and the cream room is 3½ feet higher than the churning room, leaving the cellar and cream room each seven feet high. The height of the churning and butter packing rooms is 10½ feet. The cellar floor is cemented, but an ordinary board flooring will do for the other rooms, bearing in mind that the cream room floor should be water tight in order to prevent water from leaking down upon the butter tubs. The ceilings and sides are plastered.

Fig. 3 represents the plan of the upper floor.

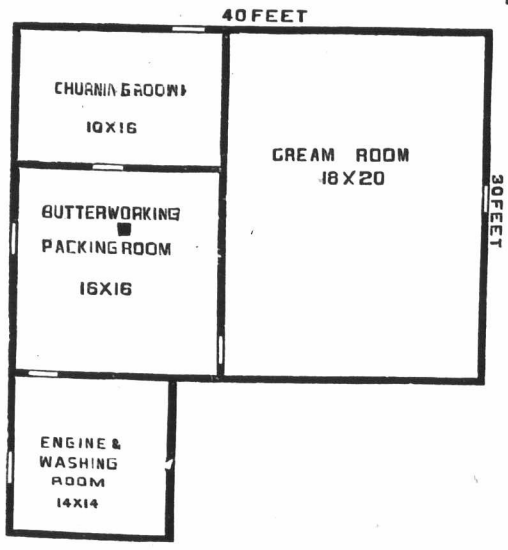


FIG. 2.—PLAN OF BASEMENT.

Water power is preferable to steam, as greater cleanliness can always be observed and greater conveniences be had. A stream that will run a six-inch square flume full of water without any pressure will do for a large creamery under a head of about fourteen feet. The cream is led down by pipes from the wagon, where the horse is standing, into the cream vats.

The cost of such a creamery, where stones are plentiful and not unusually far to draw, and where lumber is of average price, is (for steam or water power), lathed and plastered, all complete, $800. The other outlays, including steam engine (or water-power), with first-class cream vats, the best churns and other fixtures all complete, are about $600, making a total of $1,400. A great deal of machinery, etc., can sometimes be purchased second-hand, and other outlays, where durability, substantiality and size are not of primary consideration, can be materially lessened, so that a very fair creamery can often be erected for less than $1,000.

By reference to the following article it will be seen that Mr. M. Moyer, Georgetown, Ont., furnished us these plans and estimates. At the Model Farm the building cost $3,000; machinery, etc., $1,000. The building is of brick; but no creameryman will stake his reputation by saying that it is a model in any respect. It should be a pattern for all farmers and creamerymen, instead of being a disgrace to the Government and the country, and we should like to ask, on behalf of our farmers, how it is possible to stuff $4,000 into such an antiquated concern.

FIG. 1.—A MODEL CREAMERY.

Private vs. Government Enterprises in the Creamery Business.

At the annual meeting of the Western Dairymen's Association, held in Stratford in January last, an important discussion took place with reference to the cost of creameries and creamery butter. The leaders in the discussion were Prof. Brown, of the Model Farm, and Mr. M. Moyer. The latter gentleman asserted that a suitable building, with machinery and fixtures all complete, could be erected for $1,000 to $1,500.

Prof. Brown.—We don't want shanties.

The estimate made by the Prof. was $4,000, and this was the original cost of the Model Farm creamery. Many creamerymen rely upon us for accurate statements; we have had several inquiries with reference to the cost of creameries, and we promised to furnish the required information in seasonable time. Accordingly, we give on this page a cut of a model creamery, planned and fitted up in harmony with the best known methods of butter-making. The plan and estimates have been kindly furnished to us by Mr. Moyer himself, but the cost has been revised by an efficient contractor. Having built several creameries in different parts of the Province, Mr. Moyer is perfectly competent to make plans and estimates, and we visited his Georgetown factory for the purpose of getting an illustration of his factory there, which is situated on the most suitable site we have ever seen, it being shaded by trees on all sides, and there is a stream which furnishes water power, and pure, cool water for other purposes; but the building, like that at the Model Farm, was not up to the times, not having been built by himself, so that Mr. Moyer gave us a new plan, correcting some mistakes which he had made in the erection of his other creameries. The illustration represents no built creamery, but one that should be built by all who contemplate going into butter farming.

Mr. Moyer has been in the creamery business for a number of years. He left the farm and went into storekeeping, and it was the deplorable condition of our butter, as handled by storekeepers, that fired him into action for its amelioration. He may be regarded as our leading pioneer in the creamery business. He started on a very modest scale, and educated himself and the farmers as he went along. He demonstrated his principles by going out amongst them, handling their milk and cream in their own houses and before their own eyes, frequently also calling them together and lecturing to them. Moreover, he spent considerable time

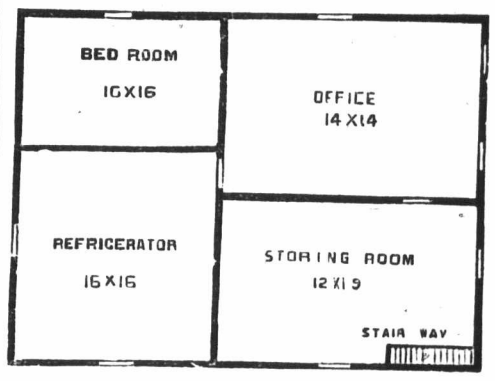


FIG. 3.—PLAN OF UPPER FLOOR.

and money in experimenting before their eyes, and then he adopted the method of making known the results of his investigations by publishing a paper and distributing it *free* amongst the farmers all over the Province. His last issue counts 20,000 copies, and is vastly more practical and profitable than the Government trash which costs the country thousands of dollars.

The first prejudice he had to contend with was to persuade the farmers of the advantages

of submerged deep-setting, proving to them that the extra profits over the shallow-pan system would pay for the cans in three months, when the greater quantity and higher price of the butter were both taken into consideration. His first crude idea was to haul the milk to the factory, making contracts for the milk at specified rates per gallon. This proved to be a losing business; for hauling twice a day was very expensive, and the farmers suffered a loss in not having the use of the skim milk. This gave rise to his system of cream gathering, allowing the farmers to do their own skimming in order that they might always have the skim-milk in a fresh condition. A difficulty then arose in that all farmers did not skim alike, when he invented an attachment to the cans by means of which all farmers can skim alike, if they choose to do so; and if they do not, there is evidence of fraud.

Not only did Mr. Moyer demonstrate to the farmers how their bad butter and inferior cows could be weeded out, but he made a successful effort to improve the reputation of Canadian butter in the English market. He sent an expert across the sea at his own expense, who succeeded largely in removing English prejudice against Canadian butter. He obtained the highest prices in the British markets, being 10 cents per pound higher than home-made butter, and Mr. Moyer regards the satisfaction of this victory as ample reward for all his pains. While he has been accomplishing all this, our Government has been quarrelling over the size of butter globules in the different fancy breeds, which professorial business it calls experimenting for the benefit of practical farmers. Our farmers can afford to wait until the hard times are over before squandering their earnings in this sort of work. That our Government has obtained top prices in the British market for its butter is true, but it had to resort to the contemptible device of coloring the butter—a fraud which Mr. Moyer has never stooped to perpetrate.

Our main object in visiting Mr. Moyer was to ascertain what *good* the Government was doing for the creamery business.

Mr. Moyer.—*Good!*

"Hush, hush," said we, "don't be sarcastic. We want to hear the truth, and nothing but the truth, and let no political motives intervene."

Mr. Moyer.—Well you shall hear the truth, and with regard to political motives, let me say that I never cast a Conservative vote in my life. I would chasten my best friend if he attempted to ruin the business which I am so ardently endeavoring to build up. Prof. Brown, basing his calculations on a month's experience with 250 cows, attempts, in his annual report, to estimate the profits that would be derived from 500 cows for a whole season, and his balance sheet shows a clear profit of $3,420. I defy any creamery man to make half these profits under average circumstances. This misleading estimate has poisoned the farmers against giving their cream to creameries, as they are getting vicious against all sorts of monopolies. By attempting to popularize the creamery business, the Government is depopularizing itself. Its inquisitorial practice is unbearable; it wants us to expose our private business to build up its own; and when I ask it for information I am snubbed, just as you saw me "set upon" by Prof. Brown, at the Stratford Dairymen's Association, when I said that I could build a substantial creamery all complete, having a capacity for 2,000 cows, for $1,000 to $1,500. What is the Government creamery for, if its officers will not furnish information when wanted?

"Stop, not so fast," said we, "the good which the Government is doing in educating students in the creamery business, outweighs any trifling errors it may have committed."

Mr. Moyer.—I take students too, and pay them all they are worth for their work. I show them the *real* practice, and teach them all the science they require, instead of a smattering about butter globules, fancy pedigrees, etc., and a sort of practice which they will have to unlearn when they go into actual business.

It is true that we have clashed with Mr Moyer's views on the creamery business. On various occasions we have shown the injustice done to some patrons by the cubic-inch system of dividing the profits; but Mr. Moyer argues that creameries should be encouraged (1) because they are a vast improvement on the old method of butter making, and (2) because there is a probability that the injustice will in time be removed. We only presented the facts, not having discussed probabilities; and with regard to the improved method, we might say we have laid it down as a general rule that it is better to abandon all encouragements than that enterprises should proceed on unsound principles. We should be glad to see these difficulties removed, and then we shall push the creamery system for all it is worth. Meanwhile we leave the reader to judge for himself between our system and Mr. Moyer's.

CANADIAN CHEESE BOOM.—September cheese from Canada had preference over that made in New York, says "The American Rural Home," Canada is unquestionably increasing its dairy products, and thus competing with New York trade. Mr. Folsom says that the New York farmer cures his cheese so as to be at its best forty-five days from date of its birth, and not at ninety days, as is the practice of the Canadian farmers. New York cheese is shipped too green, and does not stand the voyage as well as the rival product. He advises that fall cheese be cured more slowly, with more salt, or adopt some other measures to make it keep better.

Recent stock intelligence reports the death of two cows of "record" fame. Princess II., whose record is said to have been 46 pounds 12½ ounces of butter in seven days, is no more; she has gone to join Mercedes, Echo, Jersey Belle and others which have become martyrs to the "record" craze. Value II., another "record" celebrity, also died recently from the same cause. The man who will pay the price of a farm or two for a cow of notoriety, and then feed her to death for the sake of a little vain glory, and having his name talked of, is now regarded as a public benefactor and a philanthropist. This may be the cheapest method of advertising, but no man in the sane possession of his faculties will purchase the off spring of these martyred heroines. When the lower animals make so much history, man's history should cease.

Dairy Products at Annual Fairs.

BY PROF. L. B. ARNOLD.

The dairyman's part at agricultural fairs is often one of idle curiosity from the unfortunate circumstances which usually surround his class of products. To open a package of butter for inspection by the moving columns of humanity passing to and fro at fairs, would be certain ruin to the sensitive contents of the package. Butter will soon spoil if too openly exposed to even pure air, but when allowed to come in contact with air polluted by tobacco smoke, with which fools are wont to annoy public gatherings, and by odorous breaths and fetid emanations from persons perspiring from excitement and fatigue, it would be ruined in an hour. So butter is virtually kept hid at fairs, and is exhibited only by name. On some occasions it is displayed under glass, which is much more satisfactory than gazing at an uncomely package and imagining that there is butter in it, but one does not get much of an idea of the make and merit of dairy goods by simply looking at them. So far as any improvement in the art of butter-making or any public benefit is concerned, the labor and expense bestowed upon butter taken to agricultural fairs are thrown away. The lucky man who gets the prize is the only one benefited, and his chance is but that of a lottery. Betwixt favoritism and incompetency the bestowal of awards upon dairy products is involved in great uncertainty. There are but few judges officiating at fairs who could go over a dozen packages of butter or cheese and grade them twice alike, if they could not recognize them by sight or number, but unless one can repeat his work he is not qualified for making correct decisions.

Cheese is not as readily injured by exposure as butter, and hence may be exhibited openly, but this will give but a faint idea of merit and demerit without an actual trial, which, if permitted to all interested, would work a ruin to the exhibits which none but the prize taker could afford.

The obstacles in the way of profiting or entertaining either the exhibitors or the majority of visitors at fairs by an inspection of dairy products are so inherent in the products themselves that it is difficult to devise any satisfactory mode of doing it, and it is seldom done. Even the great international dairy fairs held in New York city in 1878-9, were almost total failures, so far as any good to the dairy public was concerned.

There is, however, a possibility that competition in dairy products may be made useful to competitors at least. I have seen this done in a small way with gratifying success. The first instance of the kind witnessed occurred at a dairymen's convention in Chautauqua county 10 or 12 years ago, and was planned by O. C. Blodgett, an enterprising and accomplished dairyman of that county. The plan was substantially as follows: The competitors were made the judges of their own butter and cheese. When in the progress of the convention the time arrived for passing upon the merits of the butter and cheese offered, the competitors were seated on one side of the hall, and each was handed a plate, on which a committee had previously arranged by numbers a sample of each exhibit of butter, some 15 or 20

in number. When each had made a careful examination of all the samples, he indicated his judgment by marking the preferred numbers, best, 2nd best, 3rd best, and so on, as far as the grading extended. This gave each an opportunity to compare all the samples, and prevented him from being partial to his own, for he could not distinguish it from the rest. When the examination was completed a teller counted the votes, and the prizes were awarded accordingly. This done, the successful competitors were publicly questioned in regard to their respective modes of producing milk and making butter or cheese, as the case might be, so that the whole convention could understand how the best butter and cheese competing were produced.

This novel mode of passing upon exhibits of butter and cheese was quite exciting to the competitors, and proved to be very satisfactory and correct, and furnished a profitable and interesting entertainment for the whole assemblage. Especially did the convention manifest a jolly interest when it became known that the most conceited and pretentious butter-maker in the crowd had rated his own butter as the poorest in the lot, without the least suspicion that it was his own, and had accompanied his decision with some very decided remarks im pugning the good sense of the dairyman who did not know better than to offer such stuff where good butter only had any right to be. Evidently he had for the first time in his life seen his butter as others saw it. It was a capital way for mellowing down conceit, and others as well as he went home wiser and more modest, if not better men.

The fact that little good results from competition in dairy goods at agricultural fairs, should not prevent dairymen from attending such fairs. There are always other things interesting to dairymen against which similar objections do not lie, from which enough can be gained to pay for attendance. They furnish a social holiday needed for rest and recreation by the isolated occupants of dairy farms. Improvements in dairy furnishings generally find their way to such places, and also the latest devices in agricultural implements, concerning which the dairyman as well as the general farmer should keep himself thoroughly posted. More important still, fairs generally, especially the larger ones, attract collections of improved dairy stock, which it pays dairymen to study and be familiar with. Let the fairs go on and be supported and encouraged, but the dairy department, unless in some way managed better than is now customary, might as well be dropped out along with horse racing and gambling.

The art of butter making will never reach perfection until we stop putting salt in the butter," says the "American Dairyman." It is a depraved taste that requires a salt taste in butter. The most critical judges in the old country never think of allowing salt to come near the butter, and after getting accustomed to it there is all the difference between the two that there is between salt and fresh fish, flesh or other dried or prepared food. The true epicure could eat a pound of unsalted butter at a sitting. It will be money in the dairyman's pocket when salt is abandoned in the dairy.

Mr. Lynch Defends Himself.

Mr. W. H. Lynch has written us with reference to our remarks on his "Manual of Scientific Butter-Making for the Ontario Farmer," demanding British fair play. We never refuse such demands, and we only ask Canadian fair-play from those who insist upon monopolizing our columns with voluminous matter irrelevant to the points at issue. We are never guilty of prolixity in our attacks.

We mainly attacked the system of squandering public money in broadcasting agricultural literature amongst the farmers, especially that of doubtful utility. Mr. Lynch has come forward to exonerate himself, leaving the Government to shoulder the responsibility. When we expose objectionable measures, we feel that we have done our duty, the individuals who suffer being of subordinate consequence.

The defence made by Mr. Lynch can be faithfully summed up as follows: That the Government, under Commissioner Wood, *did* commission him to prepare the manual at an interview unsolicited on his (Lynch's) part, "weeks before any petition was thought of;" that the book contained as much original matter as he "was engaged to prepare, or allowed time to prepare," the appendix (about 80 per cent of the work.—ED.) being supplied gratuitously; that he did not bring any "pressure" upon the Government which "did not grant the encouragement petitioned for, but gave way to other influences, and committed itself to the policy of creameries;" that Mr. Barré did not prove the manual to be as represented in the ADVOCATE, but, finding a dearth of matter for legitimate criticism, he caused him, in some instances, to say the exact opposite of what he (Lynch) did say; that the ADVOCATE had cheapened its columns by publishing some of his previous writings, and had more than once endorsed some of his principles; that he gave the Government to understand that he was not an office-seeker.

Mr. Lynch asserts that he is "able to prove all these statements by documentary and other evidence" We don't demand his evidence; the Government is culpable whether his statements are true or false. It would be absurd to suppose that all the principles of butter-making espoused by Mr. Lynch are unsound; we may have published some of his writings, and shall take pleasure in doing so again, if he can offer us something better than our regular contributors. We publish the soundest and most practical principles we can procure, never asking whether they come from friend or foe. Both Mr. Lynch and Mr. Barré have committed themselves to government expenditures for dairy purposes; in this we disagree with both until these expenditures are asked by the farmers, and produce more beneficial results than they have done; and it would be impossible for us to agree with both of these authorities on the principles of butter-making. We know that the Government did commit itself to educating (?) the farmers, both by the distribution of butter literature and in the establishment of creameries; for Mr. Lynch's manual was distributed and the Government did establish a creamery at Guelph. We know, moreover, that Mr. Lynch's "scientific" manual is extremely unscientific, as his "original" matter has to do with operations, not with causes, and many of his statements, especially those with reference to temperature, are exceedingly indefinite, and are hence not scientific, and can be of no practical value.

In the appendix of the manual is found a statement, clipped from a Toronto daily, to the effect that Mr. Lynch came to Toronto fro the Eastern Townships (Quebec) for the pu - pose of interesting "influential people" in the question of butter improvement in Ontario, and that he exhibited samples of churns and other appliances in one of the corn exchange rooms, the efficiency of which had been proved by competent judges. There appears also a petition "signed by 54 leading men"—such as commission merchants, editors, lawyers, storekeepers, clergymen, literary ladies and gentlemen, etc., addressed to the Premier of Ontario, asking for Government aid. If such a petition had come from the farmers we would have raised no objection. What moved the citizens of Toronto to take such a deep and sudden interest in the dairy education of the farmers? What gave rise to the necessity for a petition after the Government had commissioned Mr. Lynch to write his manual? These matters are past finding out by independent journals, which are always on the alert to make all crookedness straight—none but confidential political friends need apply—and for the present we must leave our readers to draw their own inference. If the Government did right in answering the prayer of influential citizens of Toronto, as prayed for in the petition, then Mr. Lynch lost a grand opportunity in evincing true patriotism by not constituting himself the acknowledged leader in so desirable an object as the dairy education of our farmers. We should here add that the petition makes direct allusion to Mr. Lynch and his "new scientific butter-making utensils."

Nobody can raise any objection against his exhibiting his utensils in the corn exchange rooms—or on the markets, or in the streets—and his utensils may be as valuable as his manual of scientific butter-making which advertises them; but this we do affirm that the Government is no authority on agricultural matters, and is therefore liable to be humbugged by all agents and peddlers who choose to adopt the expediency of putting their wares on the market at the public expense, instead of honestly competing with their rivals who are able and willing to expand their markets on the merits of their goods.

The Dominion Government has been humbugged in the same way, and we should like to know if it has "commissioned" Mr. Lynch to prepare another batch of his "scientific" pamphlets, or if certain other influential people have prayed for the Government to squander more of the people's money to educate our farmers in the science of butter making.

SIR,—I hasten to comply with your unprecedented offer in August issue, and it affords me much satisfaction in extending the circulation of your valuable journal, the FARMER' ADVOCATE. I find it interesting as well as profitable, and take pleasure in recommending it to my neighbors. I would not like to be without it.

REUBEN GILE, Smith's Falls, Ont.

Stock.

A Chatty Letter from the States.

BY OUR CHICAGO CORRESPONDENT.

As predicted in last month's letter, the cattle which were in the Indian Territory illegally, and were ordered to be removed, have all been taken out without any serious disturbance.

There were no bad effects felt in the cattle market on account of the enforced removal. This illustrates how alleged impossibilities can sometimes be overcome. Large delegations of cattlemen went to Washington and labored with the President to have him change his order, but when they found they had to go they seemed to forget their arguments, and proceeded to go.

Some very good fat cattle are coming this fall from the western ranges, but there are more than usual of the thin and medium fleshed kinds. To illustrate, one day, good framed, well bred western rangers, averaging 1150 lbs., sold at $3.50, while on the same day, in an adjoining pen, a lot of fat 1150 to 1269 lb. cattle sold at $4.50 to $5. There has been much disappointment in the west this year about the failure of cattle on crowded ranges to get fat. It seems that the large increase of owners on the plains within the past year or so has been detrimental to the general good. The ranges have been crowded, and as owners seldom agree upon a time to gather their beeves, the cattle are kept in almost constant motion, and do not have time to accumulate fat. For instance, there are a dozen brands of cattle on one range. Part of the owners want to market their beeves early, some in the middle of the season, and others wish to hold until late, and accumulate upon their cattle as much fat as possible. The result is that as one man's cattle cannot be gathered without disturbing all, the cattle are being worried in the round-ups when they should be allowed to peacefully take on flesh.

