

Retrospective and Prospective.

Outbreaks of foot-and-mouth disease occurred lately in Cambridgeshire and Kent, England.

British authorities claim to have discovered two cases of pleuro-pneumonia among Americah cattle. one landed at Deptford, the other at Newcastle.

Now is the time to plan farm buildings that are to be erected next year. During the winter supplies of sand and gravel are easily secured for use in the construction of what are called cement walls and floors, which have grown very popular of ate years.

Hon. John Dryden was re-elected President of the American Shropshire Association, at the recent annual meeting. In his annual address, he said that Shropshire interests had been well maintained during the year; that Shropshire breeders had bred and must continue to breed for quality rather than for pedigree.

Another British Royal Commission on Tuberculosis has been appointed, though the first one has never yet reported. The new one consists of Sir Geo. Buchanan, Prof. Geo. T. Brown, and Dr. J. S. B. Sanderson, their duty being to inquire and report what is the effect, if any, of food from tuberculosis animals on human health; and if prejudicial, under what circumstances and conditions ?

President Mills on the Relation of Agricultural Colleges to Farm Life.

STR,—There appeared in the October number of the ADVOCATE, a report of an address on "Agriculture in the Schools," by the Rev. Dr. Bryce, of Winnipeg. In this report Dr. Bryce is represented as saying that "an Agricultural College is an institution for educating agricultural professors. We wan one to educate the farmers' sons and daughters. The worst feature about an Agricultural College is that instead of your sons being educated for the farm, they are educated away from it." Assuming that this report is substantially correct, I take issue with the Doctor, and ask space for a few words in reply.

The Doctor's statement may be true of some agricultural and mechanical colleges in the United States, especially of those which are mere departments of universities, but it is far from a correct representation of the work and tendencies of our Canadian institutions. Speaking for the Ontario Agricultural College, Guelph, I may say that our course of study, the instruction in our class rooms, the work in our stables and fields, the associations, the conversation—everything in and around our College—tends to keep up the connection with the farm, to increase the interest in farm work, and develop the belief that agriculture is one of the most healthful, independent and honorable of all the occupations open to Canadian youth.

Boys who begin the study of medicine occasionally change their minds and become teachers or preachers; so also the young men who set out for To all our readers from the Atlantic to the Pacific, and "beyond the seas," we extend a hearty Christmas greeting. Judging from the many kind expressions we are constantly receiving from all parts of America and the Old Land, we feel assured that our arduous labors are being appreciated, and never more so than at the present time. Believing, as we do, that upon the condition and prosperity of Canadian agriculture the national fabric largely rests, we could not do other than battle for the interests of the farmer and the advancement of farming.

On general questions there is an increasing disposition on the part of the agriculturist to do independent thinking and acting. This is well. The ADVOCATE does not propose to take a hand in party politics, but we counsel our readers to scrutinize closely but fairly the declarations of public men addressed to them. A well-known politician stated not long since to his audience that farmers were now as well off or better than ever before in Canada, for the reason that, though prices of grain had fallen, the prices of what the farmer bought had also fallen, and "the purchasing power of a bushel of wheat was as great as ever." The farmer must look deeper into the question than that. What he has to maintain himself and his family comfortably with, or put by, is only what remains above the cost of production. With the aging of the country, soil depletion, changes in the public demand for foods, shifting markets, etc. (not to speak of the growing cost of conducting public affairs), farming becomes necessarily more elaborate and expensive, and the farmer finds himself confronted with the problem of how to increase the product of his farm or its value, and keep down the cost of production. He must either produce more bushels, sell those produced for more, or else turn his grain into a higher-priced product. These processes require skill and increasing knowledge. The real question for the farmer is not whether the bushel buys as much, but whether the profit he realizes on a bushel buys as much. Hence, the statement of the politician might be misleading. It is indeed a time to think.

In all departments of human activity, and nowhere more so than on the farm, knowledge is power. Speaking before a large convention of breeders assembled a few days ago in the City of Guelph, Hon. John Dryden, the Provincial Minister of Agriculture, in laying down the fundamental principles that should be observed in the establishment of a herd or flock, rightly placed as the first essential the possession of a clear conception of the end which the breeder desires to attain. So it is also in the general operations of the farm. Industry and steadfastness of purpose will go far in winning success against unfavorable odds, but without clear ideas of the end in view, to begin with, and knowledge of how these operations should be directed. and work done under the varying conditions that constantly present themselves, the outlook becomes indeed doubtful. We do not minimize the value of experience, because it is the hard training school through which every man must pass, but men do not stand singly, alone, working independently of all that others do and know. Mr. Mortimer Levering, of Indiana, in delivering a thoughtful address before the same gathering of breeders referred to, contradicted one of our cherished proverbs in the very wording of his subject, which was, "Practice does not make Perfect." Said Mr. Levering, in the course of his observations: "He (the farmer or breeder) must do his work, not exactly as it was done yesterday, but better to-day and with a determination to improve to-morrow. The mere doing of a particular kind of work over and over again in a listless, mechanical sort of way, no matter how long continued, will not make the operator expert or the operation as productive and profitable as it is desired." Speaking of the various advantages by which his hearers could keep themselves abreast of the times, Mr. Levering placed first in the category the Agricultural Press For many reasons, notably in the line of live stock husbandry, we are disposed to regard the out look for the Canadian farmer as decidedly hopeful In the order of Providence, the past season, speak ing for Canada generally, has been a bountiful one. With the application of the principles above outlined, we have no fear for the future, and we counsel our readers to go forward with a hopeful determination to succeed in this the original and Divinely instituted avocation of man. We sincerly thank our friends and able staff of contributors who, by voice or pen, have aided us during the year in increasing the *helpfulness* of the FARMER'S ADVOCATE, and solicit a continuance of the generous support of all our patrons for the future. In thus serving each other, we believe we

DECEMBER 20, 1894

A Practical Friend.

One of our readers living in the Eastern States writes us a most encouraging letter. He says among other things: "I think you are publishing the very best journal for farmers in Canada." Personally interested in farming, and a cheese factory proprietor as well, he knows whereof he speaks. Appreciating its practical value, he sends us the paid up subscriptions, one year in advance, for sixteen of his patrons, realizing that from the factoryman's point of view no investment will give a surer or better return than practical information, coming regularly at short intervals through such a periodical as the FARMER'S ADVOCATE. It will help these men to become better and more successful dairy farmers, and this will benefit the industry in which our factory friend has his money invested. In one sense the ADVOCATE is not a "special purpose" paper, but in another way it is. All our space is not devoted to stock breeding or dairying or horticulture or poultry keeping or grain growing, but we make every one of these departments a special feature in itself. What we give is the cream of the latest and most successful practice. We find that it is quality that counts with our readers in these busy times. We are thankful to our Eastern friend for his appreciative words, which stimulate us to still greater efforts, and can certainly commend the special plan he has taken to circulate trustworthy dairy knowledge in his locality, and will be pleased to hear from others following his example. A man cannot be a first-class dairy farmer without being a good all-round farmer, and we have the testimony of our readers on file, that we have helped them to reach that goal.

Breeders and Feeders at Guelph.

The eleventh annual Provincial Fat Stock Show was held at Guelph on December 11th, 12th and 13th, under the joint auspices of the Agricultural and Arts Association, the Sheep and Swine Breeders' Associations, and the Guelph Fat Stock Club. It was not inappropriately styled the "Smithfield of Canada," on a large banner swung across one end of the commodious Victoria Rink, where the show was held. As a display of live stock it was an immense success, though the weather, which was simply abominable, spoiled the attendance and the gate receipts. The following table shows the number of animals entered in the different classes this year, compared with last :—

0.443	1893.	1894.
Cattle	51	52
Sheep	160	288
Swine		169

Numerically, the cattle display was about the same as last year, but it was hardly up to the other two classes in general evenness and excellence. There was a good increase in swine, and an advance of over 100 in sheep, and a marvellously fine display of dressed poultry. From the experience of the last three years, it is only necessary to look forward one or two years to see the need for a much larger building than what is now used to accommodate the exhibits. It is only two years ago since considerable space was occupied by stock from the College Farm, which was auctioned off during the last day of the show. This year, not only was the entire space well filled with fat stock, but all the space that remained was too cramped to accommodate even the small number of visitors present. It is a source for regret when the most important day of a show knows not even an hour of fair weather; but had Wednesday, the 12th inst., been fine, spectators would have had no place for standing, unless in the galleries. The breeders' meetings passed off most successfully. At the Agricultural and Arts Board meeting arrangements were begun with regard to the Spring Stallion Show in Toronto. An effort will be made to popularize it in the direction of a suggestion thrown out in the last issue of the ADVOCATE. The initial steps were also taken leading toward the establishment of a show of dairy cattle, products and appliances, in Eastern Ontario, to be an equivalent to the East of the Fat Stock Show in the West. On Wednesday evening the stockmen and distinguished visitors were royally entertained at a banquet at the Western Hotel. The City of Guelph received a great deal of well-merited praise upon this occasion, for the efforts put forth in order to make this great annual event successful.

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the legal profession not unfrequently turn aside to other occupations; and the same thing is now and then true of those who go to school or college to fit themselves for farming. An odd one of our graduates becomes a professor at home or abroad, and a few abandon agriculture for other vocations, but the great majority (over 95 per cent.) of those who come to us from the farm return to the farm with increased interest in farm work and farm life. Not only so: a fair proportion also of our town and city students exchange urban for rural life.

Agricultural College, Guelph. JAMES MILLS.

The Tuberculin Test atQuarantine.

A Dominion Government Order-in-Council, requiring cattle coming into Canadian quarantine to undergo the tuberculin test, received the sanction of the Govenor-General on November 16th, but quarantine officers had been notified of the proposed regulations previously.

With regard to those responding to the test, the Order-in-Council specifies that no such animal is allowed to leave the precincts of the quarantine, and the owner can have the alternative of returning it to the place whence it came or having it slaughtered withcut compensation.

At a farmers' club meeting in New York State, the pros and cons of saws and clippers were discussed, and it was concoled that, if the clippers are sharp so as to make no tractores, they may be best, as they do the work quicker. All agreed that dehorning is a great success, and that all cattle ought to be dehorned. Cool weather was preferable.

future. In thus serving each other, we believe we A complete report of the show and various assowill best serve the interests of our common country. ciation meetings held will appear in our next issue.

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FARMER'S ADVOCATE. THE

THE FARMER'S ADVOCATE & HOME MAGAZINI

THE LEADING AGRICULTURAL JOURNAL IN THE

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It 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 and stockmen, of any publication in Canada.

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WINNIPEG, MAN.

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Our Illustration.

The question is often asked, "Is the typical Shorthorn of the present day superior to the best of thirty or forty years ago?" In fact, in various forms this has been the subject of no little controversy. In the way of a pictorial answer to this query, we give on our front page a representation of the yearling Shorthorn heifer "Queen of the May," the property of Richard Booth, Esq., Warlaby, Yorkshire, Eng., for which the first prize of £10 for the best yearling heifer was awarded at the R. A. S. of England, at Chelmsford, in 1856. Our readers who vis ted the Guelph Fat Stock Show a few days ago will still retain in mind the image of some of the winners, which we may regard as being very near our typical Shorthorn. To those and many others who interest themselves in Shorthorn cattle, our illustration will be especially interesting.

The "Queen of the May" was bred by her exhibitor, Mr. Booth; calved November 5th, 1854; sired by Crown Prince (10087); dam (Red Rose), by Harbinger (10297), etc., tracing back to Suworrow (636). She was a beautiful roan, and her conformation seemed to lack nothing to fill the demand for an ideal at that date. She was considered extraordinary in chine and hip, and had a very good back, beautiful head and excellent quality. She was, in short, good enough to please the appointed judges of three of the largest shows of Britain, viz., the Royal Agricultural, Yorkshire Societies' and the Durham County.

British Columbia.

The Royal Agricultural and Industrial Society held one of their most successful exhibitions on October 9th to 12th. The entries were in excess of previous years, and numbered about 4,000. To the management is due much credit for the way it was conducted. The fatality connected with the balloon ascension cast gloom over what otherwise would have been a most delightful day. Such accidents are not necessarily connected with agricultural exhibitions, and it is to be hoped that exhibi-tion boards will soon realize the important priviledge which is theirs, and do all in their power to in-crease an interest in that which is useful, and expend all the moneys at their disposal in encourag-ing industries of importance to the country. The chief advantage of exhibitions should be ever kept in view—education.