So long as the cattle in the west are compelled to run on unfenced government lands, this growing evil cannot be obviated. The most land that cattlemen can legally acquire from the government is 480 acres, and as it requires about 8 to 10 acres for an animal's annual subsistence, this amount of land is a mere drop in the bucket for a big cattle company. The President lately issued a very positive order, demanding the removal of all fences from government lands; there is now no way of obviating the commingling of various brands.

As the laws now stand the cattlemen of the west are looked upon as mere intruders and usurpers, and seem to have no rights which the government or individuals are bound to respect. If a squatter takes a notion to settle in the middle of a big cattle range, he can do so, and the cattlemen are obliged to yield. In this way there is a large amount of black-mailing business done by unprincipled men who go far out of their way to harass the stockmen.

The so-called hog cholera or swine plague was never so prevalent in the States as it is this year. There seems to be almost an epidemic in parts of the west. It is a notable fact that while last year the disorder was confined largely to the middle States, it is this year most prevalent in the west, Illinois, Iowa, Missouri, Kansas and Nebraska. There has been a sentiment that such disorders could not flourish in the clarified atmosphere of the west, but this pet theory is effectually exploded.

Whatever this hog cholera is, it attacks pigs and shoats chiefly, and thousands have been swept away this year. One dealer, disposed to see good in all things, thinks that if there was not something to thin out the young hogs, they "would not be worth one cent a pound in the market." This is on the theory that there would be an overproduction if all of the pigs were successfully raised.

There is evidently something radically wrong in the treatment of growing and fattening hogs. They are not so finely bred, as a rule, as to have weakened constitutions, and the fault must be in the feeding. Pigs are forced on rich heating food almost from birth, and thousands of them are raised without ever having an opportunity to taste pure water. This notion that pigs will eat or drink anything and thrive is a mistaken one.

The late Illinois State Fair was a financial success. This, in view of the fact that the Wisconsin and Iowa exhibits were financial failures, owing to bad weather, is gratifying to the Illinois Board.

The display of live stock was a very creditable one; but the management, evidently tired of the usual wrangling and complaining, did not have any grand sweep-stakes in which the different breeds would appear in the same ring. After all, it may be a pretty good plan to let each breed stand on its own merits. In nearly every case where the Herefords and Shorthorns come into direct competition the judgment is biased according to the personal predilections of the judges. Every intelligent man has his fancy, and it is mighty hard for a man who personally prefers Shorthorns to see any superiority in other breeds, and *vice versa*.

There is more sickness among pigs this year than last, and it is chiefly in Iowa, Missouri, Kansas and Nebraska, while last year it was confined largely to Indiana, Michigan and Ohio, says the "Drover's Journal." There is no epidemic of the so-called hog cholera, and the health of the hogs in the country, taking the crop as a whole, is very good. There is something very peculiar about this disorder, which our best veterinarians do not seem to understand. The fact is, if our Bureau of Animal Industry folks who have been making such foolish blunders in trying to find diseases among cattle, would address themselves to this very important matter, they might be doing the country some good instead of injury, as they have done.

It is always a good thing for every farmer's household to have at hand a supply of liniment to be used in case of bruises or injuries, says the "Germantown Telegraph." The following recipe is for a liniment that under ordinary circumstances is warranted to be valuable for beast or man. It is beneficial in case of rheumatism, sprains, swellings, and stiff joints in the human family, and for fistula, poll-evil, sweeny, etc., in animals: Oil of cedar, 2 ounces; aqua ammonia, 3 ounces; oil of hemlock, 2 ounces; spirits turpentine, 1 ounce; oil of cloves, 1 ounce; oil of tar, 1 ounce; spirits camphor, 2 ounces; oil sassafras, 2 ounces. Apply to affected parts.

Garden and Orchard.

Various Notes on Small Fruits.

BY W. W. HILBORN.

Another season has proved the Shaffer's Colossal the most valuable raspberry for the amateur, where only one variety is planted. It is perfectly hardy, most productive of any, and continues in bearing for a longer season than any other sort, but it is too dark in color for a good market sort.

The Worden grape is now attracting more attention than any other black variety. It is about a week earlier than the Concord, with larger cluster and berry, of somewhat better quality, and well worthy of a place in every garden, no matter how small.

This month is the time to plant currants, gooseberries, blackberries, raspberries and grapes. Farmers have more time to plant small fruits in the fall than in the spring, and if planted any time before the ground freezes, and a little mound of earth drawn up around each plant, and taken away again in spring, the plants will go through the winter without injury, and make a much better growth the first season. Plant well tested varieties. Most of the new varieties sold at high prices are not as good as many of the old standard sorts, and cost much more.

The following varieties are very reliable, and can be planted with the assurance that if any sorts can be grown, these will succeed: CURRANTS, red—Raby Castle, Victoria and Fay's Prolific. Black—Lee's Prolific and Black Naples. White—White Grape. GOOSEBERRIES—Houghton, Downing and Smith's Improved. BLACKBERRIES—Snyder. RASPBERRIES, red—Turner and Cuthbert. Purple—Shaffer's Colossal. Black—Tyler and Gregg. Yellow—Caroline. GRAPES, black—Worden and Concord. Red—Delaware and Rodger's No. 9. White—Niagara, Lady and Jessica.

THE AMERICAN POMOLOGICAL SOCIETY.

The twentieth biennial meeting of this society was held at Grand Rapids, Mich., Sept. 9th, 10th and 11th. The attendance was large, consisting of many of the most distinguished horticulturists from all parts of the Union. It was no doubt one of the best meetings ever held on this continent. The show of fruit was in a seperate hall. Among the most notable displays of fruit were 100 plates of pears by President Marshal P. Wilder; 140 varieties of pears by Ellwanger & Barry; 100 plates wild fruits, nuts, etc., indigenous to Michigan, by Prof. Bailey, of Lansing. A number of plates of apples were on the table in perfect condition, after having been kept in cold storage two years. There was also a very interesting display of Southern fruits.

Many new varieties of grapes were on exhibition. Perhaps the most promising for our Canadian climate was the Ulster Prolific, being a cross of the Catawba and a variety of the wild grape of the woods, of much better quality than the Concord; berry about same size; cluster not quite so large; color, very dark purple. From all the information I could gather, I think it the most worthy of trial of any variety on exhibition for our climate. Michigan made a grand display of over one thousand plates of fruit.

There were a number of very valuable papers read, which will be published in their report.

Marshal P. Wilder was elected President; Patrick Barry, 1st Vice-President, and Charles W. Garfield, of Grand Rapids, Mich., Secretary. The next meeting will be held at Boston, Mass., in 1887.

Suggestions for Amateur Fruit Growers.

BY L. WOOLVERTON, GRIMSBY, ONT.

No. 1.

I purpose writing a series of concise papers for the benefit of the farmer and the amateur fruit grower.

It is very confusing for an inexperienced person, when about to purchase trees and plants, to have placed before him a long catalogue of varieties, each one lauded for some excellent quality, and from such a list to select those best suited to his requirements.

The object of these papers will be in part to place before the novice in fruit culture such varieties only as are thoroughly tested, and proved to be each the best of its season for the table or market. A small fruit garden, of properly selected varieties, will furnish the table with a daily supply of fresh fruit for the space of nearly three months, and how much more delicious such fruit is when freshly gathered from one's own bushes day by day, than when jammed about during a long journey and furnished second hand! An orchard of well chosen kinds of fruit trees will yield an ample supply of the larger fruits for the remaining nine months of the year, and thus at no season need the home lack for an abundant supply of one of the most important and healthful articles of diet.

A further object, then, will be to encourage the planting of fruit gardens, at least for home use, in all parts of our Dominion, by pointing out, as far as possible, varieties of fruits that may be successfully grown, even in the colder sections.

STRAWBERRIES.

There is no fruit which may be so successfully grown in almost every part of Canada as the strawberry. It will flourish luxuriantly in the north, because it may be so easily protected, either artificially with sawdust, straw or leaves, or naturally by the deep snows. Mr. Hickling, of Barrie, says the strawberry succeeds well in the Muskoka District, and Mr. A. A. Wright, of Renfrew, assures us that he has no trouble there in growing any variety he has yet tried, although the thermometer often registers more than 40° below zero. Mr. Charles E. Brown, of Yarmouth, N. S., says: "The strawberry, though late, attains a large size here, and under good cultivation yields large crops, giving more profit to the area planted than any other fruit;" while Mr. Whitcombe, of Moosejaw, Manitoba, tells us that in his garden strawberries have done remarkably well.

Among the many excellent varieties of the strawberry we would recommend the following as the most desirable, naming them in the order of ripening:

The *Early Canada* is valuable for its earliness. It is smaller than the well known Wilson, softer and not as good a bearer, but in southern Ontario, where it is desirable to have an early berry to ship north, it is very important to have a small proportion of this variety.

The *Crescent* is not much behind the Early Canada in earliness, while it rivals, if not surpasses the Wilson in productiveness. On sandy soil it is preferable to the latter, being better able to endure the drouth, which so often ruins the crop. It is also more attractive in market than the Wilson, though slightly inferior in quality. Being pistillate, that is, having flowers without stamens, it needs here and there a row of Wilson or other kind with perfect blossoms, planted in the same patch, or near it.

The *Wilson's Albany* is still the most popular strawberry in Canada, in the north, south, east or west. On clay loam it is also the most desirable of all tried varieties for main crop for market. No variety excels it for productiveness upon such soil, and with many people its tartness only sharpens the appetite for its consumption. South of Lake Ontario it ripens about the middle of June, but north of that lake not till about the first of July or later.

The *Manchester* is the most promising of all the new varieties. So far I prefer it to any strawberry I know of for all purposes, and especially for the table. It is later than the Wilson, and consequently should be a most desirable market berry to grow in northern sections for shipping south. It is in many respects a typical strawberry. It is of a bright straw color, and like the wild strawberry in flavor, only sweeter. All the berries are large and perfect in shape, and the whole berry ripens and colors in a remarkably uniform manner.

The *Sharpless*, *Triomphe* and *Jucunda* are more or less grown as fancy varieties for table use. The first is the largest, and succeeds occasionally very well on sand, if kept well thinned out, but if the berry is the least overripe it has a disagreeable taste. The other two are best suited to clay loam, and need the highest cultivation.

The *James Vick* is an enormous bearer, but the fruit is often small and very imperfect in form.

The *best strawberry markets* for all ordinary kinds are the towns and villages nearest home. The great centres are of late so overstocked that the shipper to them is often a loser. During nearly a whole week this summer strawberries were wholesaled in Toronto at four cents per quart, and one shipper found himself in debt to the express company on the heaviest day's shipment of the season. Hamilton market was worse, the price sinking so low that one day seven quarts were sold for 25c.!

The net proceeds of the writer's strawberry crop during the last three years has been as follows: In 1883, an average of 12c. per qt.; in 1884, 8c., and in 1885, 5c. What may be expected from 1886?

CURRANTS.

This fruit succeeds the strawberry in the order of ripening, and cannot be left out of the farmer's garden, if only for home use. It also is very hardy, and can be grown throughout the vast extent of country from Nova Scotia to Manitoba; indeed, Mr. Whitcombe, writing from Moosejaw, says: "Currants can be grown here equal to any in Ontario."

The *Red Cherry* is the finest currant grown. If left till fully mature, the berries more resemble red cherries than currants, they are so large, and on this account are very little trouble to stem. This variety succeeds best on clay loam. On sand it is apt to make too much wood, while on heavier soil well cultivated and enriched, it bears enormous crops.

Fay's Prolific is perhaps the most profitable currant to grow for market. It is a greater bearer than the Cherry, and the stems are longer, so that it is more easily gathered, but the berry is not quite as large.

The *White Grape* is the best white currant, and it is very desirable in the home garden. Nothing presents a more attractive appearance on the tea table than a glass dish with several compartments, each filled with a different colored fruit. But it is useless to grow the white currant for market, because they are less profitable than the red.

The *Black Naples* is the most reliable variety of black currants that has yet been thoroughly tried. With proper cultivation and pruning, and on good, rich clay loam, or on sand if not too light, good paying crops may be secured; but the expense of picking is double that for the red, and as the yield per acre is much less than that of the red, it must necessarily bring at least one-third more per lb. in the market to make it profitable.

Lee's Prolific has been introduced with a great flourish of trumpets, just as all new fruits are now-a-days heralded, and then sold at an extravagant price, but the difference between it and the Black Naples is barely observable.

The *best markets* for the currant are usually the large cities, where so many are used by confectioners and fruit preserving companies; but such quantities have been grown of late that there is a very small profit in growing them for shipping. During the past season the prevailing price has been 6c. per qt. for red, and from 8c. to 10c. per qt. for black currants in the Toronto fruit market.

According to an Indian authority who writes an interesting letter on the subject to the St. Paul Press, wheat growing in India is annually becoming a more important business; and if the rate of increased production and export be maintained, it will not be many years before the demand of England will be principally supplied from her Indian empire, while other European countries will find their deficit replenished from the same source. The Indian producer, however, in his competition with America will be handicapped first by the quality of his wheat, and second by the cost of production. Indian wheat is soft wheat, and can never hope to take the place now being assumed by the Manitoba hard wheat, the flour from which has been tested and has been proven to be superior for baking purposes to any other. Even should the Indian wheat be largely used it would have to be mixed with some hard American variety. The cost of producing wheat in India and shipping it to England is computed at 97 cents per bushel, that is to say, it can be laid down in London at that price. To the digust of Canadian farmers that price is being beaten now from this side of the water. It is difficult to say how, in view of the growth in the competition, wheat-growers are going to fare in the near future; but farmers cannot do better than resolve not to carry all their eggs in one basket.

Poultry.

The Fall of the Year.

BY L. G. JARVIS.

The fall of the year is the best time for beginners to commence the business of fowl-raising, for the reason that they can at no other time of the year find matured young stock to operate with, without paying fancy prices. In the spring months those who have wintered a flock of young fowls prefer to keep them for laying and hatching purposes, unless they can get higher prices for their birds than at this season of the year. It is, therefore, economy to procure the birds in the fall. They can be bought at lower figures then, and the purchaser has the whole benefit of their egg product in the early spring months, when he desires to begin to hatch a few broods in succession. If he waits till spring he may readily procure eggs for a beginning; but there is the risk of delay, of transportation, of the cold weather that may chill them in transit; while with the fowls for providing eggs in your own hands you can much better procure all you require for hatching, and in this way be able to increase and multiply your stock without additional expenses.

WORK FOR THE PRESENT MONTH.

December is ordinarily one of the roughest months in the year for poultry men. Winter will fairly set in before the holidays come round again, and breeders or poultry raisers who have neglected to prepare for this inclement season will find themselves behind their competitors who have taken the necessary precautions in time to render their fowl stock quarters comfortable at this rude time of the year. The hen-house should now be cleaned and arrangements made for their thorough ventilation hereafter. The old nests should all have been emptied and washed inside with kerosene, to destroy any vestige of lurking vermin that may have accumulated this fall. The roosts must be similarly cleaned, and every part of the interior should be carefully seen to, to prevent the generating of this pest, which will cause so much annoyance to the birds when they are of necessity housed for the winter.

Do not attempt to carry over more fowls than your houses will reasonably accommodate. The young stock now well matured should be disposed of at once, if your yards are overstocked. It is better to fatten and market them now, if you have not a ready sale for them for other purposes, than to keep them till spring, especially the young surplus cockerels. Good pullets will pay you for their keeping in eggs next spring, if you do not harbor too many in limited quarters this winter. Lay in your vegetables for a full supply of green food. Bear in mind that as soon as the snow flies your fowls must be artificially fed in this respect, and however well you may feed them on grains, that they must have "green feed" as well to keep them in constant good thrift. We conceive this indulgence of paramount importance in December and January more particularly as a prime necessity for breeding fowls. In getting ready for winter don't forget to provide dust boxes. They may be placed inside of the house and near the window where the fowls can lie in the sun and enjoy the bath. This will help to keep them healthy and contented during their winter confinement.

If thus fed and warmly housed, almost any kind of hens will give you eggs, more or less, in cold weather. Old fowls will commence to lay in winter, when properly cared for, several weeks earlier than when they are neglected and allowed to shift for themselves comparatively. From now till April the stock should be fully fed. Poultry require more and heartier feeding in cold than in warm weather. Look out for roup and colds this month. Give your birds fresh water daily, and once or twice a week drop into the drinking vessel a little cayenne pepper. This is an excellent tonic, and it is warming to the crop in severe weather, but you must not use it too plentifully. Corn is the best evening food for fowls, especially during the cold months, as it keeps up a comfortable heat during the night. Give soft food the first thing in the morning.

Do not leave the cracks open in your poultry department; nail lath or other strips over them now. Don't leave the windows open on cold days; if you do you will most likely have to pay for it in the loss of your fowls.

POULTRY AT THE PROVINCIAL EXHIBITION.

A very fine collection of poultry was exhibited at the Provincial Show held at London last month. The Superintendent of the poultry department, Mr. McNeil, and his assistants, did all in their power to look after the comforts of the poultry on exhibition. The coops were well arranged, and kept very clean during the show. Owing to the inclemency of the weather on Tuesday the judges did not commence to judge until about ten o'clock the next day. There were a great many complaining outside the poultry building of not being able to gain admission to the poultry department during the entire day, and the same complaints made again on Thursday, as the judges did not complete their duties until Thursday afternoon, keeping the building closed almost two days, the best days of the exhibition. I think the judges would have got over their work much faster if they had paired off, and two of them judged the old class and two the young. This has invariably been the way the judging has heretofore been done at the Provincial Exhibition. I believe the one-man judge system gives the best satisfaction, and a show can be divided into several classes, and a show judged in one quarter of the time. This system has been adopted by all the poultry exhibitions held in Canada and the United States, and found to be the proper system of judging.

The building in which the poultry was exhibited we find very dark and very hard for the judges, especially in cloudy weather, to give entire satisfaction either t themselves or the exhibitors. The awards at this show seemed to give pretty general satisfaction. The slight mistakes that did occur may be attributed, as I mentioned before, to the building not being sufficiently lighted.

Dry salt is as good as any material that can be used for preserving eggs. Pack in boxes, turning the boxes twice a week, in order to prevent the yolks from setting to the inner sides of the shells.

Veterinary.

Foot Disease.

It may be of some interest to casually review a few of the many foot diseases, with remedies applicable in case of emergency, says a veterinary in the Horseshoer's Journal. For corns: do not leave the shoe on too long; use in shoeing a wide web and heavy shoe. Remove the bearing slightly from the quarter affected, trim the fungus parts at the seat of the corn, and at each shoeing use a caustic, and during the time the shoe is on use a foot dressing of tincture of arnica.

For thrush: remove the ragged edges, apply once a day carbolic acid one ounce, tincture of aloes two ounces, water one quart, and keep a pleaget of tow. For quarter crack: keep heavy shoe on foot, reset often and at each resetting pare all the foot will allow, if the toe is long shorten, if the heels are high lower. Apply a stimulant to the coronary band; in bad cases put a plate across the crack and fasten with small screws or one or two clinch nails, until grown down. If you happen to prick in shoeing, immediately remove the nail and apply arnica. In case of nails picked up on the road, enlarge the crifice and apply arnica two or three times a day until cured. In case of cuts from over-reaching calks, etc., on or around the coronary band, remove ragged edges with the knife, and if the wound is serious stitch it up and apply the carbolic acid solution recommended for thrush. It is well in case of injury to the foot to have the animal laid up for rest, more especially if it be in cold weather. Not unfrequently a small wound in the foot will result fatally, or leave the animal with an ugly looking blemish. In this connection I will give the treatment which resulted in the cure of weak feet very badly contracted and affected with corns; the treatment being entirely in the manner of shoeing. The horse was used on the road and over-reached, frequently pulling off the shoes. He had been shod by a number of smiths, with a view of remedying the defect, but all to no purpose, the foot growing worse until the animal was almost worthless for any purpose, the foot so weakened it would scarcely grow at all. I was consulted by the owner, who was necessarily anxious to remedy the evil. I replied that I thought a cure possible and accordingly took charge of the case. The sole of the foot was very heavy, dry and thick, the outside of the hoof very thin, brittle, dry and hard. In the first place I made a very heavy shoe, about 36 ounces, for the foot. I commenced to dress the foot, paring the sole until it would yield to strong pressure of the thumb, then put on the shoe, using No. 7 Northwestern nails, two on inside and three on outside of shoe, and the foot improved immediately, and the shoe remained in position without being pulled off. He has since been shod around and has a good foot.

I like the FARMER'S ADVOCATE well; get a great many useful hints and valuable information on agriculture and stock raising. I think it the best journal of the kind on the continent of America. C. F. SIMPSON,

Cavendish, P. E.

The Apiary.

Wintering.

Y G. B. JONES.

Before commencing this subject, I wish to tell my readers that my article for last month on "Fall Feeding" was written and mailed in proper time, but has not reached the ADVOCATE office. Its loss was not discovered till too late for another.

As I have already stated, winter preparations should be commenced in July. Suppose this to have been done, and our bees to be ready for winter quarters, our next step is to pack them. I shall confine myself to describing the clamp system, and refer any who wish to cellar or house their bees to my communication in last November's number of the ADVOCATE for directions.

The clamp is simply a box with a sloping roof, of ufficient size to contain the number of hives to be wintered in it, and twelve or fourteen inches of straw packing about the whole. The joints should be matched or battened, and the roof of sufficient slant to shed rain and melted snow, and tight enough to prevent leakage. An inner porch or vestibule should be constructed in front of the hive entrances, about six inches high and eight inches back, whose bottom should be on a level with the platform of the hive. It should run the full length of the clamp, and have a board for a door hinged to its upper front edge, and so arranged that it may be either fastened up against the front wall or let down so as to close the porch in. Entrances should be cut opposite those of the hives and the same length, and passage ways constructed from the hives to the porch, but shut off from each other. The clamp should face the east, or if it be a double one, east and west.

To pack the bees, bring them together, as directed for spring doubling, into a row where the clamp is to stand, and face them properly; and the first day they don't fly, after they have marked their location, set them into the clamp and pack up to within an inch of the top of the lower story. As soon as the bees are well settled in their new quarters, choose a warm day, examine them carefully and decide just how few combs they can be crowded upon, removing those which contain no brood and least honey until these are left. Place the remaining combs all towards one side, and shut off the vacant space by a division board. Place three or four pieces of stick about an inch in diameter, or corn cobs, across the top bars of the brood frames at equal distances, and over the whole place a quilt of cheese cloth, and upon this the summer quilt. If the bees have not now twenty-five pounds of feed left, place one of the removed combs into the vacant space beyond the division board, and raise this half an inch from the bottom. Place another comb upon its face upon the quilt, whose corner has been turned back to make a passage for the bees to and from the comb. Supply combs till there is sufficient honey with the bees, and then close down the division board. As soon as settled cold sets in, put a cushion in place of summer quilt, and pack to the roof with straw, but leave the hive covers off.

NOTE.—This clamping should be done *at once*. If short of stores the bees should be fed *without a moment's delay*. To feed: Make a cotton duck bag to hang in the space behind the division board, and to close at the top. Fill it with a syrup of two pounds of granulated sugar to one pound of water, brought to a boil and allowed to cool. Place it in the hive till empty; repeat as often as necessary.

The only care the bees will require is protection from winds and snow by means of the porch door and plenty of ventilation. Each day the bees fly during the winter clean the dead ones from the bottom board with a long stiff wire having a crook on one end.

Sheaves from our Gleaner.

The "Michigan Farmer" speaks thus confidently about the future of the wool trade: There is no longer any doubt but that wool is bound to advance. A Michigan dealer told us that he never saw the clip picked up closer in this State than it has been this season. Those who have wool, he said, refused to put a price on it. He intended buying a good deal more than he did, and is now feeling like kicking himself because he did not. One dealer in Detroit, quite able to hold it for a year, if necessary, has about a million and a half pounds stored in his warehouse. He thinks it a good investment, as he can sell at an advance of 4c. over what he paid for it.

The "Farmer's Review" says: "Pear blight is the source of much annoyance to fruit-growers. Of late years it has been recommended to seed down a pear orchard to grass as a preventive of blight." The editor of the "Germantown Telegraph" says: "We never had a tree to blight in grass, though they were of all ages, from three years up to one hundred and seventy-five, and of about ten varieties, while scarcely a year passes in which we do not lose one or more by blight in cultivated ground." We first saw grass mentioned as a preventive of blight in our columns in May, 1884, and more fully by T. V. Munson, of Denison, Texas, in our June number of last year. We are glad to see that the information we gave our readers at that time has been so fully wrought out by the experience of so many practical growers. We seldom advance new theories, and should not then have done so, had it not been so forcibly proved to us by repeated observation of the advantage of the plan to which we gave circulation.—[Farm and Garden.

HOW TO KEEP CIDER SWEET.—Pure sweet cider that is arrested in the process of fermentation before it becomes acetic acid or even alcohol, and with carbonic acid gas worked out, is one of the most delightful beverages. The "Farm, Field and Fireside" recommends the following scientific method of treating cider to preserve its sweetness: When the saccharine matters by fermentation are being converted into alcohol, if a bent tube be inserted air tight into the bung, with the other end into a pail of water, to allow the carbonic acid gas evolved to pass off without admitting any air into the barrel, a beverage will be obtained that is a fit nectar for the gods. A handy way is to fill your cask nearly up to the wooden faucet when the cask is rolled so the bung is down. Get a common rubber tube and slip it over the end of the plug in the faucet, with the other end in the pail. Then turn the plug so that the cider can have communication with the pail. After the water ceases to bubble, bottle or store away.

Correspondence.

NOTICE TO CORRESPONDENTS.—1. Please write on one side of the paper only. 2. Give full name, Post-Office and Province, not neccessarily for publication, but as guarantee of good faith and to enable us to answer by mail when, for any reason, that course seems desirable If an answer is specially requested by mail, a stamp must be enclosed. Unless of general interest, no questions wil be answered through the ADVOCATE, as our space is very limited. 3. Do not expect anonymous communications to be noticed. 4. Matter for publication should be marked "Printers' MS." on the cover, the ends being open, in which case the postage will only be 1c per 4 ounces. 5. Non-subscribers should not expect their communications to be noticed. 6. No questions will be answered except those pertaining purely to agriculture or agricultural matters.

Voluntary correspondence containing useful and seasonable information solicited, and if suitable, will be liberally paid for. No notice taken of anonymous correspondence. We do not return rejected communications.

Correspondents wanting reliable information relating to diseases of stock must not only given the symptoms as fully as possible, but also how the animal has been fed and otherwise treated or managed. In case of suspicion of hereditary diseases, it is necessary also to state whether or not the ancestors of the affected animal have had the disease or any predisposition to it.

In asking questions relating to manures, it is necessary to describe the nature of the soil on which the intended manures are to be applied; also the nature of the crop.

We do not hold ourselves responsible for the views of correspondents.

Beef and Butter Breeds.—I drop you a card to ask your opinion in reference to Holstein cattle. I hear them highly praised as comprising the combined qualities of beef and butter, which are two very essential points. What I now want is your opinion whether they would be suitable to our northern part of Canada, Muskoka. I have an idea of going into the stock business, and would like to improve my cattle by the introduction of a pure-bred bull. Which breed would you recommend as the best for a new country like this? All kinds of root crops can be raised with profit here, and good pasturage throughout the summer; but the winters are pretty severe. Please state what a good six months old bull calf would be likely to cost, and the names of some reliable breeders; and any suggestions you may make will be thankfully received.—W. A. C., Muskoka.

[The Holstein is noted for quantity of milk, but the percentage of butter is usually low, although there is a great difference in individuals of the breed. Of all the dairy breeds the Holstein is the best for general purposes, but no cow or breed can be first-class in all departments. We do not, as a rule, recommend farmers to purchase general purpose cattle. Holsteins are best suited to farmers who sell their milk to cheese factories. They are very hardy, and would suit your climate very well. The Jersey is the best butter maker, but she is no beefer, and not very hardy. If you want to make a specialty of butter-making, you should for the present select the best natives you can find and improve them by selection, as there is as yet little known as to the real merits of the respective breeds; but if your natives are not beefy enough to suit you, you may introduce some Shorthorn blood of the Bates or Cruickshank strain. By consulting our "Breeders' Directory" on the last page of the ADVOCATE, you will find the names of the most reliable breeders. You can ascertain the price of a bull by writing to breeders who advertise in the ADVOCATE.]

Talk About the Northwest.—We have received for publication the following private letter written by a gentleman residing in the Saskatchewan district (Prince Albert), and addressed to a friend of his in Toronto. As it gives private advice to a friend, the accuracy of the information may be relied on, and many of our readers will have an opportunity of comparing it with the Northwest immigration literature that has been scattered all over the world: "Yours came to hand in time to have been answered by last mail, but I was camped out on the prairie making hay, and was quite unable to get writing materials. You need not have made any apology for writing to me, for I am always pleased to give all the information I can about the Northwest. I came to the territory of the Saskatchewan in the spring of 1882, and do not regret having done so. The Government gives all the supply contracts to the Hudson's Bay Co., and as they never pay for produce in cash, money is scarce; but nevertheless I am gathering land and stock which will some time or other be of value, although it would be quite impossible to get even half their value in money just now. I cannot advise any one to come here just now, as our political affairs are in a most unsatisfactory

state; nor would I advise some to come any time—although I myself am well satisfied—because many people would find that although the pioneer's Robinson Crusoe kind of life is very fine in the dim distance, it is quite a different thing in reality. The romance soon wears away. But I shall give you as correct an idea of the country as I can, and you may then judge for yourself. In the first place, then, you must remember that the country drained by the Saskatchewan is larger than France and Great Britain and Ireland combined, so that any description I may give you of this part may not apply to others. The general aspect of the country is what we call "broken," and is not unlike the vicinity of Brantford in appearance, but our virgin soil is of course richer. The heavy clay prevents the escape of water, and consequently every hollow place holds a little pond. Vegetation is very abundant. A kind of grass called Blue Joint, and Vetches or Wild Prairie grass, are especially abundant, sometimes reaching above the horses' backs. From this you will readily understand that it is a magnificent stock country. In my estimation it surpasses in this respect the famous Bow River country. The Chinook winds give them some assistance when the wind is blowing from a westerly direction, but at other times their climate is quite as severe as it is here, and as the grass in that locality is short, they are at a loss for hay, of which we have an abundance. Horses winter out, and I think the West Highland cattle would do well without feed, but I would prefer shelter for both. The climate is severe, the thermometer ranging as low as 65° below zero since I came here, but, although more dangerous, the decrease from 10° below is hardly felt. We have an abundance of wood on our claims for fencing and firewood, but not for building purposes. I have sufficient on my place even for building, but none of my neighbors have. On the north side of the North Branch there is an almost unlimited supply, and with a little labor this becomes available for settlers. The only serious drawback which we suffer from is the want of a market, but this will very soon be remedied. The Hudson's Bay Co. have been able to navigate Hudson's Straits for over 200 years with ships that were little better than tubs without losing a single vessel. If this route were once opened, Prince Albert would be as near Liverpool as Toronto now is, and it would then be the distributing point for the greater part of Northern North America. The Government are delaying the opening of this route in the interests of Eastern Canada, under the pretence of exploring it, but it must be opened soon nevertheless. As a grain growing country the Saskatchewan is as yet untried. Mr. William Miller has been here for eleven years and has had good success, but the majority of our farmers are too slovenly to succeed. The natives have been too long accustomed to an easy life to be successful at this their first effort. I feel confident that for stock raising of all kinds its success is beyond dispute. As a grain raising district I have not such strong faith in it, but feel sure that we can easily raise enough for our own wants. If you could only visit this country I am sure you would like it. Travelling on the prairie is not near so fatiguing as it is generally supposed to be, and the exceedingly healthy climate seems to more than make up for the fatigue."

Glanders in Cattle.—Please tell me if cattle will take glanders by feeding in the same pasture that glandered horses have been feeding on.—Subscriber Austin, Man.

[Glanders have never been known to affect cattle.

Farmers' Clubs—Shorthorn Milkers.—Acting on the advice given in the ADVOCATE some time since, we, in February last, organized a Farmers' Club in School Section No 8, Dawn, known as the North Dawn Farmers' Club, with 15 members, John Small being elected President, Peter Knight, Vice, and John Hale Sec-Treas. Meetings held in School House on Thursday evening on or before full moon. Though hardly to be called farmers as yet, being in a new settlement, with our oldest resident only located about seven years, still we are making a good show, and we expect to have good farms sometime in the future, as the land through this north part of Dawn cannot be excelled in Canada. The subject for discussion last meeting was, "How can we best improve our stock for dairy and other purposes?" and we concluded that the best way was that the Club get a thoroughbred Shorthorn bull. Now here we want a little advice. 1. Would it be better for us to get an animal with or without a pedigree? We think pedigree costs money, and money is hard to get. We believe there is considerable speculation and some humbug about this pedigree business, and that we might get just as good stock without it. Would you also give us the address of some stock raiser whom you can recommend as an upright honorable man, one whom we can trust to send us what we want.—J. H., Dawn, Ont.

[We are pleased to hear from the Secretary of this Club, and should be pleased to hear from all farmers' clubs organized in the same way. It will afford us great pleasure to aid them in every possible manner. There is a good deal of humbug about the pedigree business, it being to the interest of speculators to attach more value to it than it is worth, although there is considerable risk in getting a bull without a pedigree. Individual merit must go with it, otherwise the pedigree is worse than useless; for then the weak points are sure to be transmitted, while they are not so apt to be transmitted where there is no pedigree. You may attend some of the leading shows and select an animal upon its merits, but stock fed for prizes are apt to be useless, and many of our best stockmen do not show at all. The names of our most reliable breed- will be found by consulting our "Breeders' Directory" on the last page of the ADVOCATE and our advertising columns, to whom you may write; but if there is a member of your club who is a good judge of cattle, it would pay you to send him out among the breeders and let him select a good pedigreed bull, but not an expensive one. Let him also examine the ancestors and the offspring of the bull. Fifteen or twenty dollars spent in this way will be more than saved in the extra value of the bull, and in the satisfaction of knowing that you have made the best possible bargain. See also that the breeder does not pamper his stock or raise them too tenderly. Middlesex and Wellington are leading Shorthorn counties. Get a bull belonging to the Bates or Cruickshank strain of blood.]

U-necked Horses.—Would you kindly publish in your next issue how to prevent a horse from getting U-necked, that is, becoming hollow on the neck where the collar rests, and how can you raise the neck after it has become hollow. I have a three-year-old colt affected.

[Many horses have become U-necked by being overworked in the harness while too young. There is no remedy, but by keeping your colt in good condition his appearance will be greatly improved.]

Swollen Legs.—Will you please give me some information as to what to do for my horse. He swells badly on the hind legs when he stands in the stable—one worse than the other. It has been coming on him for the last five years. He is eleven years old.—H. J., Madoc, Ont.

[Give a purgative ball once every 10 days, and every night give 1 drachm saltpetre and 2 drachms sulphur in soft feed. Groom well and give regular exercise. This condition is frequently caused by neglect in keeping the legs clean, although it sometimes originates in impure food, and some breeds have a predisposition to it.]

To Reduce Swellings—Lampas—1. Would you kindly answer through your columns the following questions? I have a mare which foaled last June and filled very badly on both sides. She improved for a week or two, but now gets no better. The swelling is still bad on one side. The mare is on grass, thin, but doing no thing. I have been giving her a little alum and saltpetre mixed twice a week. What can be done for her? 2. What is the best treatment for lampas? My horses are much troubled with them.—L. Q. C., Millward, Alta.

[1. Bathe the swelling with warm water and apply a mild ammoniacal liniment. Give also a light purgative drench, and every evening put a drachm of saltpetre in feed. These remedies can be procured at any drug store 2. Scarify the swelling with a lancet, and give iodide of potassium in drachm doses every night in feed.

Orchard Grass—Quack Grass.—1. Does orchard grass make good pasture for cows? 2. When is the best time to sow the seed, spring or fall? 3 What is the best way to kill quack grass.—E. A., Union Springs, Ont.

[1. Orchard grass makes capital pasture for cows; it starts earlier in the spring and lasts later in the fall than any other grass. 2. All depends upon the season. Grasses are usually sown in the fall and clovers in the spring. 3 Various modes of destruction have proved successful. The main object is to keep leaves from forming above ground until the roots have perished, and the best and cheapest way of doing so depends upon the quantity of grass and the nature of the soil. It has often been effectually exterminated by planting a root or corn crop and keeping the ground perfectly clean; but in bad cases a more effectual way will be to plow the land deep in spring, stir the surface once a week throughout the summer with a gang plow, and then plow in the fall the same depth as in the spring; the next season a root or corn crop should be planted, followed by clear cultivation.]

Bot Flies—Lousy Cattle—Restoring a Horse's Mane.—Kindly answer the following questions. 1. Are the "grubs" in a cow's back injurious to her and how can they be prevented? 2. Our cattle get very lousy while stabled in winter; what is the best remedy? 3. We have a three year old colt that has her main badly spoiled by the poke; would you advise me to cut or shingle it?—A. C., Wendigo, Ont.

[1. You will find full particulars about the warble fly in our issue of last May. These grubs are irritating to cows and so reduce the flow of milk, and the hides in which grub holes are found are depreciated in value. The grubs should be destroyed by puncturing the wound by a hot wire or needle. If allowed to escape they will turn into flies and injure the cattle the next season. 2. There are numerous remedies, but a strong solution of tobacco water is usually the most convenient, being careful not to apply it all over the body at one time. 3. Clip off all the mane and let it grow evenly.]

Curing Hops—Please inform me how to cure hops. Is it proper to gather them green? Will first frost injure them?—W. H. Y., Mount Forest, Ont.

[For curing hops a special building is required containing a furnace, usually termed a hop kiln, the size being in sympathy with the extent of the hop-field. The stove-room, with stone, brick, or plastered walls, occupies about half the building, and over it the drying room is placed. The ceiling of the store-room, or rather the floor of the drying-room, is constructed as follows: Joists are laid as in other buildings, and wooden slats 1x2 inches placed across on edge, 2½ inches apart. A flax or hempen carpet, loosely woven (leaving the spaces between the threads about one-sixteenth of an inch apart, so as to allow the air to pass through freely), is spread over the slats. On this the hops are placed for drying, and, when dry, they are removed into the store-room, which occupies an adjoining part of the building. The hops should be ripe before picking, but if the plantation is large and the laborers few, the picking may commence a little earlier, that is, when the seeds commence to harden. When the hop is ripe, the seed is hard and of a purple color; but it soon afterwards turns brown, when the quality becomes depreciated, and the weight lightened by the dropping out of the seeds Hops are sensitive to frost, and it should be avoided by every possible means.]

Stock Notes.

Constipation kills a great many hogs, says Col. Curtis. It takes the form of piles, staggers, megrims, fevers and colic. It is not epidemic, but the same causes which will make sick one hog, or cause it to die, may also affect more, so that the diseases have the appearance of an epidemic, whereas each case rested on the same violation of nature's laws. I have no doubt that hogs have pleurisy as a result of colds.

President Delano says an effort may be made to knock off the protection of wool at the next Congress, and he wants the names and post office address of all the officers of all State and county associations, and also the names and post office address of all wool growers in each State who desire information on this subject—the object being to distribute from time to time among such persons, information calculated to keep wool growers informed as to the progress of all efforts affecting their interests. Send names to C. Delano, care of Edward Young, No. 119 Maryland avenue, N. E. Washington, D. C.

The result of the judging in the "group contests" at the recent prominent English shows has occasioned considerable comment. On this subject a correspondent of the Chamber of Agriculture Journal, London, says: "The most important stock incident of the Bath and West of England show was, no doubt, the triumph of the Herefords in the breed family class, open to any breed, and the throwing over of the Shorthorn group, which had in it Mr. William Handley's celebrated bulls, Hovingham and Self Esteem 2nd. These had, with a four months' calf called Royal Hovingham, waged a similar contest at Waltham Abbey the preceding week, and conquered Mr. Price's group of animals which at Brighton were elevated into the position of taking first prize. Here, then, we have another instance of those singular reversals by different branches of show-yard judges which make our system of judging so much a farce. The anomaly becomes all the more singular from a group of Sussex cattle having the second prize, and a group of Devons coming in for reserve, while the Shorthorns which were first at Waltham Abbey, have no notice taken of them whatever. Both the Sussex and Devon groups were certainly very deserving, and headed by well-known animals which have taken several prizes, including Royal ones."

(Continued on page 318.)

The Household.

How to Furnish Rooms.

Rooms belonging to rich and cultivated amatures, are generally either over furnished or under-furnished. The *objects de virtu*, which have been collected at such pains and cost, because they are the fashion, have little reason to be where they are found, however beautiful they may be. They crowd the house till it looks like a curiosity shop; or else they are frugally scattered with a palpable aim to seem select, and their fewness and goodness carry a sort of self consciousness and affection with them.

Now, when we enter a room, the first feeling ought to be, "how comfortable!" Then we glance quickly around to discover *why* and it should be "how beautiful!" not a touch too much or too little. The art is to conceal art, and when the impression is that of hyper-refinement, just as when it is that of depletion, or of conspicuous wealth, we may be sure the room is not perfect. Directly affection enters, beauty decamps. A room should be treated, as much as possible, as a picture. In a picture, monotonous angels, as in panelled walls, would be judiciously broken by the shrewd introduction of some bracket, shelf or plate. Yet, most people still enunciate the angularity of panels, by stretching square pictures in the middle of each. If the panel is of good oak, let us now and then see its fine fabric, unspotted by hanging things. But because one panel is left bare, do not leave all the panels without ornament. Suspend a handsome drooping object of some sort so as to break the lines a little without causing a disagreeable shock to the eye, or place some tall palm plant, so as to serve the same purpose. But plants, young trees and bushes are not often and enough used and appreciated, even by those who love flowers.

Beauty in dress, beauty in decoration, like beauty in architecture, largely rest upon character—the human soul within, about, behind it. Individuality supplies the interest, as in a picture. Harmony, like a charitable mood, is the other secret, an open secret, yet somehow as hard to find as genuine charity. To find a beautiful room, or a beautiful costume, is to find a human soul, for the heart and brain shine through tint and fold. Hence, how needful that a pure mind and a genial soul should be clothed about with what is individual and genuinely their own, rather than with some concoction foreign to them, which may speak for itself an alien language.—Temple Bar.

Celery for Rheumatism.