The poultry shown were of good quality, and in numbers sufficient to manifest the interest taken in this industry. Ample room was provided, and had the exhibits been arranged properly, much better re-sults would have been possible. While some coops remained empty, in others two cockerels and two pullets were shown, with the four entry tickets attached. In case some of these were awarded a prize, it was impossible to know which bird the judge had placed first or second, and consequently little information could be gained through the ex-hibits so arranged. The main building contained many fine displays made by manufacturers and the detailed mention Space will not perm them even of those especially worthy. Cauliflowers that measured 18 inches in diameter were shown, and of quality fully equal to their size. In very many of the classes of fruit and vegetables were speciof the classes of fruit and vegetables were speci-mens of like gigantic proportions, showing the great productiveness of the soil and favorable climatic conditions for their growth and maturity. The display made by Mr. Sharp, superintendant of the farm at Agassiz, was one of much interest, and which, together with a report of the farm, will be mertioned in a future issue be mentioned in a future issue. Fine displays were made by "Brunette saw mill" and "Royal City planing mill" and various manu-facturies such as shingles, doors, sash, mouldings, etc., for which British Columbia enjoys a world wide reputation. A most complete incubator, manufactured by Mr. Smith, of Chilliwack, was shown in operation, and when the writer saw the result of the hatch, which, under such conditions, could not be expected to be the best, it was so successful in every particular that certainly nothing better could be desired. The chicks were strong and lively, and in such numbers as to make some people wonder if there was any magic attachment by which two chicks were produced from every egg. The price of poultry products here, the necessity of such an appliance in obtaining best results, and the completeness of this machine chould containly stimulate this inductor machine, should certainly stimulate this industry. Mr. Smith's experience in poultry raising has enabled him to produce an incubator that is almost perfection. The horse exhibit was somewhat limited in numbers, although some good individuals were shown. On the whole, the interest which generally characterizes this important part of exhibitions was lacking. The cattle were represented by several breeds. In Shorthorns, those of W. H. Ladner, of Ladner's In Snorthorns, those of W. H. Lather, of Lather's, Landing, carried off the greatest number of awards, the herd prize going to H. F. Page, of Matsqui, who also won nearly all the prizes for Holsteins. Jersey prize-winners were shown by Thos. Foster, M.P.P., T. R. Pearson, E. Goudy, Brehant & Booth, and A.

C. Wells & Son, of Chilliwack, who were also the most successful exhibitors of Ayrshires. Thos. Shannon, of Surrey, and Isaac Kipp, of Chilliwack, also competing successfuly the latter breed. Guernseys were also shown, Isaac Kipp and W. Knight dividing the honors.

The sheep, speaking generally, were not in show shape. In Southdowns, J. T. Wilkinson's flock ob-tained nearly all the awards. Wm. McKee showed Cotswolds; W. Grimmer and Isaac Kipp exhibited Shropshires. In Oxford-Downs, H. D. Benson, Ladney's househt forward a number to kine all the Ladner's, brought forward anumber, taking all the prizes in this class, all the awards in the Lincolns going to W. Grimmer.

Not many pigs were shown, the Berkshires being most numerous, and having among them some good representatives of the breed, Black Jim, No.—2778 bred by Robert Marsh & Sons, Richmond Hill, Ont., and owned by Thos. Shannon, Cloverdale, carrying off the silver cup for best boar, any breed, compet ing with much older animals. Other winners owned by Mr. Shannon were Model Duke 3rd and Daisy 2337-, the latter being bred by himself and always heading the list, having taken first in '92, '93 and '94. Cloverdale Belle 3263—, April Lily 3530—, were also first in their respective classes. Mr. Shannon's herd is one that is likely to improve under his management, and take a still more prominent posi-tion among the breeders of the West. He is also interested in poultry, for which he was awarded several prizes.

(TO BE CONTINUED.)

The Farmer's Advocate Appreciated.

The other evening I heard an old settler and practical farmer (in his own estimation only) say 'Experimental Farms were of no use, and only an expense to the country." Well, sir, as this is most misleading to new-comers (called green settlers), I wish to give my own experience. In May, 1892, I landed in Montreal, from Scotland. I travelled west to Brandon and there visited the Experimental Farm, and gave the man who showed me around a lot of trouble, as he had to answer a thousand questions, as I had not seen an Experimental Farm eport at that time, and wished to learn all I could. From Brandon I continued my western journey to Broadview, where I found 160 acres of fair land awaiting an occupant, and where I at once comawaiting an occupant, and where I at once com-menced work as a farmer. My previous experience in farming having been limited, if I had followed the advice of some of the so-called *practical* farmers I should have got left, as many others have been. One recommended his wheat (Lodoga) as the best for this country, being early, and making the best flour, etc. Another would have me buy his Black. Tartarian oats, as being the best in the Dominion. Tartarian oats, as being the best in the Dominion. The seed catalogues, of which I received a number, all had something superior to the common oats, ranging in price from \$1 to \$3 per bushel. As I had made up my mind to start with the best, it was going to cost me quite a few dollars for seed. But luckily, one of my neighbors, thinking that I was, like himself, willing to learn, handed me a few old FARMER'S ADVOCATES, and here I found reports of the Experimental Farms:

Brandon Farm reported Red Fife Lodoga Indian Head Farm " Red Fife Lodoga 28 " 20 " 20 " 31 bu. 50 lbs. per acre. 28 " 20 " 33 " 20 " 30 "

Do you suppose I bought Lodoga seed that No, I bought Red Fife, instead, and in 1893 oring? my wheat was chosen to send to the Winter Fair at San Francisco, as the best in this district

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Clubbing Rates for 1895.

Our subscribers may obtain any of the papers
montioned below at the following price:-
FARMER'S ADVOCATE and Home Magazine and
Manitoba Weekly Free Press
Manitoba Weekly Free Fress
Manitoba Semi-Weekly Free Press
Winning Weekly Tribune 175
Winnipeg Weekly Nor'wester
Toronto Evening News
Toronto Evening News
Toronto Dally Hope, multing current
Toronto Daily Globe, second edition + 0.
Toronto Empire daily
Tononto Empire, evening edition
Toronto Weekly Globe (12 pages)
Toronto weekly Globe (12 pages)
Tomonto Weekly Fillblic.
London Free Press, weekly edition 1 /
London Advertiser, weekly 1 (
Montreal Weekly Witness 1 6
Montreal Weekly Witness.

This year I find the *practical farmer* and adviser has no Lodoga, but Fife wheat. I consider this piece of information alone was worth \$50 to me.

I also took advice from the Experimental Farm reports, and commenced with Banner oats, and find no difficulty in selling my spare oats at 10 cents above market value of common oats.

It was through your paper, the ADVOCATE, I got these Banner oats at a reasonable price from a farmer. This also has been worth a lot to me; also a host of other wrinkles I have learnt, viz., proper quantity of seed per acre, spring vs. fall plowing, method of applying bluestone, etc.

I consider Experimental Farm reports, in the book form, as sent out, worth \$100 to any new-comer, and if it had cost me that amount I consider I would have got good value. It seems possible for some people to know too much (in their own opinions), and have no use for a farm paper or experimental farm report. I say, let them plod on in the dark if they are content, but they should avoid misleading R. ROBINSON, Broadview, Assa. others.

FOREMOST IN ADVOCATING THE FARMERS' INTERESTS.

FOREMOST IN ADVOCATING THE FARMERS INTERENTS. Please accept enclosed cheque as subscription on ADVO-CATE. I would not like to be without the ADVOCATE, as it stands foremost in advocating the interests of agriculturists, and is a great factor in keeping the farming community abreast with the times. J. J. KING, Crystal City.

Dairying in Russia is about to undergo a change for the better. The Minister of Agriculture finds that there is an increasing demand for butter and cheese in European markets. England has morted twenty per cent. more butter during the past five years than it did formerly, and he proposes to foster this branch. The Government has decided to assist the Russian milk industry by introducing competent foreign teachers, and to "extend credit for the establishment of butter and cheese fac-tories." The transport of these commodities by rail will also be improved.

The Need of a Dairy Superintendent for Manitoba.

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Ten years ago, any one venturing the opinion that No. 1 Manitoba Hard wheat would sell for less than 40 cents per bushel in 1894, would have been regarded as an object of pity, but now it goes without argument that if Manitoba agriculture is to be a success, the farmer must produce other products for export as well as wheat. We cannot hope to compete against the cheap water transportation, and cheaper domestic labour of Russia, India and Argentina, except in a limited way, trading upon the extra quality of our wheat for "mixing" purposes.

Just what these other products will be is the question now occupying the mind of the average Manitoban.

Prof. Robertson recently expressed the opinion, on a public platform, that within ten years a substantial revenue would be derived from the production of sunflower oil. At the present time, flax looks as though it might enjoy, in the Prairie Province, the privilege of being a profitable substitute, in part, at least, for wheat. In the minds of a few, two-rowed barley for the English brewer holds out brilliant prospects, while there are not lacking those whose faith in beef, mutton, and even horses, has as strong a hold on them as ever.

But whatever the chief export products will be, certain it is that those products requiring the greatest skill in their production will meet with the least competition. No product of the farm requires so great skill in its production as butter and cheese of high quality; besides, the greatest value is condensed into the least bulk, costing the producer the least proportionate freight. These products rob the soil of the least amount of fertility, and in these products the cheap labor of Russia, India and Argentina can never compete.

Hand in hand with dairying goes the production of pork, which, if of a good enough quality to reach the best English market, appears capable of

almost unlimited expansion. That many parts of Manitoba are well adapted to dairying is now admitted, especially those districts where good water and pasture abound, and such eminently practical men as James Elder and S. A. Bedford hold the opinion that even those districts where pasture and hay is limited, can be success-fully converted into dairy districts by the cultivation of corn and other fodders.

While inestimable good has resulted from the work of the local and Dominion travelling dairies, yet they have only whetted our appetites, and we venture to say that, were the same routes traversed again next season, the attendance at meetings would be doubled.

Now, while Prof. Robertson will doubtless do a great deal for the advancement of Manitoba dairv interests, it appears to us that a man living right in the Province, whose whole time would be exclusively devoted to this work, could do even more than it is possible for Prof. Robertson to accomplish.

At the convention of the Manitoba Central Farmers' Institute, the following resolution was carried, on motion of W. B. Underhill, of Melita:

"That, inasmuch as a very great interest is being devel-d, through our travelling dairies, among the farming com-

Chatty Stock Letter from the States. Receipts of cattle, hogs and sheep at the four principal western markets for the first eleven months of 1894, with comparisons :

Eleven Months.	Cattle.	Hogs.	Sheep.
Chicago	2,758,583	6,748,146	2,819,754
Kansas City	1,569,112	2,330,934	544,890
Omaha	762,463	1,799,025	228,986
St. Louis	610,032	1,038,263	269,662
Eleven months, 1894	5,700,145	11,916,068	3,863,292
Eleven months, 1893	5,915,307	9,209,671	3,896,723
Eleven months, 1892	5,924.964	11,447,928	2,854,615
Eleven months, 1891	5,295,278	11,877,450	2,863,243

Combined receipts of hogs at Chicago, Kansas City, Omaha, and St. Louis, last month, 1,529,745, against 836,471 a year ago, and 1,554,427 three years ago. While the receipts at the four markets thus far this year are the largest on record, the total for the twelve months will fall at least 500,000 short of receipts for 1891, when the four markets received 14,200,000.

KLEVEN MONTHS' M	OVEMENT	S AT CH	ICAGO.
Receipts.	Cattle.	Hogs.	Sheep.
Total, 1894 Total, 1893 Total, 1892	2,758,538 2,908,049 3,282,476	6,748,146 5,431,244 7,049,796	2,819,754 2,801,747 1,987,142
Shipments – Total, 1894 Total, 1893 Total, 1892		2,291,505 1,946,972 2,707,811	297,005 420,856 455,249

Actual receipts of hogs at Chicago last month, 36,896, the largest since January, 1892, when 977, 334 were received. Average weight of hogs for November, 235 lbs., against 232 lbs. for October, 262 lbs. for November, 1893, and 235 lbs. for November, 1892.

The first eleven months of 1894, Chicago received 12,461 more cars of stock than arrived the corresponding period of 1893, or a total of 263.380. being nearly 24,000 per month.

W. H. Renick, of Austerlitz, Ky., who was a prominent exhibitor at the Fat Stock Show, had 9 head of 1,420-lb. Shorthorn cattle sold to Swift at \$6.50, with one 1,150-lb. heifer at \$5.50. Other cattle exhibited at the show sold as follows :-Burr & Son, Davenport, Iowa, 1 Shorthorn, 1,680 lbs., \$6.50; H. J. Fluck, Goodenow, Ill., Hereford steer, 1,860 lbs., \$6.50; Adams Earl, Lafayette, Ind., Herefords, one steer, 1,580 lbs., one 2,100 lbs., one 1,600 lbs., one 1,230 lbs., all at \$6.371; 1 calf, 810 lbs., \$5; B. R. Pierce, Creston, Ill., 2 Angus steers, 1,420 and 1,460 lbs., at \$6.50; W. S. Niles, Wyoming, Iowa, 1 Angus, 1,390 lbs., \$6.25; John Hudson, Moweaqua, Ill., 2 Devons, 1,170 and 1,280 lbs., at \$6; A. E. Baker, Beaver Dam, Wis., 2 Angus, 1,350 and 1,500 lbs., at \$5.50 and \$6.

R. J. Stone, of Stonington, Ill., and G. Brick, of Paw Paw, Mich., had some fancy show sheep and lambs on the market this week. Mr. Stone's sheep averaged 174 lbs., at \$4.25; and lambs, 96 lbs., at \$4.50. Mr. Brick's sheep weighed 144 lbs., and brought \$4.25; lambs, 85 lbs., and sold for \$4.50. A carload of extra fine Polled Angus steers, 14 head, as fine as any of the cattle exhibited at the Fat Stock Show, sold on the Chicago market to a New York butcher for fine holiday trade at \$6.60, being the highest of the year, and within 15c. per 100 lbs. of the top last year. The lot averages 1.714 lbs. Nearly 400,000 Western range cattle were received at Chicago this year, and over half, or 236,-655, were "Montanas." Dakota followed next in point of numbers. Receipts of Westerns were the largest on record. A public sale of Polled Angus cattle, owned by J. P. Hine, was held at the Stock Yards last week. Bulls sold at \$30 to \$125 per head, and cows and heifers at \$25 to \$100, bulk around \$50. All the Eastern and Western markets have been glutted for some time past with pigs and unmatured hogs, which are a drug on the market, depressing prices for the better grades. A year ago Eastern dealers were compelled to come West for supplies, but this season they have too many in their own territory. Wednesday, Dec. 6, Armour & Co. purchased 8,500 hogs, averaging 250 lbs., that cost \$4.49 per 100 lbs., the lowest of the year, and, in fact, since May, 1892. A well-known speculator, speaking of the situation in the hog business, says :-**Receipts** this month will be as large as last month, but provisions should be bought. This corn crop, the necessities considered, is the shortest ever raised, and it is natural, enough the hogs should be marketed as quickly as possible. But there is certain to be a scarcity of both corn and hogs next spring.