Among the thousand and one "sure cures" for rheumatism, the use of celery has had its run of popularity; and it has at least this to commend it, that, if it does no good, it is not "bad to take," celery being a most palatable and wholesome article of diet. A recent German writer thus lays stress upon cooking as a condition of its therapeutical effect:—

I have had a severe attack of inflammatory rheumatism, and was healed in two days' time by a soup made of the stalks and roots of celery; therefore I desire to make this simple remedy known through the columns of your paper, for the benefit of all suffering from gout or rheumatism of any form. . . . The fact that it is always put on the table raw prevents its therapeutic powers from being known. The celery should be cut into bits, boiled in water until soft, and the water drank by the patient, Serve warm with pieces of toasted bread, and the painful ailment will soon yield. Such is the declaration of a physician who has again and again tried the experiment, and with uniform success. At least two-thirds of the cases named "heart-disease" are ascribed to rheumatism, and its agonizing ally, gout. Small-pox, so much dreaded, is not half so destructive as rheumatism, which, it is maintained by many physicians, can be prevented by obeying nature's laws in diet. Here, in Germany, we boil the roots and stalks, as the root is the principal part of it, and afterwards eat it as a salad with oil and vinegar. I received such immediate benefit that I am anxious to let all the rheumatic sufferers know of it.

Apple Jelly.

The manufacture of apple jelly is simple enough; proceed as follows:—Take any quantity of good cooking apples, wash them and pick out all decayed parts, then slice them in a copper, tin lined or porcelain lined boiler, and one-third larger than required to hold the apples; next cover them with water half an inch higher than the apples; now place them over a good fire. The boiler is best raised a little, or a false bottom on it filled with water to prevent burning. Bring the whole to a boil, constantly stirring. When it begins to thicken and adhere to the spatula, jelly like, pass the juice through a flannel jelly bag, said bag being suspended above another kettle to catch it; let it drain of its own accord without squeezing or pressing. When all the juice has passed through return it to your kettle, measuring it, and to every pint of juice allow from eight to twelve ounces of powdered sugar, according to the sweetness of the apple—the more sugar you use the quicker it will jelly. Boil this until by taking a little and placing it on a plate in a cool place it will form a jelly, then remove it from the fire and pour it into your jars, &c. When cold place paper right on the jelly, passing the paper through whites of egg or gelatine, thus rendering it impervious to air; next cover the top with skin or good oiled wax paper, seeing it fits well, so as to exclude all air.——[Confectioner.

A French chemhist asserts that it is the mechanical state which makes new bread less digestible than old; the former is so soft, elastic and glutinous in all its parts that ordinary mastication fails to reduce it to a sufficient digestible condition. In the course of some experiments in this direction a circular loaf, twelve inches in diameter and six inches thick, was taken from an oven heated to 240° Reaumur, and a thermometer forced into it three inches. The thermometer indicated 207.5 Fahr. The loaf was then taken to a room, the temperature of which was 66° Fahr., and found to weigh 7½ lbs; in twenty-four hours the temperature of the loaf fell to 66°, and in thirty-six to 63.5°. In the first forty-eight hours it lost anly two ounces in weight. After six days the loaf was again put in the oven, and, when the thermometer had indicated that its temperature had risen to 156° Fahr., it was cut open and found to be fresh, and to possess the same qualities as if it had been taken out of the oven the first time, but it had lost twelve ounces in weight. Experiments were made with slices of bread with similar results.

How to Sleep.

Health and comfort depend very much on attention to matters that to some seem very trivial. We have sometimes heard persons complain that they did not sleep well; that they were troubled with horrible dreams, and awoke in the morning weary and nervous. Inquiries as to diet, exercise and other essentials of health, have often failed to reveal anything that could account for these unfavorable conditions.

It is not well in these cases to limit our investigations to the routine of a day; but we should inquire at what hour the patient goes to bed, what he thinks about usually, and most particularly what position he places himself in to invite sleep? If he lies on his back with his hand over his head, there will be a half-conscious compression of the chest, with difficult breathing to relieve which he opens his mouth. The air coming in direct contact with the throat, causes dryness, and then snoring will begin. In the meantime the pressure of the viscera on the large artery whose course is along the inner portion of the backbone, impedes the circulation of the blood, producing discomfort which manifests itself in horrid dreams. Thus the whole night is passed in a disturbed sleep, and perhaps many nights pass without one of refreshing sleep. The most unwise course under such circumstances would be to resort to the use of opium or any other drug. The ranks of the victims of this unfortunate habit are recruited mainly from such cases as we have described. It is wonderful what control an individual can get over himself if he tries. There is no reason why a person cannot lie upon his side instead of his back, and keep his hands and arms down; then he will not open his mouth; then his throat will not become dry, neither will he snore or have bad dreams. But often he can't help thinking about his business, and his thoughts will run on for hours. This is also a habit that may be broken up. Have the will to put aside your thoughts, and in time you will have the power to do so.

We do not say that there are not other causes that habitually interfere with sound sleep, but we believe there is a remedy for each difficulty which may be found by seeking for it.—[Hall's Journal of Health.

A Missed Opportunity.

When the Duchess of Edinburgh was in Paris the other day, shopping on her own account, one evening quite late she arrived at the establishment of a celebrated *couturiere*. Everybody was gone, and the *bonne* sent the Duchess away, saying her mistress had retired for the night. Next morning the *bonne* reported that a "Mme. d'Edinborg" had called late, and that she had refused to admit her. "Do you know who it is you have treated thus?" asked her mistress. "That was the daughter of the Czar of Rusian, and she is the wife of a son of the Queen of Egland. "*Tiens!*" replied the *bonne*, greatly exercised at her lost opportunity; "and I let her go without having a good look at her!"

Family Circle.

THAT SUMMER AT RICHFIELD.

Mrs. Hall—my Cousin Fanny—and I, sat contentedly, after lunch, before the fire. I was idly looking over the photograph-book, while Fanny ate an orange.

"Oh! who's that?" I exclaimed eagerly, at the sight of a young girl, looking back at me over her shoulder, with the sauciest, most piquant face imaginable.

Fanny tipped her chair forward to see.

"That's Emily Van Buren," she answered. "My mate at school, and dearest friend ever since. Splendid girl, too! Clever, and warm hearted, and generous to a fault. Poor Emily! What a romantic, heart-rending time she did have! The nights I've lain awake, out of pure sympathy in her love affairs! My own never gave me half the trouble."

"I hope they turned out well."

"Depends on what you call well. Suppose I tell you the story and let you judge for yourself.

"The first piece of news," began Fanny, "that I heard on returning home, after my wedding-tour, was that Emily was engaged to Calvin Hard. We were living at A—— then, and directly opposite the Van Burens. I never was more astounded. He had cared for her a long time, so at last she had consented, though I was sure she did not really love him. Her family had talked her into it. He was so cold, so dull, and narrow-minded, and in figure tall, stiff, and thin, with a pale, drab face; hair, eyes, and complexion, all of one colour. But there were excuses to be made for her. Her home was not a happy one, for father and mother, though high in social position, were constantly giving her to understand that they considered an unmarried girl as a failure in life; nay, more, as an actual burden and expense.

"Well, Emily was to be married in October. She looked pale and thin. So when, in July, James and I went to Richfield Spa, we persuaded her father to let her go with us. That's eight years ago. Emily anticipated so much pleasure, that she talked of it all the way up. Yet what should she do, the very first night, but have a terrible attack of pleurisy. Her room luckily opened into ours. James rushed out to get a doctor. The landlord told him that there was a skilful, well-known physician in the house, Dr. Lambert. I can see him now," said Fanny, staring into the fire, "as he stood with his quiet, professional air; and poor Emily, with her magnificent hair tossed over the pillow, her face as white as the sheet, while she moaned and gasped for breath. The gray morning light was stealing into the room before Dr. Lambert ventured to leave, and then he left his patient under the influence of opiates. For days poor Emily did not leave her room; for weeks Dr. Lambert, as her physician, was watching over her, lest she should expose herself to drafts; forbidding her to dance, and ordering her quietly into the house when she was out on a damp evening. Emily used to pout, and rebel, and tell him that he was 'a tyrant;' but she liked it for all that, I began at last to think.

"He was very nice, then?" I interrupted.

"Nice!" echoed Fanny. 'He was one of the most accomplished and elegant men I have ever met. He looked about thirty-five, was of medium height, erect, and full of vigour. His face was not handsome, but it was refined and very strong. Everything gave you the impression of a tremendous reserve of force in him; his quiet, gray eyes, brimming with humour, as they were at times; his full, manly voice; his easy stride. He had to a wonderful degree, that personal magnetism—Calvin Hard had the least—that mysterious, irresistible something, which is the distinguishing characteristic between the men who lead and those who follow. Here, then, was one who combined just those qualities to which Emily was most susceptible. He was the hero of her dreams in flesh and blood! What could she do, thrown into almost hourly intercouse with him? Could a musician stop his ears if Beethoven were played to him? And the attraction was mutual. Something in one seemed always to respond perfectly to the other. I noticed this when Dr. Lambert was reading to us. The very thing that aroused Emily's attention was always what most struck him.

"I noticed, too, that, great as was the pleasure he took in her society, he guarded carefully against any flirtation. If Emily, going to her room to dress, found there a box of flowers for her hair, I, too, had the same. If at breakfast a delicate dish of fresh trout or game beside her plate met her astonished eyes, I fared equally well. His fees to the head cook must have been tremendous! If a package of new books or a magazine was sent to him, they were at Emily's disposal, or at mine the same. He and James, who had become fast friends, were always getting up delightful drives and excursions for us. I began to build up in my own mind—what, under the circumstances, I suppose I had no business to do—the finest castles in Spain, where Emily and the Doctor reigned in bliss, and where the very name of Hard was unknown. Poor castles How they came down with a crash one day! I was dressing for a moonlight sail. To keep James from scolding me for being late, I kept up a chatter while buttoning my boots.

"'How nice our little square parties are James dear!' I said. 'And don't Emily and Dr. Lambert, go together like cup and saucer?' 'H'm!' says he, putting on his gloves. 'I think they do; but it's not best for a cup to have two saucers. If I were Mr. Hard, I think I should object to saucer number two. However, I suppose it's all right. Emily understands herself, no doubt, and the Doctor's safe, being married.' 'Married! What do you mean?' I exclaimed, turning to look at my husband. 'Why, of course he is,' James answered coolly. 'I wonder I hadn't spoke of it before. But I thought you knew it. Everybody does, and no doubt the Doctor himself thinks you do.' 'I don't then,, I answered, emphatically, sitting down with one boot in my hand. 'Be so kind as to tell me what you and everybody—but Emily and me—know.'

"He plunged his hands down into his pockets, planting himself in the attitude of *Punch's* 'badgered witness,' in front of me. 'Now, then,' he said. 'The Doctor was married, to the best of my knowledge and belief, when he was twenty-five, to a young lady in London. There was insanity in her family on both sides of the house; but her husband was kept in ignorance of this fact. In a few months it developed itself, and on the very anniversary of their wedding day, the poor man had to take her to a lunatic asylum; and there she has remained, hopelessly insane, ever since, and that was a dozen years ago.' 'What a frightful thing!' said I, 'and how could he ever get over it so?' 'It did all but kill him at first,' said James in his sympathy, sitting down by me. 'For years he went nowhere, except on professional business; only plunged day and night into work, as some men take to whisky in misery. Then, I suppose, he got used to it, and accepted it as inevitable. A gentleman, speaking of him yesterday, said he had borne it nobly and irreproachably; but he was more cheerful, and like his old self, this summer, that he had ever been since.' 'But is there no hope, James?' 'None. It is confirmed melancholia, almost idiocy now. But her health is perfect in other respects, and she is as likely to live to be a hundred, more likely, than any of us.' 'Dreadful!' said I. 'And of the two, I pity him more.'

"Well, we went on our sail," continued Fanny, after pausing for a long breath. "But as I watched Emily and the Doctor rowing together in the moonlight, with murmurs of low talk, sometimes grave, sometimes gay, but always in accord, I sat silent in the stern of the boat, and could have cried.

"I told Emily that night. She was not easy to read sometimes, and whether it was secretly a shock to her or not, I could not tell. I noticed that she kept her face carefully in shadow. She only said, in a low voice, 'I knew there was something. He reins himself in so suddenly, sometimes, when we are alone together. In his very gayest moods, a fit of the deepest depression will come over him, and he will be *triste*, and silent, till I myself begin to feel as if some terrible weight were crushing me, as well as him.'

"I was the most faithful, unwearied of chaperones; for though I, myself, had the most entire faith in both of them, the tabbies, I knew, soon were beginning to watch them with their slanderous eyes. 'James,' said I, 'I wish, from my heart, we had never come here with Emily. Let us go away.' But he was stupid about such things; all men are. 'It was just a romantic notion of mine,' he said. The fact was, he was having a good time, and wanted to stay.

"But the end came at last. One suffocating day the two gentlemen took us for a barouche over to the Lake for a breath of cool air, and a row at sunset. Afterwards we had a trout supper, in the neat, breezy, little inn-parlour, with its doors and windows opening on to the rippling lake, and the mountain walls of verdure that encircle it. I had determined to throw care to the winds, for that day, at least. Everybody was in the wildest spirits: and Emily and the Doctor kept up a perfect fire of wit across the table, amid peals of laughter from all. She was so pretty, I could not take my eyes off her, with her piquant head and animated gestures; a blue bow tucked coquettishly into her bright, chestnut hair; her round, full form in a white cambric morning-dress, turned slightly away from her softest and whitest of throats. Suddenly, up dashes a phaeton, with a pair of horses, to the door, and a tall, thin, drab man, in a gray travelling suit, gets out. Emily turned pale to her very lips as she rose to meet him. 'Ah! Calvin, this is a surprise,' she cried. 'When did you come?' Not one word of welcome could she force from her lover. Then she introduced Dr. Lambert. But Hard only bowed frigidly. 'Arrived at Richfield two hours ago,' said he to Emily, turning his back on the Doctor, and taking the seat beside her at table. 'They told me I should find you here in pleasant company'—this last in a low, significant tone that told that the tabbies had made the most of their time. 'I shall stay over Sunday, though I can hardly spare the time from business. 'Business before pleasure' is my motto, you know.

"With this new, discordant element, all brightness vanished from our party. In vain did the Doctor talk his very best—and he was a charming *raconteur*—and James and I vie with each other to see which should appear merriest. Calvin's glum silence would have quenched Sancho Panza himself. Emily's face grew sadder every moment. If she had never realized before the fatal mistake of her engagement, I felt that she did now. And it takes the courage of a martyr to rectify such mistakes in a case like hers. I wonder if she would be brave enough before it would be forever too late; for, you see, October was so near.

"They brought, soon after dinner, our barouche to the door, and the phaeton, which, of course, Emily was to return in. How I pitied her when I thought of the terrible ten-mile *tete-a-tete* with her sullen lover that was before her. They started first. Dr. Lambert stood, with a strangely thoughtful face, watching them till they were out of sight; then turned away, with a heavy sigh. 'So that is the man she is to marry. Heaven help her!' said he. 'Amen!' said I, fervently, and our eyes met.

"I think it was nearly morning before she went to bed. I felt the thunderstorm in the air, and could not sleep myself, and long, long after midnight, when I glanced out of my window, I saw, by the moonlight, Dr Lambert pacing restlessly to and fro on the deserted terrace, his hands behind him, his head bowed down.

"When I was ready for breakfast, Emily answered my knock without opening the door. 'I have a terrible headache; I am not going down,' she said. At table, Calvin Hard's seat, next hers, was also vacant. Said the waiter. 'The gentleman had an early breakfast, but didn't eat nothin'; and he went by the first train.' James and I exchanged meaning looks. 'If the engagement is broken,' said he, when the waiter had gone, 'I pity Emily. The Van Burens will never forgive Dr. Lambert, either, for Calvin Hard is said to be worth at least half a million.' 'She has done right, and I am heartily glad of it!' said I, too much excited to taste a mouthful.

"After our breakfast, which was very late that morning, I was sitting by myself on the terrace. From the saloon, where the band was playing, came the plaintive, delicious notes of Schumann's 'Trauweree,' which chimed well with my thoughts. Suddenly a low, husky voice at my side, said, 'Mrs. Hall!' I turned, amazed, when I found it was Dr. Lambert's. His face was full of strong emotion. He extended his hand. 'I have come to bid you good-bye,' he said.

"I knew why he was going, and I could not urge him to stay. I felt that he spoke only the truth when he said, earnestly, 'I have done wrong; I have stayed too long. My conscience has been telling me to go but the happiness of seeing her every day was so great, the temptation to keep it a little longer so strong. May Heaven forgive me! Now I am going back to my duty, and to my treadmill life.' As he said this, he set his lips like stone. I murmured heartfelt words of sympathy and friendship, but I think he hardly heard me. 'Will you take my farewell to her?' he said, at last, in a lower tone; 'and tell her, that if I never see her again'—he stopped, then went on with an effort—'I shall always thank her for her frank friendship. I owe to her the very brightest hours in a life that has not had too many in it.'

"Then he wrung my hand, and turned away. I stooped down and kissed 'baby,' to hide my tears. By-and-bye, I went to Emily's room. Her face showed that she had been going through so much, that I trembled for her, when I told her Dr. Lambert had gone, and gave her his message. She did not say one word, but great tears filled her eyes, and she hid her face in the pillows. I caressed her without speaking, till she held up her left hand to me significantly. Then I saw that her engagement-ring was gone. 'You have given it back?' I asked. 'Yes, last night, when we were driving. Oh, Fanny! she exclaimed, vehemently, throwing her arms round me, while her eyes flashed with a fire that startled me—'Oh! Fanny, at least I can thank Dr. Lambert that I have learned, in time, the danger there is in marrying a man you do not care for; that some day you may wake up, and find there is a man whom you love!'

"'But Fanny, how did Calvin bear it?' I asked.

"My cousin looked at me earnestly. I knew she was reading my thoughts.

"He was very angry and bitter against her, Kate, for awhile. One could hardly expect anything else, you know. It's no little thing to break an engagement. But, dear me, a man doesn't die of it. In six months he married a pretty little widow, and 'lived happily ever after,' as the story-book says.

"Poor Emily it was, who had the hardest time after all. Her family made her life wretched for her. Then her father died, and, to everybody's surprise, left his estate heavily encumbered. I think Emily was glad, when she found that she had got to choose between going away to support herself, or staying idly at home, with grinding economy. Of course, it was like her to choose the former, with eagerness. Work and independence forever!' she wrote me. She drew exquisitely; it was her great accomplishment. By James's advice, she came to London—we were living here then and learned drawing on wood. In time she became very skilful, and was able to support herself handsomely. She lived a very quiet, industrious life, with an aunt of hers here, and did not care to visit at all, except at our house. I used to tell her sometimes that I wished that I could see some of her bright coquettish ways come back. 'You never will,' she would answer, soberly. 'I feel sometimes, Fanny, as if I were a hundred!' But that was nonsense, for she was barely twenty-seven, and with her perfect health had never been prettier or more attractive in her life.

"When we went abroad last year, and proposed her going with us, I was delighted to see with what zest she entered into the plan. The voyage, which to me was purgatory, to her was paradise; for she was not sick a day. And when I lay groaning in my berth, she and Colonel Gade were pacing the deck together by the hour, exulting in the roll and toss of the sea. Every day she grew more like her own, sparkling self. Colonel Gade was a young Prussian officer, whom James introduced to her on the second day out. His uncle—a wealthy banker in London—was an old friend of my husband's The Colonel was tall and handsome, with frank, honest, blue eyes, warm-hearted, brave, and good, and he had the most charming manners.

"He had been travelling in this country for his health, and was now returning to his home in Berlin. Emily's German was bad, but as he told her, his English was worse. He besought her to teach him, and the merry, musical little laughs she gave at his blunders seemed to afford him infinite pleasure. I think he fell in love with her from the very first. His polite, foreign ways, and the entertainment their lessons afforded, made her receive his attentions at first with a frank pleasure, that deepened into another feeling by slow degrees.

"When we were in Paris, Colonel Gade was with us constantly. After that, we separated; but when we arrived in Berlin, the first person to greet us at the hotel was our handsome Colonel. It was one of those sudden, romantic affairs that just takes one off one's feet. I never cared for foreigners, or approved of foreign matches; yet, in six weeks after we came to Berlin. I was present at Emily's marriage and I kissed her glowing cheek with a heart full of joy at the bright future before her.

"The young couple went to Switzerland for their wedding journey. Two days ago I had such a bright charming letter from her! I really don't think you could find a happier wife in all Berlin than Emily Gade'"

"And Doctor Lambert?" I asked.

Fanny's voice trembled a little.

"He died last year, in London, of typhus fever, caught in a hospital for poor children, to which he had been the generous patron, as well as chief on the visiting staff, for years."

Miss Malony on the Heathen Chinee.

Och! don't be talkin'. Is it howld on, ye say? An' didn't I howld on till the heart av me was clane broke entirely, and me wastin' that thin that you could clutch me wid yer two hands. To think o' me toilin' like a nagur for the six years I've been in Amerikay—bad luck to the day I ever left the owld counthry—to be bate by the likes o' them! (faix I'll sit down when I'm ready, so I will, Ann Ryan, an' ye'd better be lisnin' than drawin' your remarks; an' is it myself, with five good characters from respectable places, would be herdin' wid the haythens? The saints forgive me but I'd be buried alive sooner'n put up wid it a day longer. Sure an' I was the granehorn not to be lavin' at onst when the missus kim into the kitchen wid her palaver about the new waiter man which was brought out from Californy. "He'll be here the night," says she, "and it's myself that looks to you to be kind and patient wid him, for he's a furriner," says she, a kind o' looking off. "Sure an' its little I'll hinder nor interfare wid him nor any other man," says I, a kind o' stiff, for I minded me how those French waiters, with paper collars and brass rings on their fingers, isn't company for a gurril brought up dacent and honest.