DECEMBER 20, 1894

Our Scottish Letter.

It is characteristic of the pluck and energy of Scottish farmers that, although the demand for horses has seldom been worse than at the present time, they are, if possible, more active than their wont in hiring good animals for service during the ensuing season of 1895. The extraordinary collapse in the foreign demand cannot be better illustrated than by the simple fact that while in 1890 no less than 1,500 pedigreed animals were passed through the books of the Clydesdale Horse Society, during the year now closing the whole number reported for exportation does not exceed a score. This remarkable shrinkage tells its own tale, and the home trade would be sufficiently affected by it were other causes absent. The tables, however, have been completely turned. Not only has the export decreased as indicated, but we are now importing almost as many horses as five years ago we ex ported. Sales of Canadian horses have been held in Glasgow for several months now, and while the heaviest class of draught horses are not over numerous, the supply of the lighter draught and heavier express horses interferes seriously in bad times with the demand for the second-class of home-bred animals. Realizing the changed aspect of affairs, breeding societies are keeping the heavy draught market in view when making their selections Close upon thirty horses are under hire at the time of writing (24th November), and the highest terms have been paid, as in former years, by the Rhins of Galloway farmers, who, determined to lead, have engaged the veteran MacGregor 1487 at ten guineas (£10 10s) per mare—foal or no foal. Both of the neighboring districts in the same county, Newton Stewart and Port Williams, have made choice of "crack" animals. The former has secured the celebrated champion horse, Prince of Carruchan 8151, the Cawdor cup winner of the year, and unique in this respect that he has never won a second prize ticket. He was first at the H. and A. S., Dundee, 1890, when first seen in public ; first in the following year and champion at the H. and A. S., Stirling; first in 1893 and champion at the H. and A. S. Show at Edinburgh, and first and winner of the Cawdor challenge cup at the Scottish Stallion Show in spring, 1894. He has been in Forfarshire for four seasons in succession, and now changes into Wigtonshire. Gradually he is working his way to the front as a breeding horse, and this season he stands in the first six sires of the Clydesdale world. The Port William Society have selected the best known two year-old of the season, Royal Gartly 9844, which had an unbroken career of success until the H. and A. S., at Aberdeen this year, when he was placed second to the MacEachran. He is the highest priced colt of the season, and is now the property of Messrs. P. & W. Crawford, Dumfries, who also own Prince of Carruchan. Besides MacGregor, Mr. Andrew Montgomery, or his brother, Mr. William, has hired the MacKerrall 9304 for a second time to Kelso district; the McVinnie 9318 to the Lower Strathearn district, and the MacAndrew for a second term to the Stratherd and Scone district. also in Perthshire. These three horses are sons of MacGregor. To the Kirkcudbright district, for a second term, the Messrs. Montgomery have hired the H. and A. S. champion, Barou's Pride 9122, a son of Sir Leonard; and to the Lockerbie district, the fine, strong, solid horse Belvidere 9138, which was first at the H. and A. S., Inverness, in 1892, and was the Stirling premium horse in 1393. All of these horses are solid, massive animals, quite different from the half Hackney type, which sometimes has been fancied by show judges. And yet, in respect of show points these horses are quite able to hold their own, and have greatly distinguished themselves. A good many stallions are still on the road, got by Prince of Wales 673. To one, reference has already been made. The others already under hire are Mr. Lockhart's fine horses, Mains of Airies, and Handsome Prince, both of which go to Forfarshire. They are full brothers, their dam being the magnificent mare, Pandora, by Darnley 222. The former succeeds Prince of Carruchan, in the Strathmore district. Mr. Renwick's celebrated Prince Alexander 8899, for another season has been secured to serve in Gervain and Ayr district, on very handsome terms. He, too, is promising well as a breeding sire, and is rapidly coming to the front in that respect. The Cawdor Cup horse, Prince of Kyle 7155, owned by Mr. Kirkpatrick, has been hired for service in the Kippendavie stud. He, too, is guaranteed liberal terms, and is breeding well. A strong, big horse, Crown and Feather 8559, goes from the Eastfield stud to the Carse of Gowrie, in Perthshire, and Prince of Scotland 8926, from the Banks stud, goes to Central Banffshire. Mr. Marshall's Prince of Garthland 9828, second aged horse at the H. and A. S., Aberdeen, this year goes to Dumbartonshire. Altogether, eight sons of Prince of Wales are this year under hire. Amongst the other engagements are Lord Colum Edmund 9280, to West Lothian; Prince of Fortune 9826, to Central Aberdeenshire; Gold Mine 9540, to Stirling ; his sire, Goldfinder 6807, to Dum-fries ; Top Knot 6360, to Biggar and Peebles ; Prince of Erskine 9647, to Turriff, in Banffshire ; Brooklyn 6547 to Cupar and the north of Fyfe; a very good young horse by Prince Robert 7153, to Girvan and Ballantrae the splendid young horse, the Loyal Standard, to the Lower district of Renfrewshire, and the choicely bred horse Vanora's Prince 9461, to Kilmarnock. One-third of all the horses engaged are out of Darpley mares, and only one is out of a Prince of Wales mare. It is hardly possible for Canadian readers to appreciate the character of

open, through our traveling darres, among the farming com-munities of our Province, and a strong desire exists for very much further development on these lines, and we feel that the time is now opportune; therefore, be it resolved, that this In-stitute strongly impress upon the Honorable the Minister of Agriculture, his very careful consideration of the practicability Agriculture, his very careful consideration of the practicability of securing permanently for such work, a first-class, all-round dairy expert, who would not only be competent to instruct in the manufacture of dairy products, but who could, by practical experience, assist our farmers in building up a system of co-operative dairying." operative dairying.'

The intention of this resolution, as we read it, is to have a DAIRY SUPERINTENDENT appointed for the Province, whose duty it would be to direct and supervise any and all work undertaken by the local Government for the encouragement of the dairy industry; to assist in the formation of joint stock companies to carry on co-operative factories in districts where there was a reasonable assurance of such factories being a success, and through traveling dairies in summer and Farmers' Institutes in winter, assist the farmers' wives in improving the quality of home dairy butter, which in many dis-tricts will have to be the stand-by for some time yet, and to assist in every possible way the building up of this industry upon a substantial foundation.

To be of any real service, this man would have to be thoroughly practicable, a master of the science of modern butter and cheesemaking, including a thorough knowledge of all the machinery and appliances used in factories and in home dairies, as well as being able to address meetings and attend to the other duties that would come under his division of the Department of Agriculture. Such men can be got in the East; men trained at the Ontario Agricultural College, or under Prof. Robert-

son. The only question there can be about such an appointment would be the expense. Yes, there would be expense, but if anyone can tell us how the Manitoba Provincial Government can invest a very small portion of the money withdrawn from the Immigration Department, to better advantage in the interest of the farmers, and eventually in the interests of immigration, we should like to hear from him.

Feed at regular intervals, changing the food occasionally and cautiously.

It is easy to stunt a growing animal, but by no means easy to undo the evil. Bear this in mind

Save the stable manure, and bear in mind that the liquid part of it is the most valuable. Enough is frequently wasted to pay a harvest hand.

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THE FARMER'S ADVOCATE.

A Reminiscence.

these horses from the few notes given, but they will at least know something of the blood which still is telling, even when heavy, big horses for the lorries are being aimed at.

I had purposed saying something in this note about the good trade experienced in sheep this fall, but perhaps enough has been written on that subject in former letters. We are now looking forward to the great fat stock shows. The first is over. It took place at Norwich, and the Queen's Hereford ox was placed champion. SCOTLAND YET.

Feeding Young Stock.

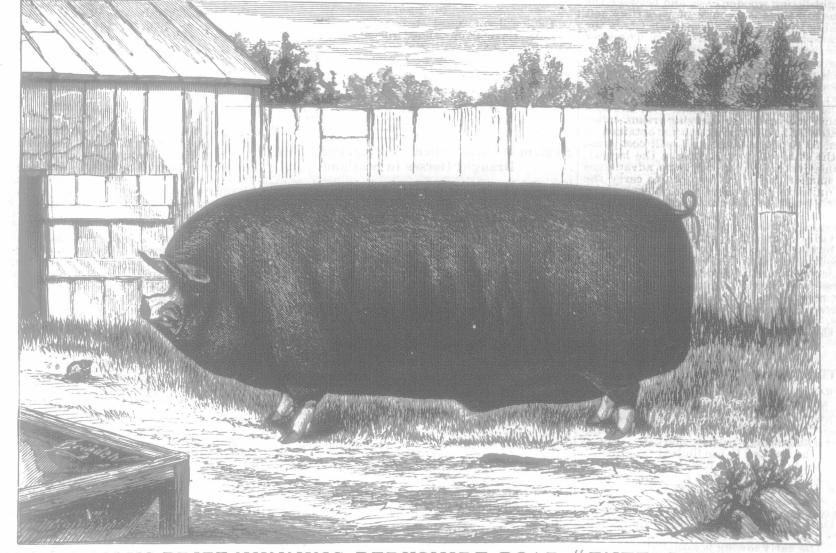
It is a mistake to run the heifer and steer calves together, giving them the same feed and treatment. One class should be cared for with one object in view, while the other will have an entirely different function to perform. Steer calves should be fed so as to obtain the greatest amount of growth and flesh at the earliest possible age, without sacrificing vigor. The heifer should be fed so as to give her a good sturdy growth without fattening. It is a con-firmed fact that over-fattening in a calf materially lessens milk secretion, by closing to some extent the lacteal ducts. Therefore the folly of such a course is evident, as fat cannot be produced without rich food, and when it is produced the result is injurious to the animal as a money-maker. Now, as to the difference in feeding heifer and steer calves.

Accept my thanks for the interest taken in my friend, Amos Cruickshank. I read late copies of the ADVOCATE with great interest, for there is no man I respect more. What you have said was not too much and just enough. Worthy and straightforward, I respect no man more. I have had a great many transactions with him, and after receiving the last importation, I wrote asking him if everything was satisfactory, as it was likely to be our last deal. He replied as follows : "I am quite satisfied with the statement, and, taking a retrospective view of our transactions for so many years-and they have been very extensive-it seems marvellous that things have gone on so smoothly; not a jar on either side. It is cause for thankfulness, and I don't want our correspondence to drop."

The first cattle I imported was in 1871: five heifers, all in calf. Was disappointed in getting one. After their passage was made, a cousin of mine bought Matchless 16th from Mr. Cruickshank. He let me have her. She was a shabby little beast, and some of the others cost three times as much, but it was not long until she could compare favorably with any of them. The first calf she had was by The latter should make very satisfactory growth on Imported Statesman (32607), a bull I bought of the and sweepstakes for the best Berkshire barrow.

Our Extra Illustration.

We give in this issue, as an extra live stock illustration, an engraving of the imported Berkshire boar Enterprise -1387- owned by J. G. Snell & Bro., Edmonton, Ont. Enterprise is, perhaps, the best known Berkshire in Canada. For the past four years he has won first prize at the Toronto Industrial Exhibition, also sweepstakes for best Berkshire boar of any age. Enterprise was bred by T.S. Minton, Moulford, England; farrowed Jan. 4th, 1887, and was imported in the fall of 1890. Just after landing he weighed 850 lbs. With his great size, he was always active and strong on his legs. He is long, broad and very deep, with wonderful back, good hams, and smooth shoulders. The Messrs. Snell say they never owned a boar with such a good constitution, with more aptitude to fatten, always in good humor, and ready to eat in a way which every practical hog breeder appreciates. He is still active, smooth as ever, and doing good service as a stock getter. He transmits his feeding qualities and smooth finish in a great degree to his get, and in his owners' estimation is the best breeding boar in Canada. At the Fat Stock Show at Guelph, last year, one of his get won first prize in his class,



THE FAMOUS PRIZE-WINNING BERKSHIRE BOAR. "ENTERPRISE" -1387 OWNED BY J. G. SNELL & BROTHER, EDMONTON, ONTARIO

quantities, ground finely and fed with ensilage or pulped roots, will produce rapid growth with a good deal of flesh. The heifers' grain food, which should not be more than half the quantity fed the steers, should be largely oats, although a little oil-cake or ground wheat may be added with good effect. The object should be to get all the growth possible, with plenty of muscle, and as little fat as can be produced.

Is is the tendency of the day to have heifers come into milk from eighteen to twenty-four months old, but a serious blunder may be made just here, by breeding a small, delicate heifer too young, and thus start a line of stock susceptible to disease. There is, perhaps, a more common mistake made by too conservative breeders allowing their heifers to run idle till they are thirty months to three years old, when the milking function will be very much weakened. This latter mistake is often made by men who have been previously engaged in beef raising, and have changed to dairying.

The largest plow in the world, perhaps, is owned by Richard Gird, of San Bernardino County, California. This immense sod turner stands eighteen feet high and weighs 36,000 pounds. It runs by steam, is provided with twelve 12-inch plowshares, and is capable of plowing fifty acres of land per day. It consumes from one to one and a-half tons shook hands with a better man than Mr. Cruickof coal per day, and usually travels at the rate of shank. four miles an hour.

ensilage or roots, hay and grain, all they can eat up | late Mr. George Isaac. I sold her to a gentleman in | The ADVOCATE said of him: "This was a hog of med-cleanly. The grain: peas, barley and oats, equal | Iowa for \$500.00 in gold when fifteen months old, | ium size, but so full of quality that he was admined and she would have been a good investment at four times the money. Her descendants have been prize winners in Canada and the United States. I merely mention this, as some think the man that pays the most money gets the best beast, which is not always the case. Mr. Cruickshank's cattle were all bred as represented, which no doubt was the cause of his success, coupled with his good judgment in selecting the right sort of animals, which I think few will be disposed to dispute at this time. My transactions with Mr. Cruickshank extended from 1871 to 1886, when the pleuro-pneumonia broke out at the quarantine, Quebec, and were then terminated, as I did not feel inclined to take any risk. It was always a pleasure to do business with Mr. Cruickshank. When he concluded to dispose of his herd, he made me the first offer of them, and I had no difficulty in getting a company up to buy what portion of the herd was suitable to come to Canada and the United States. Perhaps 120 cattle would have come had the arrangement been carried out. There were ten of us in it, and when the time came, some changed their minds, so I cabled Mr. Cruickshank to that effect, which was better for him, as he sold them more advantageously afterwards.

In the ADVOCATE of Nov. 15th you gave a true sketch of him, and of the Duke of York shaking hands with him. I can safely say he never Yours truly,

JAS. I. DAVIDSON, Balsam, Ont.

ium size, but so full of quality that he was admired by everyone who saw him. His outline was nearly perfection, his flesh smooth and evenly distributed ; his back well covered, his sides deep, and lower line straight. He had all the indications of a strong constitution ; stood well upon his feet, and was well brought out."

"A good, enterprising dairy farmer is a blessing to his neighborhood, if he is a generous, public-spirited man. If he is willing to show his neighbors how he has won success, and where he made mistakes, he helps the community about him to earn and save many dollars every year. Too many successful men are selfish and narrow. They seem to think that they would be made poorer if they instructed less fortunate men how to succeed. Then, too, on the other hand, many are jealous of a successful farmer. Go into any farming neighborhood and one will hear the poor farmer sneer at the successful ones. This is little boys' work. No man is better off because his neighbor is poor, nor is any man the poorer because his neighbor is honestly rich. Lawyers hang together, and hence lawyers are a power in the community. Farmers too often tear each other down, hence they have too little influence. Stand by each other."-[Hoard's Dairyman.

A Letter from Mr. E. A. Struthers.

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DEARSIE,-I duly received your letter of Nov. 24, in which you refer to the short paper I was asked to furnish the Manitoba Central Farmers' Institute, describing somewhat the operations of our cream-ery here at Russell. I certainly think, from the correspondence we are receiving here constantly, that the people are inclined to go a little cream-ery-mad, and it would be unfortunate should they go through the same experience that the farmers of parts of Iowa, Nebraska and Dakota have gone through, to wit, the establishing of creameries and cheese factories, at a very heavy expense, where there was little possibility of their succeeding, owing to the want of patronage and the sparse settlement of the country. You ask me, for the benefit of your readers, to describe the best appliances for conveying milk and cream to the factory. I do not know that I can describe the best appli-ances; however, I can give you a description of the cans and tanks we have been using, and I may say, that in using these appliances, we have found that we were able to deliver the raw material at the factory in first-class condition, if we received it in such a state at the farmer's door.

such a state at the farmer's door. The can used at Dr. Barnardo's Creamery is the "Curtis Refrigerator." We have it in two sizes-20 gallons and 30 gallons. The can proper is circular, and is supplied with an ordinary tight-fitting and sliding cover, similar to the old-fashioned factory milk-can, which moves upward as the cream is poured into it. The can is surround-ed by a tight-fitting wooden case, and between the ed by a tight-fitting wooden case, and between the case and the can there is a course of very thick felt paper, making two complete air spaces between the paper, making two complete air spaces between the outside atmosphere and the tin of the can. The cover is flanged so that it fits tightly into the can, and clamps fasten this cover securely. The weight of the 30-gallon can is probably 75 lbs., while the weight of the 20-gallon can is about 50 lbs. The cost of these appliances: for the 20-gallon can, about \$8.00 at the factory, and for the 30-gallon, \$9.50." We are also using another receptacle for carrying cream, called a refrigerator tank. This tank can be obtained in sizes from 80 to 250 gallons, and will cost from \$23.00 for the smallest, up to \$45.00 for the largest. The appliance just described has some advantages over the smaller cans, and appears to carry the cream in quite as good condition; however, for rough prairie trails, I fancy the smaller receptacles are better suited to the work, and, although there is more washing, there is a possibility of separating different grades of cream, supposing it was found necessary by the collector to do so. Our patrons who are delivering milk, use the ordinary milk-man's can, containing all the way from 5 to 10 gallons. These cans may be purchased in the country at a very reasonable price; however, in districts where cheese factories have been succeeded by creameries, there is no reason why the cheese factory cans should not be kept on in use. E. A. STRUTHERS.

Timely Notes for December. WHEAT VERSUS TWO-ROWED BARLEY.

In Nov. 20 issue, Mr. McWatt makes out a strong argument for two-rowed barley. I "beg to second that motion," and also the suggestion that the Do minion Government help us to a market. But if they cannot, the market is too limited for growing it on a large scale, except for feeding, and to those of us who take pains in securing a bright samplesuch as the brewers want—it seems a sin to "cast our pearls (of barley) before swine." I have not found it yield better lately than Six-rowed, and think the Duckbill preferable to Prize Prolific, but of course, soils differ, and Mr. McW.'s may favor The early sowing is essential, and a late the P. P. spring frost seems but to make the barley "take a fresh hold." For fattening pigs and cattle, give me barley meal every time before wheat, and our land, will continue to give forth her increase, when if cropped continuously to wheat, it would run out in ten years. Ordinary wheat land, giving a crop of 20 bushels to an acre, with equal care will generally give 40 bushels of barley. The best wheat is worth to-day, 43 cents; the best barley, 30 cents, or \$8.60 gross return from an acre, instead of \$12 from the In feeding value, the barley is worth barley crop. fully 30 cents if wheat brings 35, except for milking cows, when I would give the wheat In other words, it would pay to sell the wheat at 43 cents, as now, and buy barley at 30 cents to feed to the fattening stock. It is also a safer feed.

have not been touched on, and no apology is needed trade facilities with our neighbors and with the rest of the world, deepen the canals, improve the ship ping accommodation at Port Arthur, the customs restrictions at Kingston and Montreal, and such other really helpful works, and we will sleep sound, even if the H. B. is never built.

A REFRESHING VISIT.

I had the pleasure of passing an evening and night at the home of an "old settler," down in Kil-donan, a short while ago. It was a good many years since I had been in such a quiet, home-like place, and every year these peaceful homes seem to be getting scarcer in Manitoba. It isn't the comfort, the wealth or the prosperity of Manitobans that is retrograding, but is it not a fact that we more seldom come across the united families, where the father is the head and counsellor and priest of the house; where the hired man is treated as one of the family, and doesn't presume on it; where the chil-dren know a *little less* than the parents, and heed them; and lastly, where the day's labors are closed by family prayer and reading of God's word. Such scenes are still common in the Old Land, but in this Canada of ours, alas ! how rare. The following lines by a poetess-now seldom read-occur to me:

Oh! prayer is good when many pour Their voices in one solemn tone; Conning their sacred lessons o'er, Or yielding thanks for mercies shown

Then can we firmly lean on Heaven, And gather strength to meet and bear; No matter where the storm has driven, A saving anchor lives in prayer. -Eliza Cook

GENERAL.

Don't sell your good steer hides for 11 cents per pound. Have them tanned for robes, and so save hardship in driving.

Look out for clean seed from new land for next vear.

A merry, merry Christmas, And a happy New Year, A pocket full of money— And a cellar full (not of beer)— But of potatoes dear. "INVICTA."

System of Management in Breeding Studs of Draught Horses in Scotland.

[Compiled from a paper prepared by Archibald MacNeilage, Secretary of the Clydesdale Horse Society.]

Continued from page 453.

The second class of mares--those kept both for work and breeding-is, it may well be supposed, in Scotland much more numerous than the last under notice, and considerable diversity prevails in the treatment of these mares. On one point there is, however, absolute unanimity amongst breeders, viz., that mares in foal should be carefully worked in cart-yoke, at all times; should not be "backed," and for two or three months before foaling should only be worked in plough, and more and more leisurely and carefully as the foaling time draws near. At the same time there is equally general agreement amongst breeders that mares thus carefully handled have usually the easiest foaling time, and the strongest, most thriving and healthy foals. All this is perfectly intelligible, and in accordance with nature. The natural state of the draught horse is one of labor; and while the class of mares first considered cannot be said to lead an unnatural ex-istence, there can be little doubt that the third class—mares for exhibition—undoubtedly do so.

the Linkwood stud, the ordinary rations for In work-mares in foal are 168 pounds bruised oats to the pair per week, with a small allowance of Swedish turnips, and hay ad libitum. A small proportion of Epsom salts, about 2 oz. each, is given occasionally on a Saturday night, and in Aberdeenshire it is cus tomary, about a month before foaling, to give more laxative food, such as bran and linseed, than at an earlier date. The Earl of Strathmore has a stud of fourteen breeding mares, all of which are wrought at ordinary farm labor, and treated, up to the time of foaling, as already indicated. After foaling, and while nursing, they are hand-fed at first with mashes and soft food, and later on, as harvest approaches, with oats. I do not think it is general to hand-feed mares while nursing, but the course followed in Mr. Morton Campbell's stud, of giving such mares a feed of oats night and morning, if in low condition, is probably not exceptional. Mr. Bisset, the able farm manager at Balbirnie, is strongly in favor of a bite of good grass as the most favorable food for mares, immediately before and after foaling. Mares that foal early and have little nourishment for their offspring, are generally fed on sloppy food, consisting of boiled barley, oats, turnips and cut hay, mixed with some meal. Bran is considered specially valuable for this purpose, and can never be dispensed with. The quantity recommended by Mr. Lumsden is as follows : One lb. oats, $\frac{1}{2}$ lb. barley, 1 lb. bran, 1 lb. bruised oats and 1 lb. cut hay and straw, with a few turnips and a little salt and treacle, three times a day. There are, however, mares whose milk is alike plentiful and strong, causing diarrhœa in the young toal. This is an evil to be guarded against, and it is found useful in such a case to put the mare on dry food and straw fodder, and if at grass, she is put on the oldest, where it is least succulent, and sometimes it might be advisable to drain off some of the milk by hand. These cases are, however, compara-tively rare, and exceptional treatment of this kind is therefore not much called for.

for a somewhat detailed account of the management of a Kirkcudbright stud, which has an enviable record for its success in rearing foals. Mr. Houston, Overlaw, has a stud of seven breeding mares, all of which do their full share of farm work and are not exempted from labor for an hour, until they come to the foaling. For feeding during preg-nancy they get bruised oats and linseed cake, with Swedish turnips and fodder in abundance. A little boiled food seasoned with "horse powder" is given to each mare twice a week. Mares, while nursing, are not hand-fed, but after a mare has again been stinted, she may get a proportion of bruised oats and linseed cake, both for her own sake and the foal she is nursing, as well as to strengthen the future offspring. One remarkable feature in the future offspring. One remarkable feature in the mares in this stud is that they are not infrequently spoken of as being too fat, and in spring, when the foaling season is coming near, breeders of experience have often had misgivings as to the foaling re-sults amongst the Overlaw mares. The issue, how-ever, has invariably belied these gloomy forebodings, as there is probably no collection of mares of a similar class in Scotland that have bred so regularly, and with so small a percentage of deaths. In the six years, 1885-90, inclusive, 34 mares have been served by the horse, and of these 29 proved in foal, bringing forth live, thrifty progeny in nearly every case, several of which lived to be prominent prizewinners.

The lesson to be learned from the results in this stud would seem to be that, given steady, cautious work and careful handling, breeding mares are all the better off to be liberally fed. A state of body verging on that produced by "high" feeding is rather beneficial to the breeding mare than otherwise, when her whole frame is in a state of training from regular work.

In a stud of sixteen mares owned by Mr. Chapman, in Berkshire, England, all of them that are in foal are regularly wrought until within a fortnight of the foaling date; but for a month previous to that they get the lightest part of the work, and are never allowed to be put between shafts from the moment they are seen to be in foal. After foaling, they are fed with chaff, bran, and a few oats, until the foals are strong enough to be out. The reason of this is, of course, that the foaling season is much earlier in England than in Scotland, and hence, no doubt, in some measure, the earlier maturity of English-bred horses. An intelligent American, who buys largely, has expressed the opinion that, while the yearlings and two-year-olds in England are bigger and heavier than horses of the same age in Scotland, the difference is almost entirely removed amongst threeyear-olds and aged horses, and there can be no doubt that Scotch horses, in general, grow at least until they are six years old.

(TO BE CONTINUED.)