Och! sorra a bit I knew what was comin' till the missus walked into me kitchen smilin', and says kind o' schared: "Here's Fing Wing Kitty, an' you'll have too much sense to mind his bein' a little strange."

Wid that she shuts the doore, and I mistrustid if I was tidied up sufficient for me fine buy wid his paper collar, looks up and—Howly Fathers! may I never brathe another breath, but there stood a rale haythen Chineser a grinnin' like he'd just come of a tay box. If you'll blave me, the crayture was that yeller it 'ud sicken you to see him; and sorra a stitch was on him but a black night-gown over his trousers, and the front of his head shaved claner nor a copper biler, and a black tail a-hanging down from it, behind, wid his two feet stuck into the heathenestest shoes you ever sot eyes on.

Och! but I was up stairs afore you could turn about, a givin' the missus warnin', an' only stopt wid her by her raisin' me wages two dollars, and playdin' wid me how it was a Christian's duty to bear wid haythins and taich 'em all in their power—the saints save us!

Well, the ways and trials I had wid that Chineser, Ann Ryan, I could'nt be tellin'. Not a blissid thing cud I do but he'd be lookin' on wid his eyes cocked up'ard like two poomp handles, an' he widdout a speck or smitch o' whiskers on him, an' his finger nails full a yard long. But it's dyin' you'd be to see the missus a 'larnin him, and he a grinnin' an' waggin' his pig tail (which was pieced out long wid some black stoof, the haythen chate!) and gettin' into her ways wonderful quick, I don't deny, imitatin' that chary, that you'd be shurprised.

Is it to ate wid him? Arrah, an' would I be sittin' wid a haythin an' he a-atin, wid dromsticks—yes, an' atin' dogs an' cats unknownst to me, I warrant you, which it is the custom of them Chinesers, till the thought made me that sick I could die. An' did'nt the crayture proffer to help me a wake ago come Toosday, an' me a foldin' down me fine clothes for the ironin' an' fillin' his haythin mouth wid water, an' afore I could hinder squirrit through his teeth stret over the best linencloth, and fold it up tight as innercent now as a baby, the dirrity baste! But the worrest of it all was the copyin' he'd been doin' till ye'd be distracted. It's yersel' knows the tinder feet that's on me ever since I've bin in this counthry. Well, owin' to that, I fell into the way o' slippin' me shoes off when I'd be settin' down to pale the praties or the like o' that, and, do ye mind! that haythin would do the same thing after me whiniver the missus set him to parin' apples or tomaterses. The saints in heaven could'nt have made him belave he cud kape the shooes on him when he'd be pealin' anything.

Did I lave for that? Faix an' I did'nt. Did'nt he get me into trouble wid the missus, the haythin'? You're aware yoursel' how the boondles comin' in from the grocery often contains more'n 'll go into anything dacently. So, for that matter, I'd now an' then take up a cup o' sugar, or flour or tay, an' wrap it in paper an' put it in me bit of a box tucked under the ironin' blankit and how it cudd'nt be botherin' anyone. Well, what shud it be, but this blessed Sathurday morn the missus was a spakin' pleasant and respec'ful wid me in me kitchen, when the grocer boy comes in an' stands fornenst her wid his boondles, and she motions like to Fing Wing (which I never would call by that name nor any other but just haythin,) she motions to him, she does, for to take the boondles an' empty out the sugar, an' what not where they belongs. If you'll belave me, Ann Ryan, what did that blatherin' Chineser do but take out a sup o' sugar, an' a handful o' tay, an' a bit o' chaze right afore the missus, wrap them into bits o' paper, an' I spacheless wid shurprise, an' he the next minute up wid the ironin' blankit and pullin' out me box wid a show o' bein' sly to put them in. Och, the Lord forgive me, but I clutched it, and the missus sayin', "Oh Kitty!" in a way that 'ud curdle your blood. "He's a haythin nagur," says I. "I've found you out," say's she. "I'll arrest him," says I. "It's you ought to be arrested," says she. "You won't," says I "I will," says she—and so it went till she gave me so much sass as I cuddent take from no lady—an' I gave her warnin' an' left that instant, an' she a-pointin' to the doore.

Comparatively few persons know how the White House at Washington got its name. It was given to it because of its color. The building is constructed of freestone, and after the British burned the interior in 1814, the walls were so blackened that when it was rebuilt it was found necessary to paint them. Ever since, at intervals of a few years, the whole structure receives a fresh coat of white paint. The cumbrous title of Executive Mansion was very naturally dropped for the short and literally descriptive name of White House, and now only figures in official documents and correspondence.—[Ladies' Floral Cabinet.

It was a Frenchman who wrote: What is a woman? For a painter, a model; for a doctor, a subject; for a pheasant, a housekeeper; for a Parisian, a dowry; for a naturalist, a female; for an Albanian, a beast of burden; for a Roman, a citizeness; for a schoolboy, an angel; for an honest man, a companion.

How He Got Justice.

It has been charged upon certain secret orders and "mystic brotherhoods," that the bond among them is used to aid one another in the wrong as well as in the right; and members guilty of public misdemeaners do certainly reckon upon escaping punishment, sometimes, on the strength of their "tie;" but, if all such met the straightforward treatment described in the case below, Masonry, Odd-fellowship and the like, could never be called shields to evil-doers:

Some young men of the town of B., having "cut up" one night, to the detriment of certain windows and bell-pulls, were lodged in the calaboose, and in due time, next morning, confronted with a police magistrate, who fined them each $5 and an admonition. One of the three foolishly remarked,—

"Judge, I was in hopes that you would remember me; I belong to the same lodge with you."

The Judge, apparently surprised, replied with brotherly sympathy, "Ah, is it so? Truly, this is Brother B.; I did not recognize you. Excuse me for my dullness. Yes, we are brother Masons, and I should have thought of that. Mr. Clerk, fine our Brother B. $10. Being a Mason, he knows better the rules of propriety than other men. Fine him $10. You will pay the clerk, brother. Good-morning, Brother B. Call the next case."—[Good Cheer.

A Pretty Sight.

The piazza of St. Mark in Venice, a broad, open square, is the great resort of Venetians in the evening for conversation, ice-cream eating, coffee drinking and music. In the day-time it is the resort of myriads of pigeons which are fed at the expense of the state, and which have been held sacred ever since the aid rendered by one of them at the taking of Tyre, seven hundred years ago.

They are very tame, and a lady traveller writing home recently says that one of the most beautiful sights she saw in Venice, was a little girl of three years, daughter of an officer of the U. S. frigate Congress, seated on the ground surrounded by pigeons. Her attendant had scattered corn all over her, the pigeons were struggling one over another on her lap, on her shoulders, piled up on her head, and out of this fluttering mass of soft plumage peeped the child's sweet, half-surprised baby face.

Taste in Dress.

A girl's whole prospects and happiness in life often depend upon a new gown, or a becoming bonnet, and if she has a grain of common sense she will find this out. The great thing is to teach her their just value, and that there must be something better than a pretty face under the bonnet if she would have real and lasting happiness.

There is no surer expression of character than dress. It gives evidence which none can dispute, of wisdom or folly, of refinement or the want of it; and since it is an indication of what we are, its edicts have their place among the minor morals. Taste and elegance are not always signs of frivolity, or even of an absorbing interest in the fashions.

Minnie May's Department.

My Dear Nieces,—It is an old saying that "one might as well be out of the world as out of the fashion," but at present it is a hard matter to be entirely out of fashion, as there is such an extensive variety worn, although each season, and we might almost say each month, announces some change, yet not quite as marked as a few months ago.

There are two new styles of wool street suits, viz.: combination of two fabrics, the underskirts of many being striped goods made across or lengthwise in pleats or plain, with plain wool for the overdress; others entirely of one material, which are usually of home-spun, serge, bouclé, or other rough-surfaced stuff. Mixed goods are also shown, one is wool of several colors, woven in small irregular bits like mosaic patterns. Plain velvet or plush skirts are revived, with cloth overdress. The plain skirt is about two and-a-quarter yards wide, simply hemmed or finished with a braid, and mounted on a foundation skirt, which is entirely covered. The fullness of the skirt is massed in the back. The velvet is shown quite high on the hips, at least on one side. Some draperies are very long in the front and back, and very short on the sides, being sometimes omitted altogether on the sides to show the rich fabrics from the waist to the foot. Other dresses have a short lambrequin festoon on one side, with an apron front and full back, or a soft pouf drapery representing the milk-maid overskirt now in vogue.

The back draperies are generally bouffant, that is, the fullness puffed high and the lower part hanging rather plain and square. Sash effects made of the same material as the dress, if soft and not too heavy, are pretty, especially over the long straight back.

Fig. 1 shows a pretty costume, in which the skirt is of figured goods pleated or kilted, and the front is plain goods of finer kilts, with a panel or rever of plush between the two fabrics. The front drapery is festooned, and the back bouffant. A mantle of figured velvet trimmed with heavy lace. Round hat, trimmed high in front with velvet and plumage, and the rolled edge is finished with a puff of velvet.

Tailor-made suits of soft woollen will be very fashionable for autumn and winter wear. Flounces on these suits are abandoned. The skirts are made plain, sometimes finished at the foot by a narrow pleating. Bias folds around cloth dresses will form a stylish trimming.

There are three styles of wraps, viz.: Cloth jackets, for general wear; short mantles for dress occasions, and long cloaks, for comfort.

Some of the outside garments are made of rough finished cloths, and others of smooth, with rough cloths for borders, collars and cuffs.

Jackets are made shorter than last season in the back, and longer in front, sloping gradually to a point. The fronts of rough cloth jackets are made either single or double-breasted, but in most cases the right side laps on the left and buttons diagonally. The standing collar, about two inches high, is preferred by many, and is made of cloth, velvet or heavy rep silk, finished around the edge with piping or cord of mohair braid, such as finishes the edges of the whole garment. The fronts of the collar are straight and made to meet, having a button-hole in each end through which two

Fig. 1.

linked buttons are passed, or else a small clasp of wood or metal. The sleeves are made amply loose, but no added fullness at the top. Small straight cuffs to match the collar, and slit pockets bound with braid on the sides. Very large flat buttons are again used, sometimes two sizes on the same jacket are seen—at the top and waist-line buttons two inches in diameter, while those between are but half the size. Vests and reverse fronts continue to be worn on smooth broad cloth jackets. Braid is still used in diagonal rows, or in points on vest, collar and sleeves, and as a border on the lower edge.

Alaska, sable, Persian lamb skin, and light natural beaver, will be the popular furs for trimming cloth wraps for the coming winter. Mantles are quite short in the back, reaching just below the waist line, and curving out nicely over the dress. The fronts are long mantilla shape.

Some of the long cloaks are made closely fitting in the back and half loose fronts, with square sleeves. The back is cut off just below the waist line, and the fullness necessary for the skirt is added in large pleats or French gathers. The style as shown in Fig. 3 is very pretty; the plush panels give it a rich appearance. Jerseys are again imported for autumn wear, and are cut with as many seams as a tailor basque. They are quite short and pointed in front, still shorter on the hips, and have a narrow square postilion pleating behind. Cardinal plush vests are worn on navy-blue, brown and black Jerseys.

Cloth postilion basques made double-breasted and edged with braid in tailor fashion are used by many instead of jerseys, as an extra waist to wear with various skirts.

Bonnets for street wear and travelling are very small and narrow, with high trimming directly on top, and increasing in height towards the back. The sides are very close to the head, and the small crown is in horse shoe shape. The new fancy is to put trimming straight through the top and down the crown, such as rows of beads, rows of gilt cord, piping, folds of plush, etc. Combination bonnets are made by using a figured fabric through the middle of the front and crown, putting plain goods up each side, forming a high fold that rests upon the middle fabric. The front edge of the new bonnet is now very full, instead of resting flat on the hair; it is raised by a beaded coronet, or by a puff of velvet which is very high in the middle and close on the sides. Some box-pleated velvet fronts stand up very straight and high in the middle, and have narrower pleats on the sides.

Velvet, plush, embroidered cloth, and felt, are the materials for the new bonnets. Beaded velvet and heavily beaded laces are used down the centre of black bonnets, with the sides of plain black velvet. Felt bonnets are finished on the edges with long stitches of fine chenille cord in points or scallops. Many of the velvet and felt bonnets are trimmed with ribbon alone. The plain ripped or satin ribbons with purled edges are chosen darker than the bonnet, and are arranged in a high narrow bow of long loops on top of the front. The strings are then folded narrowly along the end of the crown, attached by an ornament on each side, and are tied under the chin. Ripped plush ribbons are arranged in the same way, but fewer loops are used on account of the thickness of the ribbon. Fur will be much used for bonnets, as also bird's heads and plumage.

New tissues for long scarf veils are of fine silk threads, woven in fish-net patterns. Dark red, blue, brown and green are the colors shown for winter veils.

Vests of lace are made to put on the outside of the dress waist. Some of these are of fine wool lace, others of valenciennes net, and still others are of plain silk muslin, or of embroidered Swiss or mull. They are shirred at the top and bottom, and are attached to a collar of two folds, or many narrower folds, that is buttoned behind. Very narrow ribbon, a fourth of an inch wide, is tied in long loops and placed at the throat instead of a brooch. Cravat bows are long and narrow, reaching almost to the waist line and made of many fine pleats. Heavy laces are worn smooth and plain over velvet. Scarfs and barbes of lace are again coming into use.

The favorite colors in gloves are shades of brown and tan.

Fig. 2 shows a child's costume, which is easily made and very stylish.

MINNIE MAY.

Work Basket.

KNITTED BABY'S BOOT.—Materials: One ounce of pink Saxony, and one ounce of white Saxony, four knittting needles, No. 16.

Cast on 53 stitches with pink wool on one needle, and knit across plain.

First Row.—Slip 1 (*a*), knit 1, over, knit 3, slip 1, narrow, pass slipped stitch over, knit 3, over. Repeat from (*a*) to the end of needle, and knit the last two stitches plain.

Second Row.—Slip 1, purl the rest. Repeat the lase two rows seven times with pink wool, and fourteen times with white wool. Now knit 18 stitches plain, take another needle and knit the next 17 stitches on it plain; turn the work and knit these 17 stitches back and forward as follows:

First Row.—Slip 1, knit 3, purl 3, knit 3, purl 3, knit 4.

Second Row.—Slip 1, purl 3, knit 3, purl 3 knit 3, purl 4.

Third and Fourth Rows.—Like first row.

Fifth Row.—Like second row.

Sixth Row.—Like first.

Repeat these six rows twice more, so that there are six little squares. Take pink wool and knit 16 rows, all plain, on the same seventeen stitches. Now pick up the seventeen side stitches on each side of the narrow stripe, and work them and the other 18 stitches left on the side needle plain for 6 rows. In the next 18 plain rows you have to narrow every alternate row on each side of the narrow stripe and in the middle of them; also at the beginning and end of the needle for the toe. Bind off loosely. For the instep stripe, pick up your stitches just over the first square on the pink row, and knit these four stitches twenty four times, plain, not loosely; bind them off and fasten on the opposite side. Lace very narrow ribbon around the instep and tie in a small bow in front.

A narrow shelf on simple brackets placed over a doorway, and painted like the wood work of the room, is a pleasing and artistic addition, and can be easily put up by any carpenter. A few pieces of pottery, good in color and shape, though not necessarily rare and costly, may be grouped upon this shelf, forming a very effective decoration.

CARD TABLE.—Procure a small table with square or oblong pine top and crossed bamboo legs on two sides. Cover the top neatly with green or red felt over thick Canton flannel; tack the cover tightly to the wood all around the edge. Make a lambrequin by cutting

FIG. 2.

panels of felt with pointed ends and finishing them all around with couching, which is loose button-holing in gold floss worked over three or four strands of crewel the same color. Upon each panel set a shield in plush or satin, set on with an edge of gold cord. Cross each shield diagonally with a black velvet ribbon upon which are applied single white velvet figures of hearts, diamonds, spades and clubs, nearly,

FIG. 3.

if not quite as large as those upon the playing cards.

A LIBRARY TABLE.—An ordinary kitchen table can, with little trouble, be transformed into quite an elegant piece of furniture for the library. The top and legs are smoothly covered with green cloth; the seam on the legs to be neatly sewed and the joining made on the inside of the leg that it may not show. It is then tacked at the top to hold it in place. The cloth is drawn smoothly over the top and tacked all round the sides. The head piece extending round the sides of the table must also be covered. An under-shelf is made of pine wood covered with cloth and fitted securely to the legs about eight inches below the top. A heavy cord fringe of green worsted must be fastened round the edge of the top, also round the shelf, with bress-headed nails about an inch and a half apart. A caster fitted into each leg will finish a very handsome table.

Handkerchief bags make lovely presents for ladies, and can be made out of two oval or shield-shaped bits of pasteboard covered with satin and painted with flowers and birds. For the outside of the bag gather a piece of satin a quarter of a yard in width and twice the fullness of the painted centre on both edges, and sew it all around, and make a shirring at the top of the satin to run in ribbons to draw up the bag. The bag can be made of black satin and handsomely decorated with flowers, such as nasturtiums, carnations or pansies, with good effect.

CHEAP WORK BASKET.—A pretty work basket can be made on an ordinary splint grape basket; line with bright colored silesia or flannel. On Java or aida canvas, work a simple pattern, leaving a margin for fringe at the bottom. The canvas should be as long as the circumference of the basket, and as wide as the basket is deep. Let the linen come over the edge and join the canvas to it, covering the seam with a cord or plaited ribbon.

A handsome lining for a fancy silk quilt is made of plain surah silk, or, if that is too expensive, plain soft cashmere of a pretty color serves very nicely. It is often a question how the lining shall be tacked to the outside without marring its beauty. A very pretty way is to first baste the outside carefully on the lining—then divide the lining into squares, marking the corners of each square with a thread. A pretty star may then be embroidered at every point, catching the two sides together, but taking care that the stitches do not show on the right side. A cardinal lining with stars embroidered in yellow silk is quite showy. A darker or lighter shade of the same color as the lining used for the stars makes a tasteful combination.

Answers to Inquirers.

MABEL.—White Lady is a being who, according to popular legend, appears in many of the castles of German princes and nobles by night as well as by day, when any important event, whether joyful or sad, but particularly when the death of any member of the family, is imminent. She is regarded as the ancestress of the race; shows herself always in snow-white garments, carries a bunch of keys at her side, and sometimes watches and rocks over the children at night when their nurses sleep. It was long a common belief in the Highlands that many of the chiefs had some kind spirit to watch over the fortunes of their house.

AN OLD SUBSCRIBER.—The wedding anniversaries are—First year, iron; 2nd, paper; 5th,

wooden; 10th, tin; 15th, crystal; 20th, china; 25th, silver; 30th, cotton; 35th, linen; 40th, woollen; 45th, silk; 50th, golden; 75th, diamond.

J. R. A.—How are green cabbage colored to look like the red; and how made crisp; also, how are onions pickled? ANS.—The cabbage is cut up and sprinkled with salt over night; then drained from the salt and washed in clear water, and left to drain dry. It is then put into a jar with slices of red beets alternately, about half and half. Boiling vinegar is then poured in it to fill the jar, which is corked up tight and left for six weeks. Whatever spice is desired may be mixed in among the cabbage.

IRONING TABLECLOTHS.—S. R. T. writes: "Is there any particular way in which long tablecloths may be easily ironed so the folds will be straight and handsome. I find great difficulty in folding mine evenly. They will get askew somehow." ANS.—Sprinkle the tablecloth and roll it tightly and let it lie till the moisture is evenly distributed all through it. Then fold it once lengthwise, and while you take one end get some one else to take the other end With the two corners of the one end in the two hands and the two corners of the other end in the other two hands, snap the tablecloth till it comes straight; then gathering it up at the end, pull it till all the threads lie straight. Then lay one end on the ironing boards and iron, letting the ironed part fall into the clothes basket as you proceed. When one side is ironed, iron the other; then fold and press down hard on the edges to make the creases sharp and firm. A little thin starch in a tablecloth makes it iron nicely and makes it keep clean longer than when no starch is used.

FRED.—1. How should a person ask a young lady's father for his daughter's hand, the young lady having consented but desires the young man to ask her father's consent? 2. What should a person say to a young man when seeing him for the first time after being married, and what should he say to the young lady? ANS.—1. The best way would be to call at the father's place of business, ask for a private interview and then state your affection for his daughter, asking his consent to your engagement; you would of course tell him your prospects and means of supporting a family. If you feel too bashful to do this you might write thus: "Dear Mr. Brown—Having ventured to propose to your daughter, Amy, she has done me the honer of entertaining my proposal kindly and refers me to you. Your consent to our engagement would complete my happiness, &c.," stating your prospects, &c., and signing yourself respectfully.

A CONSTANT READER.—To remove tar, rub thoroughly with clean lard, and then wash with soap and warm water several times to remove all the grease; wash your cashmere in a sud made of soap bark, which you can procure from any chemist, and it will look almost as nice as new.