Another Reply to Mr. Elder. Editor FARMER'S ADVOCATE

I have been interested in the articles written by Mr. Elder, of Virden, on Dairying in Manitoba, and also in the replies from some of the breeders. Mr. Elder first warns farmers against thoroughbreds, and then says they must use them on grades to improve the grades. Perhaps Mr. Elder has not had much experience with thoroughbreds, and got his information from neighbors who stable their cattle on the sunny side of a barbed wire fence, or in the lee of a straw-stack.

There is no use anyone attempting to keep cow for milk unless they are given proper stabling and care. I have had pure-bred Shorthorns in my herd for the past seven years, and never give them any different treatment from the grades. I find them fully the best feeders, always willing to take anything they get, and they milk fully as well as the grades. Am now milking sixteen cows, eight of which are pure-bred Shorthorns, the others grade Shorthorns. We keep culling out any that do not come up to the average. A year ago our cows made on an average about \$50.00 each, besides raising calves; we sold the butter at twenty cents a pound. I have cows that made two pounds of butter per day on grass alone, and some that made twelve to twelve and a-half pounds a week in January, fed on wheat-chaff, oat-straw and a little hay, with nine pounds of frozen wheat-chop, I have pure-breds that would milk up to calving if fed for t, but we prefer to dry them off for a while. think I need say no more in favor of pure-breds, as Mr. Lynch and Mr. Young have said enough to convince Mr. Elder of his mistake. I can't agree with Mr. Young, however, as regards Holsteins. I think he is trying to pull the wool over our eyes. I have been through the country quite a bit last winter, and I never saw a Holstein cow from the time I left till I came back. have talked to a great many cattle breeders and dairymen that had given them a trial, but had discarded them. They give a good bit of milk, but all said it was poor quality. What we want is a cow that will give the best returns for the food consumed, and be the most value to the butcher when you are done with her. We want first milk, and then beef, and I don't think we can find a more suitable cow than the Shorthorn and the Shorthorn grade. Mr. Young must have had poor specimens of Shorthorn grades, when his Holstein gives as much as two of them. I have two I would like to put against his for a year. I believe either one of them could beat his on the same feed. F. NoBLE, "Lakeview Farm," Wawanesa.

DECEMBER 20, 1894

THE HUDSON BAY RR.

"The faithful"-or, as their opponents call them, "dyed-in-the-wool"-are advised that the H. B. is to be built next summer, and that then the Manitoba farmer, for whom the Government at Ottawa seems to have suddenly evinced solicitude, will have all his troubles swept away. But will we gain anything by it? Is it only an election bribe, and will not the election be sprung upon us just about the time the construction commences, or even before it begins? Will it not be a repetition of the former famous farce, when 40 miles were built and then left to decay? Again, if it is ever built, which is extremely doubtful, the line will be of very little benefit, except for some four months in the summer, and the rates on it will have to be proportionately high. This promise is on a par with the promise of a har bor for New Brunswick's decreasing shipping trade, the St. Andrew's Rapids improvement, the building

These particulars give a good general description of a line to Labrador, or any other scheme that is of the treatment of mares in this class all round; never intended to be finished. Let us have better but there are some phases of the question which

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THE FARMER'S ADVOCATE.

Mr. E. D. Tilson's New Barns.

One of our staff recently had the pleasure of inspecting the fine buildings and commodious stables erected by Mr. E. D. Tilson, of Tilsonburg. Mr. erected by Mr. E. D. Tilson, of Tilsonburg. Mr. The escape of foul air is provided for by chimneys Tilson has spent a vast amount of thought and in the wall, which open behind the cattle. The fresh labor in planning the arrangement of the stables, having written to all the experimental stations both in Canada and the United States for plans and suggestions. In addition to this, he has personally inspected all the most conveniently arranged stables in Ontario. The results of all this labor is seen in the almost perfect internal arrangement of the buildings. In the erection of these stables no expense was spared; the walls are built entirely of white brick, while the ceiling is ceiled with plained and matched lumber, the walls plastered and then covered with a coat of hard finish.

THE DIMENSIONS

of the main building are 125 by 60 feet. There is a wing attached, the walls of which are of the same height as those of the main building, of which it really forms a part. The size of this building is 46 by 48 feet. The stalls in this stable are three feet nine inches in width, the feed passages eight feet wide, and the passage behind the cows of sufficent width to allow of a team and sleigh being driven through for the purpose of cleaning out. As will be seen by the diagram, there is a gutter seven inchesdeepand fourteen inches wide behind the cows and protected on the side next the cows by a piece of timber to which one end of the plank flooring is attached. The Portland cement floor is of the best quality, being made from first-class material, and laid by city tradesmen in the winter season while pavements could not be worked upon. First class labor was thus obtained at a low rate. The stalls are formed by plank set up at an angle and held in place at the lower end by the two-inch flooring, the upper end fits into a groove in the upright post-The manger is on a level with the floor and is six inches high on the inside, sixteen inches wide at the bottom and slants out into the feed passage ten inches, at a height above the floor of thirty inches; thus leaving an opening fifteen inches wide through which to pass the feed. In fig. 1 our artist failed to show the manger as it really appears. The feed board extending from the bottom of the manger to the passage should have been extended much higher than is shown in cut.

The system of fastening in use is the common cattle chain which slides upon an iron bar extending from the floor to the ceiling.

THE WATER SUPPLY

to the barns, stables, yards, etc., having sufficient gravitation head to raise it sixteen feet at the barn and house. The supply is always sufficient to keep a four-inch pipe running full. There are three lines of two-inch pipe running the length of the stable, just back of the manger, partly underneath it, with fresh water continually running through the pipes from the west to the east end of the barn. There is an upright overflow at the east end to each one of the pipes, just sufficient height to keep the water | fit to him.

same time preventing all draughts. Mr. Tilson appears to have effectually solved this question, and we must admit that the system of ventilation is the most complete which we have seen anywhere. air is drawn through an underground pipe which warms the air to the temperature of the earth in winter, and cools it to the same point in summer. The air is forced into the pipes by means of upright blowers, similar to those on steamers, with the ex-

ception that there is a vane on top which keeps the opening always against the wind. The air is brought nto the stable by means of ventilation pipes which occupy the triangular space made by boarding up the space below the extension of the manger into the ssageway. Air holes are cut into this pipe at regular intervals, and the fresh air is thus delivered where it is wanted—at the head of the animal.

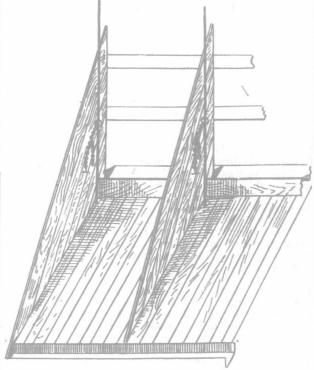


FIG. 1.-REAR VIEW OF STALL.

The milk from the herd is all made into butter in a perfect model of a creamery. This butter is sold at high prices to private customers.

Mr. Tilson believes he has the best lighthed, best ventilated, best watered, most comfortable for man and beast, the purest air, with the least bad odor, of is collected from several springs at the upper end any stable in Canada. Cool in summer and warm of the farm, and brought 150 rods in cast iron pipes in winter, and when the ground ventilation, which is to be completed before winter, is put in order there will be nothing to equal it for ventilation in America.

We would strongly advise any person. who is thinking of putting up new stables to pay a visit to those of Mr. Tilson, and though he may not be

Honey As a Food. BY JOHN MYERS, STRATFORD.

Honey is one of the oldest food products of the world. What is it? A chemist would likely answer that it has so many parts of oxygen, so many of nydrogen and so many of carbon, combined in such proportions as to form a mixture of grape sugar, manna, gum mucilage, extractive, a little wax, polon, acid, and odoriferous substances.

Honey, the saccharine (sugary) juices of plants, is collected by bees from flowers, and deposited by them in the waxen cells of the comb. These juices undergo some modification in the honey bag of the bee, but though their chemical character is somewhat changed, they still retain the flavor, and to some extent the peculiar properties of the plants from which they were collected. Besides the changes undergone in the bee-bag, other changes take place in the comb, known as ripening, render. ing it one of the most delicious and healthful foods for mankind. But, says someone, that can't be so, because if I eat a teaspoonful it makes mesick. I would like to ask such a one, did you ever try to eat eat it by degrees until you accustomed your digestion to it? There is no doubt if those to whom the use of honey causes sickness, would judiciously continue t use it in small quantities, the majority of them would find themselves enabled to partake of considerable quantities without any danger of sickness, within a very short period. I am thoroughly convinced of this by having so many instances of it come under my notice. I will relate one or two of a great many which I could give, if necessary. When first I commenced to keep bees, my wife, a rather delicate person, could not use honey in any considerable quantity without resultant sickness. She fairly detested the sight of it about the house, but continued to taste it occasionally, with the result that within a few months she could eat it without the least inconvenience, and at the present time feels lost if the honey supply for table use runs out for a few days. We, as a rule, always have it on our table, and Mrs. Myers uses as much as any member of the family. A young lady came to visit us for a few weeks, who at first, and for some time, could not use honey without resulting nausea, but by using it carefully at first, and gradually increasing the quantity eaten, she was enabled to eat it plentifully, with relish, within a very few weeks. I know that I am perfectly justified in saying it is one of the most healthful foods that can be eaten. I

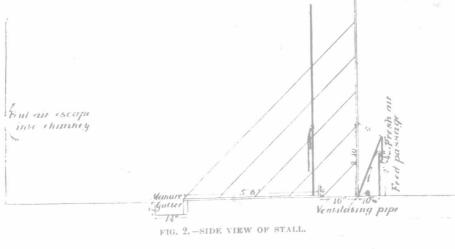
occasionally find even bee-keepers who do not use honey as part of their diet. Just here there is a great mistake being made in allowing a healthgiving delicacy to pass out of their hands without participating in its benefits.

In my own family there are just five persons, yet we annually consume about 300 pounds, and we have not had to pay \$2 in doctor bills in ten years for sickness. It has another important redeeming feature in its cheapness, when compared with fruit. If you go to your

boxes within one and a-half inches of being full. The pipes leading from the main to the iron buckets are one and one-quarter inches, entering the buckets at the bottom. They run at an angle of 45 degrees to within four inches of the box and then plumb up into the box, so that when the cows drink, the water will immediately rise, keeping the boxes full. It is so arranged that turning a stop-cock at the lower end of the mains or by opening three stop-cocks, one in each main, it will drain all the boxes and pipes in the stable in one minute, and by closing the stop-cock all the boxes in the stable, 82 in number, will fill in five minutes, and as this is done each day a constant supply of fresh water is obtained. Some of the boxes are covered with lids hung with hinges, so that the cows will lift the lids and drink when they desire. The lid falls back in its place as soon

as the cow removes her head. The water coming as it does so far underground, is almost as warm Editor FARMER'S ADVOCATE: in winter as in summer, a very important feature

One of the hardest problems for the farmer to lye has been the providing of an ample cumply of solve has been the providing of an ample supply of [Note.—Perhaps some of our readers can give pure air, both in winter and summer, and at the our correspondent the desired information.—ED.]



Bee Culture in the West.

culture has been tried in the N. W. T., between Honey should not be so eaten, as it is too rich and of the wing. On the one side are the siloes, four in number, 12 by 20 feet in surface measurement and 45 foot 45 foot 12 by 20 feet in surface measurement

Ine varieties of corn which Mr. Tilson prefers are the Learning and Mammoth Southern Sweet. On the opposite side of the passage are the calf pens. Here there is no crowding at feeding time, for a row of stalls front the passage, each just wide enough to admit a calf. There is also a very con-venient sliding door which is operated from the passageway by means of a pulley and cord.

grocer and purchase an ordinary halfgallon jar of preserved fruit, or, if you like, buy the fruit and let your wife preserve it, the cost will be quite 50 cents. Now, the same jar full of honey will not cost any more than 50 cents, and perhaps less, and it will go twice as far as the fruit, because it is so much richer.

I would not have any one consider me so foolish as to want to disparage the use of fruit, but I would like to impress the wisdom of using both fruit and honey as dessert dishes, as then you will be more healthy and have less doctor's bills to pay.

A point or two on the manner of eating honey will not be out of place. Fruit is usually and prop-Can you inform me through your paper if bee erly eaten directly from the dish to the mouth.

A clean pen and a clean trough, good nourish-[NOTE. - Perhaps some of our readers can give ment and proper exercise, are pathways to success in swine husbandry.

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A Successful flethod of Gardening in the West.

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I write you this letter to thank you for the handsome marble clock awarded by you for the best bushel of wheat, oats and barley at our past fall show (Regina), and which I had the honor to secure. It is not only ornamental, but a splendid time keeper

As I have had a fairly large experience in gardening, baving been for the past forty-five years engaged in it in England, Ontario and the Territories, and considering that I was about the only one in my heighborhood that had what might be termed a good crop, and also had an excellent garden the past season, I believe my methods and experience would be of some value to your readers, both in Manitoba and the Territories.

The past season in this district was, as you are probably aware, a very dry one, and but very few farmers had any crop. In face of this, I had a very good crop, and an excellent garden, and at our fall show secured twenty-three first and eight second prizes for grain and roots. I have sold this fall over \$450.00 worth of roots alone, and never put a pailful of water on any of them, while my neighbors, subject to the same rainfall, had comparatively nothing. Believing that the reason of my success is owing entirely to my system of cultivation, I deem it my duty, with your permission, to inform your readers of my methods, trusting that it may be of practical benefit to them.

My garden is about two acres in extent, and slopes gently to the north. It is on high prairie land, the soil being a sandy clay loam, and is fenced. Within the fence I plant, each season, six or seven rows of sunflowers, the rows being a yard apart. the seeds two or three in a place, and each bunch a yard apart. This serves as wind break in summer, and to gather snow in winter, the latter being of prime importance, as it is necessary to get the land as moist as possible in the spring. The heads of the sunflowers are gathered, and the seed used to feed the fowls, and is excellent for that purpose.

feed the fowls, and is excellent for that purpose. The land is prepared in the fall, in the following manner:—Manure to the depth of about three inches is spread over it; a large spade-harrow is then put on, which pulverizes and mixes the manure in the soil to a depth of about six inches; a walking plow is then reduced to "a skeleton" and the land plowed to a depth of twelve or fourteen inches, and even more if it be possible, the deeper the better. It is then well harrowed, and in the spring is ready for the seed.

I sow all seeds with a hand seed drill, and a good rule, as to the matter of depth, is to sow three times the depth of the seed.

I find that the character of the manure used is very important. If it once dries out it is of no use. In the winter we draw the manure directly from the stable to the fields, and it is put under without losing any of its properties, and what is used for the garden is kept in a heap, turned over a few times during the summer, and kept damp by putting water on it. There is no use of putting manure on land when it is dried out.

As I have been twelve years in the country, and as we do not always get the amount of rain necessary with ordinary cultivation, after many experiments this is the method I am adopting. There is no reason why there should be a total failure of crop any year, and nearly all of the failures are on account of improper cultivation. Of course, lack of ain in these prairie lands is sometimes a serious drawback, but if cultivation, similar to what I have suggested, be carried out, there is no doubt but that far better results will be accomplished. Most of the plowing done is not more than four or five Far better would it be to sow less inches deep. acreage and cultivate better. The principal facts, then, for successful growth are : -1. Have the land sloping to the north (such a garden, at least, can usually be had). 2. Manure freely, and have the manure in proper shape. 3. Collect all the snow you can in winter. 4. Plow as deep as possible, and that always in the fall; don't touch the land in the spring. If this is done, the results will more than surprise you.

case would have been different had the leaf mould been raked carefully off from year to year.

All kinds of farm crops and plants in general are composed chiefly of 4 organic and 8 inorganic sub-stances. At any rate, these are all that are of im portance to the farmer. If the land be deficient in any of these, it is not a fertile soil. These are supplied by our Creator in abundance, and it appears that He has left it to the agency of man to supply the increased demand required and make them available, still true to His word "that man should earn his bread by the sweat of his brow." Suffice it to say that all the substances to be supplied by man are contained in our barnyard manure, which should be as carefully handled and dealt with as a very precious asset, which is not done, generally, and we are safe in saying that farmers have lost in ten years more value through their manure being badly managed, than would pay off the larg-est farm mortgage. Still, people will complain of hard times on account of bad crops and low prices. This brings to mind a story I read the other day: "A preacher was called upon to pray for the barren fields of his flock. He passed from one enclosure to another, and offered his supplications, until he came to a most unpromising case. He surveyed the bar-ren acres in despair. 'Ah,' said he ; 'brethren, no use to pray here ; this needs manure.'" So it is that God helps those who help themselves. To sum up in one sentence all that has been said:

To sum up in one sentence all that has been said: Nature does not provide a sufficient yearly supply of plant food to replace that which is carried off in the shape of farm crops, and to supply that deficiency, artificial means must be resorted to.

This brings me to the second question to be answered, "What will restore the soil?"

We must enumerate one or two of the different agents to be employed, very briefly. To do otherwise would occupy a large volume.

wise would occupy a large volume. The object of cultivating land is to obtain a heavy yield of farm crops, and the more successful the cultivation, the more quickly will the store of fertility in the soil be reduced. Great quantities of produce, secured by thorough, tillage, hasten the poverty of the land, and while the rotation of crops allow time for the elements to act upon the soil, converting dormant into active matter, the fertility is merely lengthened, and does not prevent its ultimate exhaustion. To secure permanent productiveness manuring is necessary, and this process should not be delayed until the soil has become impoverished, or the store of plant food becomes reduced below that level at which it will produce remunerative crops. When Canada was new, and the virgin soil produced in abundance, farmers seldom took any trouble to preserve and apply the manure made by their stock. And even up to the present time a great many do not use the manure upon their land.

Soils are rich because they contain a large amount of valuable plant food, that is, soluble substances which the plant can take up through its roots and utilize to advantage. This available plant food may be divided into two classes: that which decaying plants furnish, and that which is annually produced by the decay or rotting of the mineral matter of the soil itself. To the first we give the name of organics, and this includes oxygen, hydrogen, nitrogen and carbon, and to the second, inrganics, or mineral matter, comprising potash, soda, lime, magnesia, sulphuric acid, phosphoric acid, chlorine and silica. Plants contain other substances than the above, but only in very minute quantities, and these are all that the farmer requires successful to understand for operations know how to make the above elements available as plant food is of the greatest importance, as we must, for the greater part, depend on the easily available plant food in the soil for that part of a plant substance which gives it the power to make use of and store up the greater amount of material taken indirectly or directly from the air, as carbon, in the form of carbonic acid and nitrogen or nitric acid. So that constant cropping with wheat re-moves most of this easily-dissolved plant food, and requires that future crops gather most of their food sparingly from that which is locked up and difficult to bring into a soluble form. The con-clusion come to is that we should return to the soil, in manure and fertilizers, enough of this available plant food, or that easily decomposed, to keep the uality of available fertility up to the original standard when the land was first broken up. large crops be grown, and nearly all their ferfilizing substance be returned in the form of manures, the land can gradually be increased in strength, since the accumulation in the soil from decomposition, and that gathered from the atmosphere, will more than equal the amount taken out in the form of beef, butter, etc. While making it into manure, animals of all kinds live upon and make the farmer money out of the excess of fertilizing elements the soil can manufacture, without ex hausting itself, while wheat-growing takes the excess, or interest, and also reduces the regular supply, or principal. The production of live stock enables or compels the farmer to have a greater diversity of crops. Pastures and meadows are necessary, so also other fodder crops. These cheap, rough foods, in turn require that rich grain foods be used to balance them up, to make proper rations for stock. The rough fodders give to the manure bulk and humus-forming materials, together with large amounts of other fertile elements, and the richer foods make of the properly managed manure No country was ever heap a store of wealth. robbed of its wealth so rapidly as Canada, (TO BE CONTINUED.)

DECEMBER 20, 1894

The condition of a stable floor has much to do with the purity of the atmosphere and comfort of the attendants, milkers and cows. A cobblestone floor is very objectionable, as it is rarely, if ever, dry. A smooth cement floor, graded to a gutter a foot wide, immediately behind the cows, answers very well. Bricks, if good and well laid, should answer about the same purpose. For the passage or drive-way behind the cattle, we have found a or unive-way benind the cattle, we have found a good clay floor perfectly satisfactory. It is graded with a slight fall towards the gutter, which is about one foot wide, and say eight inches deep, imme diately behind the cows, sloping up a few inches towards the outer edge. It is made of cement, also, on a good foundation. The gutter is divided from the clay floor by a firm, durable scantling. What-ever the material is, it should be kent as clean as ever the material is, it should be kept as clean as possible. A sprinkling of land plaster after each cleaning gives the stable an appearance and sweet-ness that cannot be obtained by any other method. It also retains valuable volatile manurial elements, which would otherwise be lost. If the cobwebs are swept down weekly, or once in two weeks, and the whitewash brush used occasionally, the stable will have an attractiveness that will tend to make attendants more interested in their work. By all means discourage the idea that it is simply necessary to put in a regular or an irregular hour or two, three times a day, in a careless, indifferent way, wishing all the time that the work was at an end.

The Stable Floor.

Manitoba Poultry Association.

The regular monthly meeting of the Manitoba Poultry Association was held in Winnipeg on December 3rd. There was a fair attendance of members present. After other minor matters of business had been disposed of, a lengthy discussion took place as to the most suitable dates for holding the next annual Poultry and Pet Stock Show, and it was finally resolved to hold it on March 5th, 6th, 7th and 8th, that season being unanimously considered the best time for the show in this country. The executive were instructed to arrange preliminaries for the prize list and other matters pertaining to the show.

It is expected that very liberal prizes will be offered in all the most useful classes of birds, and present indications point to a more successful show even than last year's.

It is also intended to include dogs, and dog fanciers should correspond with the Secretary at once, so that ample provision may be made for all exhibits, and prize lists arranged.

It is probable that the prize list will be ready for distribution early in January, and as the date of the show is fixed thus early, all will have ample time to fit their birds.

After business had been disposed of, Mr. S. Wise read a very interesting and instructive paper on "The Golden Wyandotte," which, we regret, space will not permit of our reproducing.

Cream. BY F. J. S.

What is in the cream will be found in the butter. Good butter is only made from good cream, therefore it is not made from cream that is taken from the milk of cows fed on turnips, turnip tops, carrot tops, rape, green rye, mouldy or musty fodders, and like foods. Butter is made out of the foods which the cow eats, and is good or bad, accordingly. The water of cream is the water drank by the cow, and not the water from your neighbor's well. Cows need all the salt they care to eat each day, if you would make good cream. Do not salt the cows once a week, and then put two ounces of salt to each pound of butter, thus spoiling the product in two ways.

JOSIAH GILBERT, Regina.

Soil Exhaustion and the Restoration of Fertility.

BY JAMES MILLER.

The want of knowledge of the character and the office of the soil, is the greatest farming blunder of the present time. It is not understood. At a Farmers' Institute meeting, one speaker expressed his erroneous idea somewhat as follows: "Professors come here and tell us that continual cropping, without returning an equivalent, will exhaust the soil, but I say there is no truth in that assertion. Look at the large trees of the forest, how they have grown in their present position for centuries, and they are to-day as texturiant as ever." Which is very true. But allow an explanation. Through lack of knowledge, this man did not understand that about 95 to 99 per cent. of the growth, from year to year, was supplied by the organic subscances of the atmosphere, either through the leaves or the roots. and when those giant trees shed their verdent coars every fall, it only added an abundant increase to the organic matter of the soil, and the hand became richer and richer all the time by the increased supply captured from the atmosphere. But the

CARELESSNESS AND LACK OF KNOWLEDGE

give rise to the chief rocks upon which success founders in the handling of cream. Under the head of *carelessness*, we would note:

First: leaving cream in cans or pans longer than is necessary, and thus exposing it to possible contamination, unnecessarily. It may be that some do not know that twelve hours for deep cans and twenty-four for shallow pans is quite sufficient for summer setting. Twelve hours should be added to these periods for winter setting.

Secondly : not stirring cream frequently. Uniformity is one of the chief good things requisite in cream. It means more and better butter.

Thirdly: leaving the cream-can open, thus allowing the possible introduction of objectionable forms of fermentation. The weight of good opinion prefers a tightly-closed tin can for the keeping and ripening of cream.

Fourthly: keeping cream in improper places—the root or vegetable cellar, beside the soap barrel, the onion chest or the meat bin, in the kitchen or bedroom, for instance.

Fifthly: ripening cream under conditions similar to the above, and raising the temperature of cream by dry heat, as by the kitchen stove, instead of setting it in hot water, stirring constantly, and thus preserving strict uniformity and exactness of temperature throughout the mass.

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THE FARMER'S ADVOCATE.

LACK OF KNOWLEDGE.

First : as regards ripening cream. Cream that is over-soured is a common thing in the dairies of Ontario, a fact which indicates that the ripening of cream is not, in all cases, well understood. A really fine, quick, rich-flavored cream is something to be desired. Cream that ripens for two or three days cannot be used for the production of highclass butter. Twenty-four hours is the ripening limit set by the best authorities. A mild acidity is sufficient

Secondly: regarding temperatures and their effects. While gathering, preparatory to ripening, cream is best kept sweet, say below 50° F. This is a stage when much cream is spoiled. While ripening cream, avoid very high temperatures, as these

ing cream, avoid very high temperatures, as these tend to make a soft, poor-bodied butter. Thirdly: lack of knowledge of the effects of non-uniform cream, which may be thus summed up: Less butter, as the thorough churning of the cream depends largely upon the uniformity of fermentation that pervades the mass. A less excellent but-ter results also, since if cream is not uniformly ripened, the butter will not be of uniform flavor and keeping quality. Specks of toughened cream are sometimes found in butter, because the cream is not frequently stirred, and has not been strained before churning.

Fourthly : pertaining to objectionable flavors. Having churned a goodly number of various kinds of cream the past summer, our experience has shown us that bad flavors in cream always result in more or less difficulty in churning. In some cases the cream will not "break," or, having broken, will not "gather." Generally, there is considerable extra loss of butter-fat in the buttermilk. In such creams we usually require to churn two or three degrees higher than ordinarily. Of course the butter is very inferior

Fifthly: as to the effects of feed, salt and water. Confining cows to one class of coarse fodder, or to one coarse fodder and one grain food of similar composition and effects, usually results in difficulty with the churning of cream. We have known cases where the cream from cows fed on corn stover solely could not be churned. Timothy hay alone has resulted similarly, so has a ration of coarse fod-der and ground wheat. Variety of fodder is absolutely essential for the maximum production of high-class cream. Cows that have not salt at high-class cream. leasure, will produce a flavorless, insipid cream, that will frequently give trouble in churning

Butter of poor quality and less in quantity will surely result from the churning of cream from cows drinking bad water.