FLORENCE S.—To make light puff paste it is necessary to keep it cool while preparing. Wet as much flour as you will require with cold water, then roll and spread with butter and ard of about equal quantity nine times. It will be necessary to sprinkle a little flour occasionally to keep the pin from sticking, but knead it as little as possible, and I think you will be successful this time.

Recipes.

AMBER PUDDING.—Ingredients: 1 dozen large, tart apples, 1 cupful of sugar, the juice and rind of 2 lemons, 6 eggs, four tablespoonfuls of butter, enough paste to line a three-pint pudding dish. Pare and quarter the apples. Pare the thin rind from the lemon, taking care not to cut into the white part. Put the butter, apples, lemon rind and juice into a stew-pan with half a cupful of water. Cover tightly, and simmer about three-quarters of an hour. Line the dish with *thin* paste. Beat the yolks of the eggs and stir into the cooled mixture. Turn this into a lined dish. Bake slowly for half an hour. Beat the whites to a stiff froth, and gradually beat into them three tablespoonfuls of powdered sugar. Cover the pudding with this. Return to the oven for a few seconds to brown. Serve either hot or cold.

PRESERVED QUINCES.—Pare and quarter the fruit, and take out all the core and the hard part around them. Boil the fruit in clear water until tender, then spread on towels to dry. For 1 lb. of fruit allow ½ lb. of sugar, and 1 pint of water for 3 lbs. of sugar. When the syrup is boiling hot put in the fruit and let it cook very slowly, or set it back on the stove, so that it hardly cooks at all, and keep it on for an hour or more, if you can without its cooking to pieces, as the longer it cooks the brighter red color it will be. Put it in jars and strain the syrup over it, as with other fruits.

KISS WAFERS.—½ pint of blanched bitter almonds, 1 heaping cupful of powdered sugar, the whites of 6 eggs, ⅓ cupful of flour; 2 tablespoonfuls of corn-starch. Blanch the almonds and pound them in a mortar. As soon as they are a little broken add the white of an egg. Pound until very fine. When there is a smooth paste add the sugar, a little at a time, the whites of two eggs, one at a time, and the flour and corn-starch. When thoroughly mixed add by degrees the three remaining whites. Butter the bottom of a flat baking-pan and put the mixture on it in spoonfuls. Spread it *very thin*, especially in the centre, and bake in a quick oven. The moment the cakes are taken from the oven, roll into the shape of cornucopia. If allowed to cool they cannot be rolled, and for this reason it is best to bake only half a dozen at a time. When all are shaped, fill with the kiss mixture, made by beating the whites of three eggs to a stiff froth, and stirring into them, lightly, four tablespoonfuls of powdered sugar. Place the wafers in a warm oven for twenty minutes or half an hour, to dry. With the quantities given two dozen can be made.

MUFFINS.—One qt. of flour, 2 cups of milk, ½ cup sugar, 2 eggs, 2 teaspoonfuls of cream of tartar, 1 of soda, ½ teaspoonful of salt, butter the size of an egg. Mix the other dry ingredients with the flour and rub through a sieve. Melt the butter with four tablespoonfuls of boiling water. Beat the eggs light and add the milk. Stir into the flour and add the butter. Beat thoroughly. Bake in buttered muffin pans from twenty-five to thirty minutes, in a quick oven.

SILVER CAKE.—One cup of sugar, ½ cup of butter, the whites of 3 eggs, ½ cup of corn-starch, dissolved in nearly ½ cup of milk, 1¼ cups flour, ½ teaspoonful of cream of tartar, ¼ of soda, vanilla or almond flavor, and a little salt. Beat the butter to a cream, and gradually beat in the sugar, add the flavor. Mix the flour, salt, cream of tartar and soda together and sift. Beat the whites to a stiff froth. Add the corn-starch and milk to the beaten sugar and butter; then add the whites of the eggs and the flour. Mix quickly and thoroughly. Have the batter in sheets and about two inches deep. Bake in a moderate oven for about half an hour. A chocolate frosting is nice with this cake.

JELLIED GRAPES.—Take about ½ cup tapioca, 2 cups of grapes, 3 tablespoonfuls of sugar, and a little more than ½ cup of water; sprinkle the tapioca and grapes together in a pudding dish; pour over the water, cover closely, and bake very slowly for an hour and a-half; eat warm with sauce, or cold with cream.

CHOCOLATE CARAMELS.—Put a pound of fine sugar and half a pint of water into a preserving pan; beat it with a wooden spoon until it boils, carefully skimming it; when it is perfectly liquid, stir into it half a pound of finely scraped chocolate; boil it strongly until it hardens when dropped on to a plate; then pour it into a buttered tin; when nearly hard, cut it with a buttered knife into squares; when cold break it up.

JELLIED TONGUE.—Boil until done a large beef's tongue, saving about a pint of the liquid; remove the skin; allow it to cool, and then slice in thin slices; in half a pint of water dissolve two ounces of gelatine; from a cupful of browned veal gravy skim all the grease, and stir into it a small tablespoonful of sugar, one of brown sugar, three of vinegar, and the water in which the tongue was boiled; then add, mixing well the dissolved gelatine, a pint of boiling water; strain through a jelly bag. As soon as it begins to set, pour a little into the bottom of the mould, next a layer of tongue, then more jelly, and so on, until the mould is full; place on the ice to harden; when wanted dip the mould a moment into hot water, and turn out the jellied tongue upon a dish, surrounding it with parsley or lettuce leaves, or sprigs of celery.

WHAT WIVES ARE FOR.—It is not to sweep the house, and make the beds, and darn the socks, and cook the meat, chiefly that a man wants a wife. If this is all he wants, hired servants can do that cheaper than a wife. If this is all, when a young man calls to see a young lady, send him into the pantry to taste the bread and cakes that she has made; send him to see the needle-work and bed-making; or put a broom in her hands and send him to witness its use. Such things are important, and the wise young man will quietly look after them. But what the true man most wants of a wife is her companionship, sympathy and love. The way of life has many dreary places in it, and man needs a companion with him. A man is sometimes overtaken with misfortune; he meets a failure and defeat, trials and temptations beset him, and he needs one to stand by and sympathize. He has some stern battles to fight with poverty, with enemies and with sin, and he needs a woman, who as he puts an arm around her, feels that he has something to fight for, will help him fight; who will put her lips to his ear and whisper words of counsel, and her hand to his heart and impart new in-

spiration. All through life—through storm and sunshine, conflict and victory, through adverse and favorable winds—man needs a woman's love. The heart yearns for it. A sister's and mother's love will hardly supply the need. Yet many seek nothing further than housework. Justly enough, half of these get nothing more. The other half, surprised above measure, obtain more than they sought. Their wives surprise them by giving a nobler idea of marriage and disclosing a treasury of courage, sympathy, &c.—[Dorcas Magazine.]

Infant's High-Neck, Long-Sleeved Knitted Shirt.

4 skeins cream-white, starlight Saxony; 2 small bone needles.

BACK.

Commence at bottom. Cast on 78 stitches; knit across plain once.

1st row.—All plain knitting.

2nd row.—All seamed.

3rd row.—All plain knitting.

4th row.—1 plain, *narrow, 3 plain, make 1, 1 plain, make 1, 3 plain, narrow, *repeat from * to * till end.

5th row.—All seamed.

6th row.—Like 4th row.

7th row.—All seamed.

8th row.—Like 4th row.

9th row.—All plain.

10th raw.—All seamed.

11th row.—All plain.

12th row.—Like 4th row.

13th row.—Like 5th row.

14th row.—Like 4th row.

15th row.—Like 5th row.

16th row.—Like 4th row.

And so on, repeating until there are 4 finished pattern rows, that is, 4 times 3 rows of eyelets with the ribbing between, and 5 ribbed rows. In going across last row of border, narrow 3 times each end of needle, leaving 72 stitches. Now knit 46 rows of 2 plain, seam 2, alternately.

To shape shoulder, narrow 1 at each end of needle every time across, until there are 44 on needle, and bind off. This forms the back.

FRONT.

For front, after knitting border as for back, knit 2 plain, seam 2, alternately for 36 rows. Take off one half the stitches on another needle, and knit 10 rows; now narrow on outside end of needle every time across, until there are 28 stitches on needle. On inner end of needle (or middle of front), bind off 3 stitches, every other time across (this is to hollow the neck), continuing the narrowing for shoulder as before until all are bound off, leaving yarn sufficiently long to sew up shoulder. Knit up the other half of front in same manner; sew up shoulders and sides on wrong side, leaving space for sleeves.

SLEEVE.

Take 2 medium-sized steel needles, and cast 40 stitches on one. Knit 2, and seam 2, alternately, till you have done 30 rows. Widen 12, by picking up stitches at equal distances in the 30th row.

Now use the bone beedles with which you made the body, and knit 2 plain, seam 2, alternately, for 40 rows. For gussets, widen 1 stitch at each end of needle every other time across until there are 6 stitches added on each end, or 64 in all.

Bind off, sew up, and sew into body. Finish the cuff and front of bosom with a small crocheted scallop of cream-white knitting silk. Then crochet a row of holes to run in ribbon at the neck, and edge these holes with the scallop also. If the front is too open, 2 little pearl buttons may be sewed on.

I would say to the sisters, any who would like to see a circular of the new book, "Fancy Work Recreation"—I have a good supply which the publishers have sent me for distribution—just send me your address.

EVA M. NILES.

East Gloucester, Mass.

A Fateful Darning-Needle.

BY MARGARET EYTINGE.

A bevy of fair girls they were,
  And all exceeding busy;
Maud sewed upon a crazy-quilt,
  And so did Jess and Lizzie;
And Jennie painted on a fan
  Some charming cherub faces;
And Nell and Bell right skillfully
  Weave yards of pretty laces.
But Peg—in wicker-chair bedecked
  With ribbons, gently rocking—
Darned—foot drawn on her little hand,
  The toe of her silk sfocking,
  Her dainty, black silk stocking.

Oh! such a picture as she made,
  The goldent sunbeams glancing
On golden head, as, to and fro,
  She swayed with grace entrancing.
Her lovely brows were slightly bent,
  Her lips closed rather tightly;
One saw at once her task was not
  A task to think of lightly.
With care she drew the fine thread through,
  The stitches interlocking,
And with her needle pierced my heart
  While darning that silk stocking,
  That dainty, black silk stocking.

LOVING TO ORDER.—There is nothing harder to do than to love to order. Such is the contrariness of the human creature that if commanded to love in one direction, he will immediately turn his heart from that object and pay his addresses elsewhere. Because a man has fine horses, a handsome house and plenty of money, young girls are apt to think him a desirable acquisition, and to fall desperately in love—not with the man, for ten chances to one if they don't wish him out of the bargain, but with his establishment, just as if they proposed living in a stable and feeding on golden oats. They have an affinity for wealth, and feel that love may come in time; but it never does. It cannot be ordered in with the groceries, or ordered out when it has possession, and any marriage that is contracted on the supposition that houses, lands, fortune, fame or beauty will take the place of love, will prove a terrible mistake—a pitiable failure.

Aaron's Beard.

Whether one believes in good old-fashioned tunes, or ornate musical flourishes, in church choirs, he must admit that all words are not suited to endless repetition in song. "Every Other Saturday" describes one of those absurdities of musical arrangement which so often occur in the church service:

The psalm read from the pulpit to be sung by the choir was the following:

"True love is like that precious oil,
  Which poured on Aaron's head,
Ran down his beard and o'er his robes
  Its costly moisture shed."

It was performed in parts, with such celerity of voice and violent contortion of the body as would indicate the fact that each performer was striving to outstrip the others in the choral race-course.

It was in this manner the performance was concluded:

"Ran down his beard and o'er his head—
  Ran down his beard——
—— —— ——his robes
And o'er his robes—— ——
  Ran down his beard——ran down his
—— —— —— —— o'er his robes
His robes, his robes, ran down his beard.
Ran down his———
——— ———o'er his robes
Ran down his beard
  h—i—s b—e—a—r—d
Its costly moist ———
  Ran down his beard———
—ure—beard—his—beard—his—shed
ran down his beard—his—down
his robes—its costly moist—his beard
ure shed—his—cost—his robes—his robes—
  ure shed
I—t—s c—o—s—t—l—i—e moisture shed."

A kind hearted bishop who was present at this church service was asked, at its conclusion, for his opinion of it. His reply was that he paid no attention to the music for his sympathies were so excited for poor Aaron, in his shampooing process by the choir, that he was afraid he would not have a single hair left—if, indeed, he came out alive.

Skipped Saturday.

We have often smiled to remember how, in a certain quiet homestead, many years ago, the count of the week-days was lost once, during the monotonous "dead of winter," and as now blockade—and how a sum equal to a supposed day's wages of the family was afterwards penitently put into the missionary-box as a "punishment" for having worked on Sunday. One of our country exchanges tells of a "York State" farmer who made the opposite miscalculation, and kept Sunday too soon instead of too late:

Last Saturday Ham Cherry arose in the morning, took a bath, put on his black suit, and after breakfast occupied himself reading sacred books. He told his folks that as it was so far to church, and as the off horse had galled his shoulder ploughing, he guessed he would not drive thither. Everything was quiet and peaceable about, and Ham was glad there was a day left for man to rest and recuperate. But just after a late dinner, a neighbor came along with a load of hay. Ham stepped to the door and called out,—

"How is this, John, that you are working to day? You should go to meeting."

"Haint got no time to go to meeting on week days," answered John. "Sunday is all the time I can spare for church-going."

The man then drove on. Cherry stood and scratched his head meditatively for a few moments, and then entered the house. He told his wife to get a pencil and check off the days.

"Less see—Monday I went to town. Got that down?"

"Yes."

"Tuesday I broke the colt. Wednesday I put up that fence down in the lower field.

Thursday I killed the pig. Friday I licked the tramps. Saturd-a-y, what did I do Saturday?" In just ten minutes after the above conversation, Ham Cherry was holding up the whiffletree with one hand, and driving his team down the lane toward the field on a sharp trot.

We hope the poor "off horse," with the galled shoulder, really got a rest next day.

October

To many is the saddest month in the year; it presents to them nothing but dead and dying forms of vegetable life. But it is only in theory that this is a sad month, for, although the harvests are gathered in, the fields now bare of summer verdure, the woods in the first stages of leafy decay, the birds gone to more genial climates, the garden rusty and full of seedy or frost-stricken flowers, and everything telling of the departure of genial summer and the approach of chilly winter, there is an opposite sidy to this gloomy picture. No month is so full of rich and varied attractions, and none offers gratification and satisfaction to the diverse tastes of so many admirers. We should not see the dying flowers but the ripened seed-pod with its hundreds of infant forms, which we will tend in the cradle of our thoughts until the dawn of spring, when they will bring to us hundreds of joys for every sorrow we had for the loss of the parent plant. And still there is more life than death in the garden, field and forest, in October. To the eyes of all who love nature, October has cheer and delight; it presents not decay and death, but a rich display of nature's choicest beauties. Every tree is now dressed in its most glowing attire; it seems as though all the summer's warmth and the earth's richness had been collected and absorbed, only to be returned infinitely increased and improved. Change is manifest everywhere. The air feels its duties enlarged, and is no longer sultry and stifled, but transformed into blue and purple mists, that envelop the hills and fill the valleys. The hedge-rows that all summer long have been the home of the cat bird and the thrush, shielding them by its thick verdure, are now radiant with the Golden-rod, the Aster and the Gentian.

The richest beauty of October, however, is to be seen in the Birches, Maples, Chestnuts and Oaks; the Cedars festooned with the Woodbine, all blended together, and yet made more brilliant by the purple atmosphere, the spirit of beauty grows more and more wonderful and magnificent, till the splendors of the earth rival those of the sunset. It seems as if the consciousness of the long sleep of winter, now near at hand, had roused the material world to show its gratitude to its Lord and Master for His constant care and kindness—for the gentle rains and winds of spring—for the hot and stimulating suns of summer—for the bounteous harvests of autumn—in one resounding hallelujah, in whose song the voice of the smallest flower is not lost, though blended with the mighty tones of forest and mountain.

Theodore Hook addressed the following lines to Mr. Blank, who put over his door 'Pen and Quill Manufacturer:'"

"You put above your door and in your bills,
You're manufacturer of pens and quills;
And for the first you well may feel a pride;
Your pens are better far than most I've tried;
But for the quills, your words are somewhat loose;
Who manufactures quills must be a goose!"

Falling in Love.

There is nothing—no moral or intellectual phenomena—more strange than falling in love. What it is; when it originates; how brought about; these things are among the hidden mysteries of our nature.

A girl has reached the age of eighteen, a young man that of twenty-one. They have lived at home, travelled a little, pursued their studies, attended parties, and been a good deal in the society of other young people, yet they never took a very deep interest in anything in particular; neither of them ever cared very much for any other person.

They meet, and lo! of a sudden all is changed. Each sees the other in a different light from what any other was ever seen in; the whole world seems changed; life itself is changed; their whole being is changed to be like what it was, again, never more.

Love is often as sudden as this; but not always. Sometimes it is of very slow growth. Persons have known each other for years, and been in each other's society, and been intimate all this time; but never thinking of a tie stronger than friendship, when some incident—even a temporary parting, or the intervention between them of a third person, friend or stranger—reveals to them, for the first time, the great truth that they are mutually in love. Yet this love, springing up gradually and imperceptibly, is no less mysterious and unfathomable than that which is sudden and at first sight. It is not mere friendship grown strong; it is a more absorbing, more violent, more uncontrollable sentiment.

Love lives to labour; it lives to give itself away. There is no such thing as indolent love. Look within your heart, and see if this is not true. If you love anyone truly and deeply, the cry of your heart is to spend and be spent in your loved one's service. Love would die if it could not benefit. Its keenest suffering is met when it finds itself unable to assist. What man could see the woman he loves lack anything and be unable to give it to her, and not suffer? Why, love makes one a slave! It toils night and day, refusing all wages and all reward save the smile of the one unto whom it is bound, in whose services it finds its delight, at whose feet alone it discovers its heaven. There is no danger that language can be too strong, or too fervently used, to portray the service of love. By cradle and couch, by sick bed and coffin, in hut and palace, the ministries of love are being wrought. The eyes of all behold them; the hearts of all are moved at the spectacle.

Whether a person can fall in love more than once is a moot question. Some people appear to fall in love many times. It is not unusual to see widowers, who have been very devoted husbands, marry again, and seem to love the second wife just as well as the first.

At a wedding where the bridegroom led for the second time a bride to the altar, the officiating clergyman, with an intention better than his wisdom, thought it well to make a few remarks as the bridal pair stood before him, and he did so in these words:—"Dear friends, this is indeed a happy occasion; and all that is needed to complete this happiness is the presence of the first Mrs. Thompson."

The Old Front Door.

I remember the time when I used to sit,
A happy and thoughtless boy,
When father came home from his work at last
And I was tired of my toy;
I remember the time, and none more sweet
Shall I know forever more,
When I sat at eve by mother's side,
On the sill of the old front door.

I remember I'd sit till I fell asleep,
And list to their loving talk;
While the crickets chirped, and the fire-flies bright
Flew over the garden walk.
And often would father tell the tale
Of the time, long years before,
When he led his bride to a happy home,
O'er the sill of the old front door.

I remember when grandfather failed and died,
And eighty years old was he,
And well I knew that never again
He would ride me upon his knee;
And, though but a gay and thoughtless boy,
I wept, and my heart was sore,
When I saw them bear him slowly out,
O'er the sill of the old front door.

It is many a weary day since then,
And I, too, am old and gray;
But the tears come crowding into my eyes
When I think of that long past day,
And I only hope that whatever end
Fate may have for me in store,
I shall pass once more, ere I pass away,
O'er the sill of the old front door.

Things Worth Knowing.

There should be good news for sufferers from neuralgia, if the experiment of an eminent physician can be repeated. He has found that the application of a vibrating tuning fork passed along the course of the nerve relieves the patient completely in about half an hour. Sufferers will have to learn how to trace the nerves, and electricians will supply them with the means of keeping the fork in vibration; for, in the absence of any special mention as to the pitch of the fork, it appears that the relief is obtained simply by the effect of the vibration. It is a well-known remedy for sciatica.

Home-made peppermint drops are a harmless delight to children. With a little direction they can make them: Take two cups of sugar and half a cup of water; let this boil for five minutes; take from the fire and flavor with the essence of peppermint; the quantity must depend on the strength of the essence; a few drops are usually sufficient. Stir with a silver spoon until it is quite thick, then lay a buttered paper on a platter, and drop the mixture upon it in little circular-shaped pieces.

To clean stained woodwork which is also varnished, an old housewife recommends the saving of tea-leaves from the teapot for a few days. Drain them, and when you have a sufficient quantity, put them in clean, soft water; let them simmer for half an hour. When almost cold, strain them out, and, dipping a flannel cloth in the water, wipe off the paint, drying it with another flannel cloth. One cup of tea leaves to one quart of water is the due allowance.

It is not generally known that when coffee beans are placed upon hot coals or upon a hot plate, the flavor arising is one of the most effective and at the same time agreeable disinfectants. If no heat is obtainable, even the spreading of ground coffee on the object to be disinfected is most satisfactory.—[American Queen.

Uncle Tom's Department.

My Dear Nephews and Nieces,—This month I propose to talk to you about rabbits and how to care for them. It is best to buy your rabbits of some reliable dealer, rather than of a boy friend, who may happen to have some, unless you know your boy thoroughly. You must take care not to buy old ones, or, indeed, any over eighteen months. A good rabbit has a fine, large eye, a smooth coat, and an active, sprightly appearance.