Truly, the cream that makes the broadly-educated, painstaking dairyman draw an inward sigh of satisfaction, is only secured by undeviating at-tention to every in and out of the work, from the character of the fodder used till the cream is poured into the churn

[NOTE.—We would be pleased to have the testi-mony of readers who have been successful in making butter of unexceptionable quality while feeding tur-nips, rape or the other foods on the list which "F. J. S." proscribes. -ED.]

How Persons of Moderate Means Can Establish a Money-making Dairy Herd.

BY MRS. E. M. JONES, BROCKVILLE.

If 2 and 2 make 4, why will not 4 and 4 make 8? ed myself this question after reading the very

\$100 to \$200, of course she will be the best investment—bar accident. But if she gets killed on the railway, or burnt up in your barn, or dies of milk fever, the money loss is too heavy for you just now, till you are in a position to afford it. Be content with the grades at first, but only as a stepping-stone to better. Then, when you have felt your way a little and can do so with prudence, buy a registered female, even if it be only a little calf, but be sure it is good. The worst thing one can own is a poor cow. You can't afford to keep her, and you can't honestly sell her. She can only be made into beef. Better pay a reliable dealer \$100 for a fine butter-bred heifer than take a poor one at \$5. Now you have a pair of registered cattle, and go on in-creasing the number, both by breeding and purchase, as you are able, till at last the grades are sold and all the herd registered.

The advantages of registered stock are: 1st. As a rule (though not always) they will produce more in the dairy, and of far finer quality, than grades. 2d. Their calves will sell for six times the price of grades. 3d. Good thoroughbreds will seldom fail to give calves as good and better than themselves, while far less dependence can be placed on grades in this matter. 4th. There is a satisfaction in a fine herd of thoroughbred cattle that can only be appreciated by those who have felt it.

The only drawback to them is that in case of accident or death the loss is greater than with common cows, but by not going ahead too fast, and by taking every care and precaution, this risk becomes almost nominal. This is my honest advice This is the conclusion, after a whole life spent in dairyng, and after attaining a reputation and success that are the pride and glory of my life. But it is quite another thing to say : don't keep

thoroughbreds because they are too delicate.

I do not think any statement was ever made that is so erroneous, and so damaging to the best interests of this great agricultural country. If a pure bred animal is more delicate than a scrub, then a half-bred one is also more delicate, though in a less degree. So why use good blood at all? What is the object? Fortunately for us, the reverse is true. A thoroughbred will not stand abuse and yield a profit under it, but (and on this the whole thing turns) neither will the scrub. Why is it that some farmers so often mourn because they "have to" keep cows, and call them a "necessary evil?" Simply because they starve and abuse them, and get in re turn a little poor milk and butter for their table, and a little still poorer manure for their land. Believe me, the scrub is not one bit hardier than a good, healthy pure blood, and she can run you into debt and eat up the profit of other things just twice as fast, if you only knew it. One reason why I have been enabled to be of some use and help in darying is this: That my methods are literally those of the farmer. My cows are not petted or pampered, but they are humanely cared for and fed, and they pay me well. I have had farmers and their wives come to see my cattle with hesitation, and say: course we can't keep them like you do, but we thought we would come and see." Then, when I take them we would come and see." Then, when I take them to the barn, they are simply amazed! No blankets on the cows; no stove in the barn; no costly fixtures, but everything of the very plainest. Every-thing to pay. Gradually my visitors expand into delight, and say: "Well, now, this is something like it, and we could do this ourselves," and they feel perfectly at home and happy, and are "so glad they came." This it is that has made my place an object lesson. This it is that has given the whole value to my life work. One word more as to the delicacy of thoroughbred cattle. My famous old cow, Massena, 654 lbs. butter and 8,000 lbs. milk in one year, has lately dropped me a fine heifer calf, and is now giving nearly 40 lbs. milk a day, and yet she will be nineteen years old next March! Who can beat it? Maud Melinda, sixteen years old, gave me a fine heifer last spring, and milked 40 lbs. a day for a long time after calving. Princess, one of my best yet, is thirteen years old, and Lilium Excelsium, now eleven years old, can turn off her 17 lbs butter a week, and none of these have been dry in years. One thing I am curious to know. If none of us kept stock like this, where is your corspondent going to get his bull to raise grades ? As to whether my advice is good, I leave it to the farmers to say, and by their decision I am willing to stand.

Dehorning.

In the FARMER'S ADVOCATE for November 15th, in reply to a correspondent, directions were given as to the best time and manner of performing the operation of dehorning. The accompanying illustration from the Australasian indicates the parts involved :-

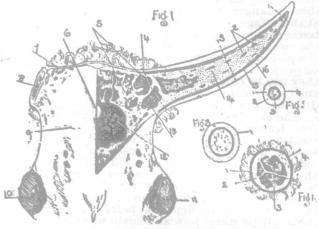


FIG. I.-1. Position for "Tipping." 2. Sections of Blood Vessels. 3. Position for Operation of "Half Horning." 4. Position for Operation of "Dishorning." 5. Plates of Bone. 6. Opening for Exit of Spinal Cord. 7. Skin. 8. Left Horn Removed. 9. Bone of Forehead (Frontal Bone). 10. Left Orbit. 11. Right Orbit. 12. Cavity for Brain (by actual measurement, 2} in. from Position for Operation of "Dishorning," but differing in different animals). 13. Cavities (Sinuses) of Skull (filled with air and opening into the nasal cavity). 14. Horn Core (an inensitive structure if cut in a normal state of health, but like all bony substance, extremely painful when in an inflamed or diseased condition). 15. Sensitive Layer of Corium corresponding to true Skin. 16. Insensitive Horn.

FIG. II.-1. Horn. 2. Sensitive Layer of Corium. 3. Horn Core. 4. Section obtained by "Tipping.

FIG. III.-1. Section obtained by "Half Horning."

FIG. IV.-1. Skin. 2. Bone. 3. Sinuses or Spaces filled with Air. 4. Section obtained by "Dishorning."

QUESTIONS AND ANSWERS.

Veterinary.

AN AILING JERSEY BULL.

J. B. P., Fairmede, Assa .:- "I have a pure Jersey bull two years old, very much in-bred. He passes quantities of bloody matter, some days worse than others. It commenced last summer. I noticed it first after covering a cow; he fell and seemed to sprain himself. Sometimes he passes little balls of matter about the size of marbles, at other times it is bloody matter, sometimes clear, other times mixed with dung. He seems healthy; has a splendid appetite, but seems to drink more water than the others.

[The condition of your bull may be the result of the fall he sustained, or it may be due to a catarrhal state of some portion of the alimentary canal. Give a moderate laxative, such as one and a-half pints of raw linseed oil, and after it has operated, give morning and evening in mash for ten days : hyposulphite of soda, one ounce.

W. A. DUNBAR, V. S., Winnipeg.]

WORMS.

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imilar cream ead of 7, and less of extraordinary letter of your correspondent (Mr. Elder), who advises farmers not to keep thoroughbred cattle, but to keep grades. Had this gentleman based his argument upon other grounds, I could have understood it better. To explain: In my little book, "Dairying for Profit," that has had such wonderful success, I have had but one aim and object, and that is to help farmers and their wives (and more especially those who have small means)to double their profits, while at the same time lessening their labor. My book was not written for the rich man, who has means to gratify every capriceit was written for the "poor man," but more than all, for the poor man's wife ; to be a real help to her, so she could get ahead in the world and lay by a little money for herself and children, and get out of debt, and be comfortable and independent. It has been the earnest work of my whole life to help my fellow-women, and my heart is just full when I think of the unceasing stream of letters pouring in upon me, saying how I have helped and encouraged them, and thanking me with all their hearts. And

as long as I live I will be true to the trust they repose in me, and advise them to do just what I would do myself if beginning life again with my own living to earn.

Referring to my book, you will see that I advise them to get a pure-bred male, and grade up their hards as the first sector of the sector boots and the sector of the sector boots and the sector boot herds, as the first step in the right direction. But do I say to stop there? Far from it. I say keep on grading up until you have as near full-bloods as you can get, and the nearer the better. Why do I not advise them to get registered females also at the start? Because I am working for the interest of the poor man, and while the full-blood male sires many calves in a year, a female gives but one. Therefore I say, "Don't put all your eggs in one basket just at first, while you have so few, but go slow. If you take every cent you have to buy a registered Jersey heifer or cow, costing from

A Milk Fever Preventive.

Of all the disorders that invade dairy herds none is-more dreaded than milk fever or parturient apoplexy, not only because of its fatality, but for the reason that its victims usually are the more highly developed and valuable cows. As a rule "remedies" are ineffectual. Dairymen and breeders have come to place greater reliance upon preventive measures, such as the exercise of greater care in feeding prior to calving. One course highly recommended is to give for a couple of weeks before calving, one quart of linseed jelly twice a day, mixed in the food, a plan that is said to obviate the giving of physic or putting the cow on a starvation allow-ance. The mode of preparing linseed jelly is to put the seeds in a vessel with water, and when brought to a boil allow it to simmer for a few hours. On cooling it forms into a jelly, which is mixed with the food as mentioned.

We would be pleased to receive a statement of the testimony of readers who have had experience with this or other simple precautionary ways of

SUBSCRIBER, Dunmore :-- "I have a half-bred Olyde mare, four years old, badly troubled with worms; they are from one and a-half to four inches long, pointed at the ends, and cling to the rectum very much when excreting. I call them pin worms. Have tried many remedies without success. Can you recommend some powders that I can put in the mare's food, as she is an awkward animal to give medicine to?"

[Give your mare, morning and evening, in mash, for one week : powdered areca nut, four drams ; powdered nux vomica, half a dram. Give the following injection, per rectum, three times a week : raw linseed oil, half a pint; turpentine, one ounce; warm water, two quarts. W. A. DUNBAR, V. S.]

Miscellaneous.

CELERY GROWING.

A SUBSCRIBER :--- " Can you or some of your AD-VOCATE readers give me information on the best method of growing celery. I have heard it stated that the secret of growing good, stalky celery—that is, having a plant with a large number of stalks lies in growing the plant properly while they are small. I have a black muck bed, which is always damp, not wet, and I wish to plant it with celery next summer. I want to grow early celery. Should I make a hot-bed this fall? How should I make it? Does it make the plants more stalky to shear the tops off when they are small?"

"Subscriber's" soil should be equal to the best for celery growing. It is quite true that much depends upon the early life of the plant to insure a successful growth. It is well to sow the seed in boxes about the middle of March or first of April. A box about five inches deep answers very well. The boxes should be filled within an inch of the top with good garden soil. That last put in should be sifted and firmly pressed down. Now, sow the seed

in rows two inches apart and the rows half an inch wide, press the seed lightly with a piece of board the size of the box, then sift a very thin sprinkling of soil over the seed. A springling of dry moss over the box acts as a nice light mulch. Water with a fine sprinkler, and place in a sunny window. When the plants come up, which will be in about two weeks, they should not be allowed too much sun, as there is danger of scorching because of their delicacy at that stage. When the second leaf appears, the boxes should be put in a moderate hot-bed, and as the weather warms, into a cold frame. When the plants get about two inches high they should be pricked out to about two inches apart, so that they can be cultivated with a hand-weeder, or some such implement; keep them well watered till about July lat, when they will be ready to transplant.

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such implement; keep them well watered till about July 1st, when they will be ready to transplant. The old idea that celery must have a two or three foot trench has exploded long ago. All that is needed is a trench a foot wide and nine or ten inches deep. Fill in the first four inches with old manure, well dug into the soil at the bottom of the trench; then spread on two or three inches of soil, and the trench is ready for the plants. Now dig holes with the garden trowel, and put the plants in about the same depth as before moving; give them a little water now and again when necessary. As the plants are cultivated and scratched among they should at the same time be banked up by holding the stalks together with one hand, while the earth is being drawn about them with the other. It is no bad plan to tie a soft string loosely around the plant when about half-grown, which will keep the leaves together and expedite the banking-up business considerably. The rows may be four feet apart, or less if the ground is scarce. When the celery is about three-quarters grown place boards close on each side of the rows, and put stakes behind to keep them up. The celery will bleach just as well as if banked up to the tops; all that is required to whiten celery is to exclude the light.

The above outline is the general plan followed by celery growers who have plenty of land and who cultivate with horse-labor. For persons with less land, and who desire to make the most of every foot, what is termed "the new celery culture" has commendable features. By it the soil is prepared by adding plenty of manure and working well. When the season comes for setting out the plants the ground is marked off in rows seven inches apart, and with a dibble or trowel the plants are set out—from three to six inches high—seven inches apart, straight in the rows. If they are half an inch from a straight line, either to the right or left, they are in danger of being cut off by the knives of the wheel-hoe. Press the ground firmly about the roots. If the weather is warm and dry, water well after the plants have been set out, giving the ground a good soaking to keep the plants from wilting.

When the weeds begin to appear run the wheelhoe through the rows. The knives of an ordinary wheel-hoe are too long, and should be cut off about five inches from the centre of the hoe. After going through one way let the crop stand a day or two before going through the other way. Four or six days afterwards go through again. If this is done frequently very little hand-weeding will be necessary.

sary. When the plants are about half-grown scatter broadcast about 1,200 pounds fertilizer to the acre. Do not do this when the foliage is wet.