Having obtained your pets, their hutch or dwelling is the next consideration. This should be elevated from the ground, and (for two rabbits) should have four compartments,—a sleeping-room at each end, and a large living-room in the centre, divided by a good stout board. The sleeping-rooms should be closed, but the living-room may be covered by a wire netting, so that the inside can be easily seen. The hutch should be perfectly water-tight, for a damp hutch will kill even strong, healthy rabbits. The sleeping-rooms should have some soft hay in them, and the floor of the entire hutch should be arranged so that it may be easily cleansed. Too much cannot be said about keeping the house clean, for a dirty hutch is the cause of almost all the ills which rabbits are heir to.

Their food is the next question which may perplex the young keeper. Oats should be given freely, as one of the best things, but it should be remembered that "variety is the spice of life," even with rabbits, and so the food should be as varied as possible. Oats may be given dry or after having been soaked in tea leaves over night. Rabbits are also fond of carrots, cabbages and lettuce, and a variety of other garden vegetables. As rabbits require little water, and almost all the moisture they require is obtained from this fresh food, very little should be given them, and that very seldom. But in winter and times when fresh food is not easily obtained, a little water, or, better still, milk, will do no harm.

The rabbits should be allowed to run at large as often as possible, and they cannot have a better place for exercise than in a yard with grass and clover growing in it. Whenever there is an addition to the family, the doe will begin to make a nest, and to do so will usually pluck her breast bare of the fur. To avoid this soft cotton should be supplied, but not just in the nest, which must not be disturbed. The proper way to handle and take up rabbits is to take them by the ears, close to the body. Lift them up thus, and support the hind legs with the other hand. The mother will look after her offspring until they are about two weeks old, when they ought to begin eating. In winter they should be kept warm and the dampness rigidly excluded. A piece of glass in place of the wire netting in front of the living-room is a good protection. Powdered sulphur sprinkled around the hutch and on the rabbits is a good preventive of ordinary diseases. After you have had your rabbits for a few months, by close watching you will discover their wants and peculiarities, and will need little, if any, assistance from outside. You will have found out that "experience is a good teacher."

Uncle Tom.

Puzzles.

1.—Drop-vowel Puzzle.

Th - f - - l wh - l - v - s th - l - w t - - w - ll.
W - ll l - s - th - n - t - nd g - - n th - sh - ll.

Ada Armand.

2.—Transposition.

Na enthso yoyenamr si uro 'socytnur eridp,
Ewnh enco oytdderes nca vnree eb euipsldp.

Robt. J. Risk.

3.—Numerical Enigma.

I am composed of nineteen letters.
My 4, 10, 6, 8, 9, 16, 19 is worn by all.
My 14. 15, 6, 5, 13, 8 means old.
My 11, 18, 6, 8 is a garment.
My 7, 2, 13, 15, 8, 16 is a space of time.
My 11, 6, 7, 10, 3 is an animal.
Whole was a king of England.

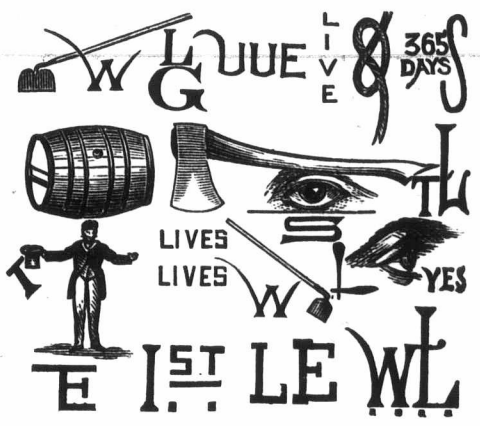
William A. Laidman.

4.—Syncopations.

Residence = A tool.
To heave = Great number.
To stop = A covering for the head.
A man's name = A nobleman.
A small boat = A stick.
Numerous = A month.
Syncopated letters will give a poet.

Henry Reeve.

5.—Illustrated Rebus.



6.—Buried Cities.

That felon don't like imprisonment.
Look at Hector on top of the hill.
I bought that watch at Hamilton.
The people on the barque beckoned to those on shore.
Look at that man breaking stones.

Ellis Augustine.

7.—Diamond.

A vowel; a girl's name; a weapon; a country; a sea in Europe; a deed; a vowel.

Ellis Augustine.

8.—Anagram.

Sthi efli si otn os dab a lfie
Sa moes ludwo eoocsh ot kame ti,
Tbu fi ouy rae eessdrp yb erac dna fistre,
Tusj fimriyl dastn adn kate ti.

Mary Marshall.

9.—Charade.

My first is something new,
A letter is my second.
Now join these two, and on my third
You'll find them there, I reckon.
Or first and second take and see
Them in my whole as plain as can be.

A. J. Taylor.

10.—Word Square.

An ache; a piece of land; the rainbow; a bed for birds.

Maggie F. Elliott.

11.—Anagram.

Yb ceanogrin si derip descriane,
Tyte ostm ssuema hwo wkno eth sealt.

Ada Armand.

Answers to September Puzzles.

1.—

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      L
    F O R
  D O U B T
H E R I T O R
L O U I S R I E L
  S C A R L E T
    E X I L E
      S E A
      L
```

2.—Be wise to-day, 'tis madness to defer,
Next day the fatal precedent will plead;
Thus on till wisdom pushed out of life.
Procrastination is the thief of time.

3.—Your fate is but the common fate of all,
Unmingled joys to no man befall.

4.—Farce—Fare—C
Fiend—Find—E
Place—Pace—L
Peony—Pony—E
Gray—Gay—R
Boyne—Bone—Y

5.—Vest, zest, pest, jest, test, nest, west, rest.

6.—March, Hungary, Inn, Friendly, Man, Tweed, Negro, Black, China, Nice, Turkey, Salt, Rainy, Mud, Chili.

7.—The breaking waves dashed high,
On a stern and rock-bound coast,
And the woods against a stormy sky
Their giant branches tossed.

8.—Rye, butter, wheat, oats, peas, beef, honey.

9.—Forget-me-not.

Names of Those Who have Sent Correct Answers to September Puzzles.

Henry Willson, E. W. Hutchinson, Joseph Allen, Willie B. Bell, Wm. Jackson, Chas. Herbert Foster, Will Thirlwall, Jane L. Martin, Mary Morrison, Henry Reeve, Wm. A. Laidman, Georgia Smith, Thos. J. Lindsay, Alice Hume, Lottie A. Boss, Robert Wilson, Robt. J Risk. Alice Mackie J. J. Steele, Mary Black, Ellen D. Tupper, Ada Armaud, Edmund Pepper, Emma Dennee, Sherman Fortner, Becca Lowry, Chas. Simpson, Agnes Leslie, Fannie Hammond, Minnie Smith, G. C. Gordon, Elfred Luscombe.

About two hundred years ago there was a physician in London by the name of Isiac Letsem, whose sign read as follows:—

When the people get sick,
I phisix, bleeds, and swets 'em,
Then if they wishes to die,

I. Letsem.

A man of tact always manages to get out of difficulty. The clerk of a parish, whose business is to read the "first lesson," came across the chapter in David in which the names Shadrach, Meshack, and Abednego occur twelve times, and finding it extremely difficult to pronounce these names, he went through the chapter referring to them as "the aforesaid gentlemen."

Child-Nature.

BY WILLIAM H. HAYNE.

A man may be noble and great,
And a woman tender and pure,
But their knowledge, if deeper, is less divine
Than childhood's innocent lore.
Ah! why should we wonder at this?
For God on the little ones smiled.
And we often lose with the lapse of years
The flawless faith of a child.

A man may be gallant and gay,
And a woman joyous and bright,
But they seldom keep through the waning years
The passion of pure delight.
Ah! why should we wonder at this?
For God on the little ones smiled,
And a harmless lightning of laughter plays
Round the guileless lips of a child.

Then happy are those who cherish
Youth's hopes and its fleeting tears,
And some clear signs of their childhood keep
Through a circle of changeful years.
Ah! why should we wonder at this?
For God on the little ones smiled,
And the heads of the Wise Men bent above
The cradle that held a child!

Birds for Profit.

AN AVIARY FOR CANARY BIRDS.

An aviary for the raising of canary birds for profit can be easily prepared. If you have not a room in your house that can be used for the purpose of an aviary, have one built. Make it eight feet wide and sixteen feet long. Let it face the east, for the birds like the sunshine, and the afternoon sun is too hot for them. Have plenty of windows, but let them be on the south, east and north sides, and no two opposite, so as to admit a draft. Let all the windows and the one door be furnished with a screen, for most of the season you will want the windows and the door open.

Have built in the eastern end (the front of the building making one side of it) a cage made of screening. Let it be three feet wide, and extending across the entire width of the room, which is eight feet. Have this divided into two equal parts, making each three by four.

This division may be made of screening also. Have a door in each of these divisions, and the entire bottom furnished with a drawer to pull out, so as to be easily cleaned. These two large cages are for the reception of the young birds as soon as their sex is distinguished. Each of these cases will accommodate comfortably six dozen birds.

Get eight little tin buckets holding a pint each. Have the proper person cut five holes in each, the size of a quarter, and an inch from the bottom.

Have the edges of these holes bound, so the birds will be in no danger of hurting themselves. Three of these for seed and one for water in each apartment will be amply sufficient, and the birds will learn to use them properly without any trouble.

The old birds may be in cages, hanging on the walls of the room. Many advise turning them loose in a room furnished with trees, in which to build, and leaving them entirely to themselves. We tried this plan one season, and very much prefer caging them, as I have just described.

I agree with others that according to the former plan they breed faster, and that it is an economical way (the outlay for males being so much less); but the females become anxious for another nest before the young ones are old enough to take care of themselves, and so partially neglect them, or leave them altogether. So, many die from starvation and want of attention.

You will doubtless raise some clear yellow birds. These, when about six weeks of age—that is, when they begin their first moult—can be colored red by a plenteous feed upon cayenne pepper. Use a teaspoonful of *pure* pepper to one egg. Feed the birds on this alone for about six weeks, unless it seems to disagree with them, in which case give a little seed.

These birds, when they have donned their new coat of feathers, will be *crimson* canaries.

All your canaries when moulting—and it occurs with the old birds in August and September, when they should be separated immediately from each other, and all expectation of raising any more birds that season be given up—should be fed, in addition to their regular feed, upon ripe mango peppers. They are very fond of them; it tones up the system and brightens the plumage. At this period they should be kept warm, and carefully excluded from drafts.

In September your birds are ready for market, if you choose to sell them then; but if you keep them until the first of December, they are then called birds in *full song*, and are worth at least one-half more. Write to some fanciers and learn what they will pay at both seasons, and judge for yourself whether it would be better to keep them until that time.

PONSONBY DE TOMKYNS BEGINS TO ASSERT HIMSELF.—P. de T. (who has had a little too much—music): "Look here, M'ria! Blest if I can stand that foreign rowdy of yours any longer! He's always pitching into England, by George, where he makes all his money! He yawns and whistles, and picks his teeth, and looks at himself in the glass when ladies are talking to him. Doesn't care what he says before ladies! Look at 'em all fanning him, and licking his boots! Makes me sick!! Half a mind to kick him down stairs!!!' Mrs. P. de T.: "No, no! Hush, love! He's a genius! He plays the flageolet better than any man living! The princesses would never have been here to-night, but for him!!—and remember, Ponsonby, he plays to us for nothing!!!"—[Punch.

Three Wonderful Pillars.

A correspondent of the Pittsburgh-Dispatch says of this range of mountains:

At the head of Canton Canyon in the coast range of mountains, California, stand three tall pillars of rock almost as large as the Egyptian pyramids, and nearly exactly the same size and shape. Around these pillars are now camped more than 1,000 people, attracted there by three black-eyed Mexican women. The leader is the widow of the famous Mexican bandit, Joaquin Murietta. She has been there for twenty-five years, the other two not so long. They profess to see spirits as plainly as though they were in the flesh, and to hold conversation with them. When the spirits arrive, these women meet them, go through the form of shaking hands, kissing, and talk to them as to the living. The gist of their teaching is that the three rocks are hollow, and are really gorgeous temples, and that in next month a potent padre will come from Mexico and open the doors of these temples to believers; that once inside each will possess his or her affinity regardless of previous marital relations. The sick are laid in front of the rocks and soon manifest signs of recovery. So many of the Mexicans, Portuguese and others in the valley have become infatuated with the new doctrine that most of the ranches are without the necessary help to tend the stock or make the crop.

The Death of the Flowers.

The wind flower and the violet, they perished long ago,
And the brier-rose and the orchis died amid the summer glow;
But on the hill the golden rod, and the asters in the wood,
And the yellow sun-flower by the brook in autumn beauty stood,
Till fell the frost from the clear cold heaven, as falls the plague on men,
And the brightness of their smile was gone, from upland, glade and glen.
And now when comes the calm, mild day, as still such days will come,
To call the squirrel and the bee from out their winter home,
When the sound of dropping nuts is heard, though all the trees be still,
And twinkle in the smoky light the waters of the rill;
The south wind searches for the flowers whose fragrance late he bore,
And sighs to find them in the wood and by the stream no more.

The Approach of Age.

The approach of age shows itself about the eyes. Lines come, faintly at first, then deeper, until the incipient crow's-feet are indicated, developed, and revealed. The woman who, looking in her glass, sees these fatal lines diverging from the outer corners of her eyes, knows that she has reached an era in her life. She recognizes it with a sigh if she be a vain, a lovely, or a worldly woman; with a smile, perhaps, if she has children in whom she can live her own youth over again. But we should never be seen on the lookout for crow's-feet or gray hairs. Looking for them is sure to bring them, for thinking about them brings them. Tears form a part of the language of the eye, which is eloquent enough when sparingly used, and which should be sparingly used for other reasons than that of adding to their mute eloquence. Tears are a disfiguring expression of emotion; and those who get in the habit of weeping over every small vexation do much to acquire a careworn, miserable expression, and are sure to look old before their time. Few women look pretty, or even interesting, in tears; though it has long been a pleasant fiction in poetry and romance to suppose that they do. Many women, some men, most children, make most disfiguring and distorting grimaces while crying; and the lady who thinks she can work upon a man's feelings by a liberal display of tears, should carefully study a becoming mode of producing them, before her looking-glass. Grimaces soften no heart; and tears, accompanied by the usual distortion, have a hardening effect, if not a visible one.

In a prettily written work, now probably out of print, purporting to be the story of the life of one of Milton's wives, the author makes the poet say of his wife's eyes after crying, that they resembled "the sun's clear shining after the rain,"—a very pretty natural object indeed; but, during the rain itself, the observer is not inclined to be complimentary.

The Little Ones' Column.

Golden-Rod.

BY M. R. COLQUITT.

Oh, mamma, I've heard such charming news
From the Bobolink down in the lane;
He knows many beautiful stories,
And promised to meet me again.

He told me about this rich Golden-Rod,
And whence came its glowing hue;
And I'm sure the bright little gossip
Wouldn't care if I should tell you.

He says when dear little Titania
Was proclaimed the fairies' Queen,
There was such a splendid banquet
As never before was seen.

And Titania's gorgeous costly robe,
All puffed with fold on fold,
Was made of a suuset tissue
Of shining dazzling gold.

The Knight of the Topaz Helmet
Was chosen to dance with her,
And he tore her beautiful court train
With the point of his diamond spur.

The wonderful exquisite fragment
Fluttered about in the breeze,
Now lighting the spears of the bending grass,
Now floating among the trees,

Till 'twas caught by the old head gardener,
Who gazed at it long, and said:
"This fugitive flying sunbeam
Has put something new in my head,

And our loyal lady's accident
Has strangely given a hint,
And furnished me just what I longed for—
An idea of shape, and a tint

For the flower that must be ready,
As soon as the dancing is done,
To present to our lovely sovereign
In token of fealty won.

I'll take its form from the flashing plume
Of the Knight who threw in my way
This fleecy fluttering fragment,
So delicate, dainty, and gay.

And if she accepts the token,
And prints with her gracious hand
The mystical sign upon it
That shows it from Fairy-land,

I'll blow its seed to the outer world,
And scatter them over the sod,
And christen my feathery favorite
Queen Titania's *Golden-Rod.*"

How Mistress Speckle Celebrated Thanksgiving Day.

'Twas early in the morning
Of the glad Thanksgiving Day,
And the people on old grandpa's farm
Were joyous, blithe, and gay;
For the dinner was preparing,
And the folks from out of town
Were hastening home to help us eat
The turkey crisp and brown.

We children were exploring
The red-roofed barn for eggs,
And climbing up to the rafters, with
No fear of broken legs.
For the boys were bold and daring,
And the girls --were Tom-boys, too,
And the hens looked on in wild amaze,
And round about us flew.

Said our youngest pet and darling,
"I'm so glad I'm not a hen;
For they don't have a Thankful day,
Nor dinners, nor"—just then
Uprose our gray old speckle
From her hidden nest near by,
And passed us with a merry cluck,
And crested head on high;
While close behind her followed
The darlings hatched that day,—
Twelve dainty, downy, fluffy chicks,
Some yellow and some gray.
"Cluck, cluck," said Mistress Speckle,
"Here's one thankful hen, you see.
Who says that this is not a glad
Thanksgiving Day for me?"

MARY D. BRINE.

The Two Cheshire Cats.

BY A. P. WILLIAMS.

Said the first Chessy-cat to the second Chessy-Cat:
"Did you ever see a Chessy-cat pout?"
Said the second Chessy-cat to the first Chessy-cat:
"Did you ever see an oyster walk about?

Said the second Chessy-cat to the first Chessy-cat:
"Did you know that a Chessy-cat could grin?"
Said the first Chessy-cat to the second Chessy-cat:
"Did you know they make tin-dippers out of tin?"

Said the first Chessy-cat to the second Chessy-cat:
"Did you ever see a Chessy-cat cry?"
Said the second Chessy-cat to the first Chessy-cat:
"Did you ever see a snapping-turtle fly?"

Said the second Chessy-cat to the first Chessy-cat:
"Did you know that a Chessy-cat could smile?"
Said the first Chessy-cat to the second Chessy-cat:
Did you know it took two halves to make a mile?"

Said the first Chessy-cat to the second Chessy-cat:
"Did you ever see a Chessy-cat weep?"
Said the second Chessy-cat to the first Chessy-cat:
"Did you ever see a weasel fast asleep?"

Said the second Chessy-cat to the first Chessy-cat:
"Did you know that a Chessy-cat could laugh?"
Said the first Chessy-cat to the second Chessy-cat:
"Did you know there were two quarters in a half?"

Said the first Chessy-cat to the second Chessy-cat:
"Did you ever see a Chessy-cat swoon?"
Said the second Chessy-cat to the first Chessy-cat:
"Did you ever teach an elephant a tune?"

Above all, no Zeal.

A collector enters an old curiosity shop in Paris and enquires the price of a set of old Dresden.

"Twelve thousand francs, sir! Genuine, and you'll see how carefully it has been repaired, so carefully indeed as to add to its value. Besides, sir, it is a historical relic. That, sir, is the very identical service of porcelain which Napoleon dashed te the ground during the preliminaries of Leoben."

"We-ell, I don't much like broken"——

The merchant, eagerly—Then, step this way, sir! Here is the same service in its unbroken form, for the same price.

Commercial.

THE FARMER'S ADVOCATE OFFICE,
London, Ont., Oct. 1, 1885.

Three weeks of fine, dry weather has done a great deal for the farmers. The corn has ripened up nicely, and many fields of late oats that looked hopeless the first week in September, are now safely in the barn or stack. Clover, seed-beans, potatoes, &c., can be got in in good condition. Fall wheat that was sowed early is now looking well, while that just put in the ground will need rain before it will make much progress.

WHEAT.

Wheat had something of a boom in Chicago during last week, the range for October being 81@87. The commission and speculating element in the large centres have become weary of the moderate degrees of life in the trade, and recognizing the difficulty in accomplishing anything effectively in the direction of further depression in values, under all the surroundings, have seen the desirability of giving as much force as possible to an upward turn, and when the Roumelian affair was announced it was grasped as the occasion for exciting the market and putting into form a boom. But exactly why a quick and sharp advance should result from such a cause in the face of widening the existing difference between current values and an exporting point, is a question we imagine not easy to explain.

The movement of wheat in September as compared with last year is a long way short of 1884. The movement for some time to come may be greatly below that of last year, which may give stimulus to trading and to values. But this will not dispose of the wheat, and if the coming winter crop receives a good start, and maintains a promising condition and outlook later on, the extravagant prices talked of by some will probably not be reached; while on the other hand, if any serious discouragements overtake the coming crop, much higher prices will surely result. The season for seeding has on the whole been very favorable, and is said to be all that could be desired in the States.

The stocks of wheat and corn at nineteen leading interior and seaboard markets, east of the Rocky Mountains, in transit from the West to the seabord, and afloat on the ocean, destined for Great Britain and Continental Europe, on dates named, were as follows:

	Wheat, bu.	Corn, bu.
Total, Sept. 14, 1885....	55,568,000	9,394,000
Previous week.....	56,444,000	7,869,000
Total, Sept. 15, 1884.. ..	40,064,000	7,154,000
Total, Sept. 17, 1883...	43.236,000	17,393,000
Total, Sept. 18, 1882...	36,027,000	8,345,000
Total, Sept. 19, 1881. ..	41,065,000	28,083,000
Total, Sept. 20, 1880 ...	30,865,000	21,144,000

This includes Minneapolis and St. Paul for 1884-5, but not for previous years.

The following shows the exports of wheat and corn, including wheat in flour, from all American ports and Montreal, from September 1 to Sept 12, for the years named:

	Wheat.	Corn.
1885.....	2,562,000	1,387,000
1884.....	7,450,000	923,000
1883	5,988,000	2,040,000
1882.....	8,083,000	59,000

The following table shows the number of acres in wheat in the United Kinfidom for ten years, compiled for the Cincinnati Prices Cur-

rent from official data, with the average yield per acre and the production in bushels each year, as per authorities upon these matters :

Season.	Acres.	Yield.	Production
1884-85	2,549,192	29	73,926,568
1883-84	2.745 367	30	82.361,010
1882 83	2,707,902	26	70 405,452
1881-82	3,156,784	37	85,233,168
1880-81	2,969,603	23½	69 785,670
1879-80	3,065,895	19¾	60.551,426
1878-79	3.056.428	17½	53,487,490
1877 78	3 381,701	27	91,305,927
1876-77	3,321.065	22	73 063,430
1875-76	3,124,342	27	84,357,234

The average annual production for the ten years is 74,447,737 bushels. The estimate for the season just ended is 521,169 bushels below the average for the ten year period. Other estimates are considerably higher—that of the London Times reaching 78,660,000 bushels for Great Britain.

LIVE STOCK.

The special despatches contain more satisfactory news of the British cattle trade, which for the last three weeks has been completely demoralized. The improvement is due to smaller receipts from Canada and the United States and a better inquiry, while supplies from other sources have fallen off somewhat. At Liverpool to-day the market was visibly better, There was a steady demand, and a fair volume of business was done at higher prices, the advance being equal to half a cent per pound. A better clearance was effected than for some time. Prime Canadian steers advanced to 12½c. Fair to choice grades were at 12c., poor to medium at 11c., and inferior and bulls at 7½c.@9c. The sheep trade has shown no change. Best sheep at Liverpool to-day were at 13c., secondary qualities at 11c.@12c., Merinos at 10½c @11½c., and inferior and rams at 8c.@9½c. All the foregoing quotations are calculated at 480 in the £. Dressed beef is lower.

The following were the exports of live stock from the port of Montreal for the week ending September 26, with comparisons :—

Per	To	Cattle.	Sheep.
Siberian	Glasgow	527	....
Colina	"	283	....
L. Champlain	Liverpool	269	204
Ontario	Bristol	365	146
Montreal	Liverpool	410	....
Batavia	Glasgow	479	333
Total		2,333	683
Last week		1,6 5	1.193
Corresponding week, 1884		2,682	1 643
Corresponding week, 1883		3 0	1,076
Corresponding week, 1882		382	1,542
Corresponding week, 1881		1,759	3,668
Corresponding week, 1880		2,659	2,350
Corresponding week, 1879		740	143
Corresponding week, 1878		757	1,454
Total to date		51,403	34,086
To same date, 1884		43,146	45,190
To same date, 1883		41,693	77,835
To same date, 1882		23,005	53,151
To same date, 1881		36 644	51,524
To same date, 1880		36,207	66.307
To same date, 1879		19,937	58,911
To same date, 1878		13,323	23,215

The total exports of beef to date were 11,191 quarters, against 11,758 last year.—[Gazette.

CHEESE.

The situation has assumed a much more healthy tone and there has been considerable business done the past week, but chiefly in August make, buyers not caring to touch the July goods, of which there is a large amount still n factorymen's hands in western Ontario. It is a great mistake to hold July cheese just because buyers won't pay what the salesmen think they should get. The result of this holding off has been that very many orders that could have been filled here have gone to New York and Montreal. Factorymen in New York State have sold all July and August, and in some instances September was sold this week. The effect of this is that our July and early August cheese, which are more or less off flavor, have to compete with States September cheese.

The Utica Herald of the 29th Sept., says :

It well be seen by a glance at our table below, that the receipts still continue much smaller than last year. The claim will be made in New York that this is because the cheese is held back in the country. We can not speak for other sections, but in the district represented by the Utica market. and we believe by the Little Falls market also, cheese is sold off quite as closely as it was last year at this time. And we are inclined to believe that there is no greater accumulation in the country at large than we had last year. September weather has been cool throughout the month, and the make is undoubtedly fine. With these points in its favor, we have a right to expect much better prices for this stock than for any other of the season, but at the best it must sell considerably lower than for a number of years past. There is too much of it, both here and in England, to look for any such boom as we had in 1879. Following is our usual table of quotations :

	Receipts.	Exp.	Cable.	Freight.	Price.
Sept. 29, 1883	66 818	39 147	53s.	25s.	11¾c.
Sept. 27, 1884	72,894	26,092	53s. 6d	25s.	11¼c.
Sept. 26, 1885	47,159	31,157	39s.	30s.	8½c.

BUTTER.

Butter remains in just about the same condition, and nothing of a stirring character can be found on the market, which has a dull tone with little trade in motion. Creamery continues to be held in the country far above the market, which at once precludes any attempt to do business for the present. Shippers could not pay more than 22c. for a choice article in creamery, but there are no sellers at that. Townships are quoted in Montreal at 15c. to 18c., and western at 12c. to 15c.

APPLES.

There is an abundance of fall apples, in fact too many. We think farmers would do well to check the production of fall apples. Winter apples are much safer to handle, to care for, and the chances are that you can sell at some price, whereas we are told that fall apples are going to waste in some sections.

A late apple circular says : "Crops in England at one time promised to be good, but owing to the dryness of the summer many have fallen. This is more particularly the case with the winter sorts.

"Germany has only half a crop, and not much more than is wanted for home use.

"Holland, which usually exports very largely to this country, has very few winter sorts, and they are of small size.

"Belgium—The report is a little better, most of the sorts being reported fair crops but also small.

"France—The reports vary considerably ; in some districts the crop is reported good. in other sections very bad indeed. On the whole half a crop.

"Comparing these reports with those of past seasons, we shall want a large quantity of Canadian apples this year—*more especially the best sorts.*"

PRICES AT FARMERS' WAGONS, TORONTO.

Oct. 1, 1885.

Wheat, fall, per bushel	$0 82	0 86
Wheat, spring, do.	0 82	0 86
Wheat, goose, do.	0 75	0 75
Barley, do.	0 55	0 74
Oats, do.	0 32	0 36
Peas, do.	0 60	0 60
Rye, do.	0 70	0 00
Beans, do.	1 00	1 25
Dressed hogs, per 100 lbs.	7 00	7 25
Beef, forequarters	3 50	5 00
Beef, hindquarters	6 75	7 00
Mutton, carcass	6 25	7 50
Hay	10 00	10 50

PRICES AT ST. LAWRENCE MARKET, TORONTO.

Oct. 1, 1885.

Chickens, per pair	$0 45	0 60
Ducks, do.	0 60	0 80
Butter, pound rolls	0 18	0 19
Butter, large rolls	0 13	0 15
Butter, Inferior	10	12
Lard	10	00
Bacon	9	12
Turkeys	0 75	1 50
Geese	0 80	1 00
Cheese	0 8	0 10
Eggs, fresh, per dozen	0 17	0 18
Potatoes, per bag (new)	0 55	0 60
Apples, per bbl	1 00	1 75
Cabbage, per dozen	0 25	0 40
Turnips, per bag	0 20	0 30
Carrots, per bag	0 30	0 35
Beets, per bag	0 35	0 40
Parsnips, per peck	0 15	0 20
Onions, per bushel	1 00	1 20
Cauliflower, per doz.	75	2 00

LIVE STOCK MARKETS.

Buffalo, Sept. 29, 1885.

CATTLE.

Receipts 8,995, against 7,854 the previous week. The cattle market opened up on Monday with very heavy receipts, over 200 car loads being on sale. The demand for cattle was only fair, and prices averaged 15@25 cents lower than on the Monday previous. Two loads of extra steers sold at $6, but the bulk of the best went at $5 50@5 75 with fair to medium at $4 50@4 85 ; mixed butchers' stock sold at $3 25@4 and stockers at $3@3 50. At the close about 10 loads of common stock was held over. There was but little done on Tuesday, only two loads of fresh receipts, and prices unchanged. On Wednesday the reports from New York were more favorable. Of Michigan cattle 24 steers av. 942 lbs., sold at $4 25; 20 do. av. 990 lbs. at $3 70; 18 do. av. 1,070 lbs at $4 35; 27 stocker av. 737 lbs. at $3 25; 31 do. av. 855 lbs. at $3 35; 32 do. av 860 lbs. at $3 50; 56 do. av 817 lbs. at $3 40 : 46 do. av. 800 lbs. at $3 50. The following were the closing

QUOTATIONS :

Extra Beeves—Graded steers weighing 1,450 lbs. and upwards	$5 50	@$6 00
Choice Beeves—Fine, fat, well-formed steers, weighing 1,300 to 1,400 lbs.	5 00	@ 5 40
Good Beeves—Well-fattened steers weighing 1,200 to 1 350 lbs.	4 65	@ 4 90
Medium grades—Steers in fine flesh, weighing 1,050 to 1,250 lbs.	4 00	@ 4 60
Oxen—Coarse rough to extra	3 50	@ 4 50
Good Butchers' Beeves—Light, fat steers, weighing 900 to 1,000 lbs.	3 60	@ 4 00
Heifers—Fair to choice	3 25	@ 4 00
Cows and Heifers—Good to choice	3 25	@ 3 75
Texas and Cherokees, corn fed	3 75	@ 4 25
Do do grassy	2 75	@ 3 00
Mixed Butchers' Stock Common steers, stags, old cows, light heifers, etc.	3 00	@ 3 50
Stockers—Good to choice western, weighing from 950 to 1,000	3 00	@ 3 60
Canadian feeders	3 75	@ 4 00
Stock bulls	2 00	@ 2 40
Butchers' do., fair to good	2 50	@ 3 25
Veals—Fair to prime of 160 to 210 lbs. average	5 50	@ 6 50

SHEEP.

Receipts, 20,400, against 33,200 the previous week. The supply of sheep on Monday consisted of about 60 car loads, of which 10 loads were Canadian lambs. The market was without any decided change, although a few loads of the best sold early at stronger prices. On Tuesday and Wednesday the receipts were light, with prices firm on sheep and 15@20 cents higher on lambs. Fair to good 0 to 80 lb. sheep sold at $2 25@3 ; 80 to 90 lb., $3 35@3 60; 90 to 100 lb., $3 60@3 70 ; 100 to 115 lb, $3 90@4 10 ; fair to good lambs $4@4 60. We note sales of 256 Michigan sheep av. 89 lbs. at $3 60; 133 av 87 lbs. at $3 50; 117 av. 71 lbs. at $3 80 ; 108 av. 78 lbs. at $3 12½ ; 100 av. 83 lbs. at $3 50 ; 123 av. 77 lbs. at $3 75 ; 220 av 79 lbs. at $3 25; 100 av. 96 lbs. at $3 90; 38 lambs av. 67 lbs. at $4 60; 100 do av. 66 lbs. at $4 50; 98 do. av. 6 lbs. at $4 60; 184 do. av. 70 lbs. at $4 70; 161 av. 59 lbs. at $4.

HOGS.

Receipts, 39,157, against 37,203 the previous week. The hog market opened up fairly active on Monday at the closing prices of the previous week, ruled steady on Tuesday, advanced 10@15 cents on Wednesday, closing with good to choice Yorkers selling at $4 60@4 65; fair do $4 30@4 40 ; medium grades fair to choice, $4 40@4 50 good to extra heavy, $4 45@4 55; pigs, common to choice, $3 75@3 80; skips and culls, $3@3 60.

Notices.

W. J. Rudd, Arkell, Ont., successor to Geo. Rudd, exhibited some very fine Devons at the Provincial and Industrial Exhibitions.

Just out! Lovett's Guide to Fruit Culture, J. T. Lovett, Little Silver, N. J., U. S., containing 60 pages, handsomely illustrated.

Just received, Vick's Floral Guide, containing a complete list of all kinds of flowers, grasses and garden vegetables. James Vick, Rochester, N. Y.

We have received the annual report of the Ohio Agricultural Experiment Station. It contains a lot of valuable information in all departments of field and garden culture, with an extensive list of experiments conducted at the station.

In spite of the great advantages attending our excellent, if expensive, system of education, there exists, however much we may regret to admit it, an indifference towards certain subjects so palpable as to induce many parents to seek other means to insure their children's more efficient progress. To attain this desirable end, and supply the much felt deficiency, private institutions of no ordinary merit have been developed in our midst in which the neglected branches of study are so capably taught by thorough and skillful teachers as to demonstrate beyond dispute that the long desired object has been gained, and those who have availed themselves of the evident advantages of the private academy, are not slow to acknowledge their superiority in many respects over the public schools. Nor does the system adopted in these private schools render any invidious distinction necessary with regard to the age or attainments of the pupils, but is equally beneficial to the child of tender years or to the youth of more matured intellect; as instance the circumstance that nearly all our lawyers and many of the judges in this vicinity received their final tuition after leaving the public schools, at the private seminary of a teacher in this city. The increasing popularity of our commercial colleges and ladies' seminaries points out indisputably the fact that private tuition is in every sense eminently successful. We are happily enabled to express ourselves without hesitation upon this subject, the evidence of our own children, several of whom were educated in private establishments, affording us the opportunity of forming a critical opinion. A short time since we visited the Buffalo Business College, probably the most complete institution of the kind in the United States. Their suite of rooms is considered to be the most elegant and best equipped on the continent, with a staff of masters of whom the management may be justly proud. The Detroit Business University also merits the patronage of a discriminating public. Among those of Ontario whose reputation and standing are well deserving of notice, may be mentioned the Canada Business College, Chatham; Hamilton Business College; Ontario Business College, Belleville; London Business University and Telegraphic and Phonographic Institute; the Canadian Business College, Hamilton; the Forest City Business College, London; Ontario Ladies' College, Whitby; Alma Ladies' College, St. Thomas; besides numerous others, all of whom, we believe, employ a competent staff of instructors whose zeal and energy are united in their one sole aim, the improvement of their pupils, and by consequence, the success of their schools.

Dr. J. B. Lawes reports to *The London Agricultural Gazette* that of two lots of twenty cows otherwise fed alike, the one receiving mangels yielded 281 gallons more milk during the experiment trial of thirteen weeks than the one supplied with clover-silage. Two of the former herd "turned out to be much better milkers" than any two in the latter, but the Professor concludes that the difference was in part due to the fact of the roots being a more appropriate addition to the dry food.

Dates of Coming Fairs.

South Perth	St. Mary's	Oct. 6 7.
South Simcoe	Cookstown	Oct. 6-7.
Union	Baillieboro'	Oct. 6-7.
Pickering	Pickering	Oct. 6-7.
Tara	Tara	Oct. 6-7.
West Elgin	Wallacetown	Oct 6-7.
North Ontario	Uxbridge	Oct. 6 7.
Melancthon	Shelburne	Oct. 6-7.
Haldimand	Cayuga	Oct 6-7.
North Brant	Paris	Oct. 6-7.
North York	Newmarket	Oct. 6-7.
Northern	Walkerton	Oct. 6-9.
Mornington	Milverton	Oct. 7.
Prince Edward	Picton	Oct. 7-8.
Southern	Brantford	Oct. 7-9.
West Simcoe	Barrie	Oct 7-9.
Puslinch	Puslinch	Oct. 8.
Osprey	Maxwell	Oct 8.
Stanley	Bayfield	Oct. 8-9.
East York	Markham	Oct. 8 9.
South Waterloo	Galt	Oct. 8-9.
Northumberland	Warkworth	Oct 8-9.
Halton		Oct. 8-9.
Wallace	Listowel	Oct. 8-9.
Euphrasia	Rocklyn	Oct. 9.
Rosemont	Rosemont	Oct. 9.
Harwich	Blenheim	Oct. 12 13.
Brighton Tp	Brighton	Oct. 13.
Fullarton	Fullarton	Oct. 13.
Forest Union	Forest	Oct 13 14.
East Riding, Peterboro.	Norwood	Oct. 13-14.
Morris	Blythe	Oct 13-14.
King Tp	Schomberg	Oct. 13-14.
Asphodel, Belmont and Dummer	Norwood	Oct. 13-14.
Essex		Oct. 13-14.
Eramosa	Eramosa	Oct. 13-14.
Reach	Port Perry	Oct. 13-14.
Manvers	Bethany	Oct. 13-14.
Norfolk Union	Simcoe	Oct. 13-14.
Murray Tp	Wooler	Oct 14.
Uxbridge	Goodwood	Oct. 14-15.
Caledonia		Oct. 15-16.

LEADING MANITOBA FAIRS.

Brandon, No 1	Oct. 14-15
Portage La Prairie	Oct. 15

LEADING AMERICAN FAIRS.

Am Institute	New York	Sept. 30, Dec. 5
Milwaukee	Industrial	Sept. 2-Oct. 17.
St Louis	St. Louis	Oct 5-10.
St. Louis	Exposition	Sept. 9-Oct. 24.

NEW ADVERTISEMENTS.

ADVERTISING RATES.

The regular rate for ordinary advertisements is 25c. per line, or $3 per inch, nonpariel, and special contracts for definite time and space made on application

Advertisements unaccompanied by specific instruction inserted until ordered out, and charged at regular rates.

The FARMER'S ADVOCATE *is the unrivalled advertising medium to reach the farmers of Canada, exceeding in circulation the combined issues of all the other agricultural publications in the Dominion. Send for advertising circular and an estimate.*

SPECIAL NOTICE.

THE FARMER'S ADVOCATE refuses hundreds of dollars offered for advertisements suspected of being of a swindling character. Nevertheless we cannot undertake to relieve our readers from the need of exercising common prudence on their own behalf. They must judge for themselves whether the goods advertised can in the nature of things be furnished for the price asked. They will find it a good rule to be careful about extraordinary bargains, and they can always find safety in doubtful cases by paying for goods only upon their delivery.

STOCK NOTES.

(Continued from page 304.)

T. Breckon, Esq., of Glencoe, recently purchased from Mr. Anthony Hughes his three-year-old filly Molly Muldoon, which took 1st prize at the last Provincial.

Mr. F. W. Stone, of Guelph, Ont., writes: "I have made the following sales of sheep, viz., 70 Southdown rams to Messrs. Geary Bros., London; to D. A. Macdonald, Glengarry, one Cotswold ram and eight Cotswold ewes; to Hy. Arkell, Arkell, Ont., one Cotswold ram.

AUCTION SALES.—Messrs. Cowan & Patterson purpose holding a joint sale of high-bred Shorthorn cattle and Shropshiredown sheep from the Clochmohr and Eastwood herds. Sale at Mr. Cowan's, near Galt, Oct. 13th. Mr. John Washington, of Auburn, Ont., will also have a public sale of thoroughbred Shorthorns and Oxford and Shropshire grade sheep, Oct. 22nd.

PERCHERON HORSES.—A telegram from New York announces the arrival, Sept. 8th, of the steamship Holland, from Havre, Fronce, with an immense shipment of Percheron horses. This stock, numbering one hundred and eighty head, was purchased in France and imported by M. W. Dunham, of Wayne, DuPage Co., Illinois, and is the first of his series of importations for 1885. The horses, among which are nine French Coach stallions—splendid specimens—arrived in good order and were immediately shipped by special train of Mr. Dunham's own improved live-stock express cars, to "Oaklawn Farm," Wayne, Illinois, arriving there about Sept. 11th.

Overfeeding is the most common and most injurious mistake made in the management of all kinds of stock, says the "N. Y. Times." We even overfeed, and so greatly harm, ourselves and our children. A large proportion of the exceedingly numerous deaths among infants and young children is due to overfeeding, and if we cram our children to death it is no wonder we should make the same fatal mistake with young chickens, calves and pigs. It is quite safe to say that 90 per cent. of all the disorders of these young animals results from overfeeding. A shepherd will more easily raise 99 per cent. of his lambs than a farmer will rear 50 per cent. of his hatched chicks, and the reason is that the lambs feed themselves, while the chickens are fed and crammed as long as their little crops will hold one more grain of food. Then the fatal diarrhea comes on, the chicks are weak and puny and fall a prey to the gape worms, or they become paralyzed or mope about with ruffled feathers until they die.

In reference to the prices of cattle in that State, the Texas Live-Stock Journal, Fort Worth, under date of June 13th, says: "During the past month or two, prices of cattle have varied very little. Indeed, the transactions on which cattle quotations have been based have been at figures very close to onr quotations of two months ago. The prices now are as follows: Panhandle—Strictly first-class yearlings per head, $15 to $16; two year-olds, $19 to $20; cows and calves, $30. Western Texas—Yearlings, $11 to $12; two-year-olds, $15 to $17.50; cows and calves, $25 to $26. Central Texas—Yearlings, $9 to $10; two-year-olds, $13 to $14; cows and calves, $23 to $24. Southern Texas—Yearlings, $8 to $9; two-year-olds, $12 to $13; cows and calves, $20 to $22. Eastern Texas—Yearlings, $6 to $7; two-year-olds, $10 to $12; cows and calves, $17 to $20. These prices are for stock delivered on the ranges where raised. So far as we are able to ascertain, cattle can be had at the prices above, but not less than the lowest figures for any class given, and the only concessions known have been in the locality of delivery. These figures are $4 per head lower than prices paid last year in every instance. These prices are strong, and will go no lower. The State is in fine condition, and able to mature every hoof of stock upon it."