Cultivation will now have to cease, on account

Geese---Breeds, Habits, and Management. BY E. JOHNSTONE.

In those times elderly people speak of as "the good old days," before the hair mattress had so generally superceded the fourty-pound feather beds, which were family heirlooms and part of every marriageable girl's outilt, nearly every well-regulated family kept a flock of geese. If not made a permanent tenant on the farm, a flock was kept until the stock of beds and pillows on hand satisfied the housekeeper's acquisitiveness. In these days, however, goose culture is in its decadence, and relatively few flocks are kept.

Nevertheless, the fact remains that wherever there is a running stream on a farm, a flock of geese may be kept with profit, if within reach of a good market town. The feathers are always salable for pillows, etc, and manufacturers have a secret process by which plain, plebeian goose feathers are converted into aristocratic eider down, which is used to fill delicate silken cushions and comfortables, and brings a high price. The feathers, from first hands, if of best quality, are usually worth about fifty cents a pound. A Toulouse goose will often yield a half-pound at a picking, while the Christmas goose often costs its consumer a higher price than any other kind of poultry.

a higher price than any other kind of poultry. There are two leading breeds, the Toulouse and Embden. The Toulouse goose is the largest known, often weighing, when fully matured, from thirtyfive to forty pounds per pair, while instances are known where the extraordinary weight of sixty pounds per pair has been attained The goslings will weigh from four to six pounds when a month old. The plumage of this variety is dark gray on the back, shading to light gray, and almost white below. They are not as noisy as some kind, and are hardy and easy to raise.

hardy and easy to raise. The Embdens are not as large as the Toulouse, though attaining good weights, but epicures con-sider their flesh superior in point of tenderness and delicacy. Their plumage is pure white, and hence their feathers command a higher price in market. They are hardy also, and easily raised. A fine cross for market purposes is obtained by breeding Embden geese to a gander of the Toulouse variety. The result is a fowl larger than either, that takes on flesh rapidly, and is as hardy as its parents But the cross must stop there. The cross-bred birds must not be kept for breeders, as the result is a great deterioration, exactly as occurs in all classes of live stock under similar circumstances. The goose begins to lay along the last of February or first of March, if well kept through the winter, and will lay from twenty to twenty-five eggs before becoming broody. If the eggs are taken away, she will lay again, but not so great a number. Indeed, she is a prolific goose that lays forty eggs a year. The eggs require about a month for incubation, and the eggs that are taken away to be hatched by hens ought to be given to persistent sitters like Cochins or Brahams. Even these sometimes get discouraged and quit just when they are most needed, so that the goose herself is most reliable as an incubator. Geese seldom lay until they are a year old, and the stock can be kept several years. Indeed, old stock is strongest and best for breeders, though the ganders are apt to get ugly as they age, and need to be kept from the goslings The care of the goslings does not differ in any material point from that of young ducks and tur-Though they require plenty of water always at hand to drink, they must be kept out of it until they are about three weeks old. At six weeks they may be turned out to pasture and require feeding but once a day. After they are eight weeks old they will forage for their own living, and at about this period the farm manager generally indulges in language akin to that in use when putting up an unmanageable stove-pipe. For they are voracious eaters, and, like a plague of locusts, devour every green thing before them, so that unless kept in an enclosure and yoked, and wing-feathers clipped so they cannot get out, they are a positive nuisance. They do not thrive in confinement. They should have ample pasturage and be kept growing fast until they are full size. To fatten they ought to be penned out of sight and hearing of other geese, and given plenty of food, grass and water. For extra ize geese, a feed of scalded meal or boiled turnips prinkled with bran or meal once a day is excellent. They must *always* have plenty of water. In France and some parts of Germany geese are fattened by a peculiar process by which their livers grow to an enormous size. Each fowl is penned separately in very narrow quarters, allowing no exercise. Three times a day the attendant comes round with a bucket of food, seizes the goose by the neck, causing it to open its mouth, a specified quantity of the food is forced down, and the goose has nothing to do out digest it and wait for a repetition of the dose. A goose's liver, under this feeding system, is sometimes made to weigh a pound and above, and is used in the making of pute foie gras, or Strasburg pies, a much esteemed delicacy on the Continent. It requires an experienced hand to judge the proper moment to kill a bird thus fed, as death follows a too prolonged forcing. Green geese are those from six to eight weeks old. Fattened at that age, they sell well in any large market. When the later crop comes on, they must be watched to see when they seem to cease to improve, as they fall away rapidly, They ought to be marketed at once when they are Three geese to every gander is the usual rule

for breeding stock, so it does not pay to winter a large flock. Those that are kept over should be fed with boiled oats and barley meal, boiled corn and cooked potatoes, and rowen cut fine and soaked in warm water. Dry grain is bad for them. They only need shelter during the winter and can be turned out early in the spring, as soon as the snow is gone, and let run until late in the autumn. Like ducks, they must be well cared for during the winter if they are to lay early, and as it does not pay to winter many or feed after the grass is gone, early goslings are very desirable.

goslings are very desirable. Geese can be picked two or three times a year, taking only the best or breast feathers. Stock to be kept over need their down for protection, and should not be picked late. The directions for picking ducks apply to geese as well.

The Jews are great consumers of geese, and usually buy them alive, perhaps feeding a little celery and parsley to flavor the flesh, then killing after a method peculiarly their own. Roast goose is a dish they highly esteem, and they also smoke the flesh as a delicacy. The market for geese is generally best from November till after Christmas, and the process of killing and marketing are like these described for turkeys and chickens in the the ADVOCATE of Nov. 15th. The negative of the wild sees in

The peculiar cry or "honk" of the wild goose is one of the earliest signs of the return of spring. The study of this species is very interesting to the naturalst. Wild geese have very keen instinct. It is wonderful how they direct their flight at so high an alti-tude and for such long distances. They winter in the West Indies, and even as far south as the valleys of the Oronoco River in South America, and it is asserted that great flocks have been seen crossing the South Atlantic, evidently bound for Africa. They always fly in a particular form—that of a V, with the point formost, and the leader, or commanding general, is often relieved of his responsibility by hi fellows, who share the duty of guidance. Though Though very noisy and garrulous on the wing, when they alight to feed at night they are so quiet one may pass within a few yards of a large flock and never notice their presence. It seems curious they should migrate, apparently in search of milder climates, when they are so protected by nature against cold, not only by their warm coat of feathers, but also by an almost impervious air cushion, being able to admit air between the skin and body as an additional safeguard.

Poultry-House Building and Heating.

BY MRS. IDA E. TILSON.

A man in one audience asked me whether a double-walled henhouse was absolutely necessary? "Not any more necessary," I said, "than an overcoat for you, but quite as comfortable." Drop siding for the outside, and matched flooring on inside of studding, makes an ideal henhouse, such as one of my neighbors is building. "It looks just like a living house," said his wee daughter to me. Our sand is of such a nature here that plastering is not strictly first-class. When many cracks and holes come in walls, there may be harbor for insects. But almost universally I found the right kind of sand was to be had in Minn, where plastering would undoubtedy be cheaper than the ceiling I did last spring, at cents a square foot, lumber and labor both ounted. I met several who were well pleased with their plastered henhouses, not only plastered, but back plastered, too, and such winter quarters are certainly worth thinking of, when every breath a hen draws in has to be warmed by her, and every draught of wind that touches her takes away a little heat. Several flocks were doing well in log houses, which, with chinks well daubed, are warm structures, as I know by experience. I often say I began poultry culture with seven tough, old fowls, in a discarded log house. That was the beginning of my present business, but there was still another beginning, a foreshadowing of my future, when a grateful pupil in Florida, led by some fine instinct of what was suitable for me, gave me a hen. I bought a companion biddy, also eggs for them to hatch, had built a small house on stilts and reached by a ladder, said stilts supposed to discourage snakes and other vermin, and thus started a little flock, which removal to another State dispersed. An 'A" roof gives half its surface to the south, whereas a one-slant roof must be entirely toward the north, if the house faces, as it should, south. Some builders do not place the ridge of an "A" roof in the middle, but put more than half the surface on the south. In order to shed water well from a building ten feet wide, the ridge should have an elevation of at least three, or better, three and a-half feet above plates, when shingles are used. For a comparatively flat roof, there are iron and other coverngs. In any case, finish with a loft or attic above, as that air chamber also prevents loss of heat. I have seen houses so low that I should fear tall cockerels might bump their heads, and perhaps get poll-evil, but I would not go above eight-foot posts. One lady was telling me about appropriating for her hens, an unused building fourteen feet high, in which she put a stove. Her fowls would singe their feathers, daytimes, and then freeze at night. She had a sort of cellar hole dug, put in straw, and sent them down there nights—to freeze, as before. was shown, at another place, the scattered remains of a \$1,000 poultry plant, where an attempt had been made to heat cheap buildings through wood stoves. Its owners, by the way, started with a large flock bought up at random. We should expect a child which began its climb at the top of a ladder, to fall and break its neck, and many

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of the size of the plant. All that is necessary now is to keep the ground well watered and manured with artificial fertilizer. The plants will cover the ground sufficiently to blanch themselves white, and will be tender, crisp and nutty. Now, about the

HOT-BED.

The situation for a hot-bed should be facing the south or south-east, and sheltered from the north and north-west. In land with an open, gravelly subsoil, in which water will not lie, the bed will be most economically handled in a pit, but if water is liable to gather and lie along with the manure, the bed should be made entirely above ground.

As a material to use for raising heat, there is nothing better than good fresh horse manure, well wetted in the stables. Throw it into a pile in a sunny place or under a shed to heat, and when well warmed up turn it over, shaking it loose and mix-ing it well, and see that it is all moist. Then pile it up till it again gets hot throughout. In making the bed, throw the hot manure into the pit or build up upon the surface, as the case may be, shaking it up and spreading it evenly as you go along, and tread it down firmly along the sides and corners. The manure should be at least four feet thick when first put up. Now put on the sashes, and keep them tight until the heat again gets strong; cover up with mats, straw or shutters at night, but let the sun shine on the sashes in the day time—it will get up the heat quicker. Now spread on four or five inches of soil, and neither sow nor plant in it till the heat of soil three inches beneath the surface has declined to 100° F. The boxes containing the celery plants may then be set into the earth an inch or so, and all will be well till the time for using the cold frames arrives. There are a few precautions to observe when using the hot-bed. So long as "steam" gathers in the frame, ventilate a little day and night, else the ammonia will burn the plants. Should there be danger of frost entering the ventilators, they may be covered with straw or matting in such a way as to allow the escape of ammonia and still keep out the cold.

Will some of our readers give their experience *re* shearing the tops when the plants are small?

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THE FARMER'S ADVOCATE.

poulterers have metaphorically done so. I know of but one poultry woman who got good results from a wood stove, and she had a stove that took green chunks and yet kept fire well. Hens do not need artificial heat daytimes, while exercising, but should have it at night, if at all, when they are still and cold, unless we can invent some way to fasten quilts and puffs on them. When people dare trust fires in an outbuilding, away from their immediate presence and care, I would recommend coal or oil heaters, particularly the latter, which may be used nights only. I have taken some pains to make inquires, and find the Barler oil heaters stand very

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high. Our West Salem Insane Asylum, under its efficient manager, of course has a poultry depart-ment. The first one in charge was a German patient, the only poultrywoman I ever heard of who was too clean. Her course was to turn out and lock out the hens, most of the day, while she scrubbed nest-boxes fairly white. On the earthen bottom of their large henhouse, she arranged a few flowerbeds and planted some evergreens. The male patient now in charge does as well as some same poulterers. The interior of the house has been whitewashed, and he has mostly abandoned the stationary nests, all in one piece, and hooked a number of little boxes, in irregular order, to the wall. The hens, when within these, apparently think they are lost or hiding, and lay better than ever before. Their 150 hens, though in too small quarters for that number, are this year hopefully expected to furnish the entire product of chicken

flesh and eggs needed for over 100 patients. During my travels, I saw a flock running at large, consisting of 22 rough-looking hens and seven roosters, for I counted them several times. Any one familiar with the vigor of farm flocks, knows that was just six superfluous roosters, just six wasters. "Something for nothing" is what people hanker after, and the nearest approach I know of, is to keep fewer and better fowls, getting, from half the food formerly consumed, probably more eggs than before. A hen which stole her nest this fall, hatched twelve chicks out of thirteen eggs, when my adult flock was consisting of 35 hens and one rooster. A friend bought two settings of eggs last spring, which hatched only two chicks, a disappointment, even after due allowance for jar of travel, because her home eggs came out well. I told her of two settings I learned about at Lake Park, Minn., which were not set for a month or so, and left unturned, while their owner brought them from the East round by were of the brought them from the East, round by way of the lakes. Nearly every egg produced a strong chick, and disposed of the superstition that eggs carried over water will not hatch. Travellers tell of a peculiar custom, on St. Antonio's day, in Zacatecas church, Old Mexico, when the people bring their animals to be blessed,—barking dogs, refractory cattle, and even unsatisfactory hens. Not a bad idea, surely !

The San Jose Scale.

(Aspidiotus perniciosus, Comstock.) BY JAMES FLETCHER, DOMINION ENTOMOLOGIST, OTTAWA.

The accompanying figure gives a representation of a small branch infested by the San José scale, a most injurious fruit-pest, which, during the past

Comstock pointed out the great loss which it was causing, and gave it the specific name permiciosus, for the reason that he considered it to be the most pernicious scale insect known in the country. It not only swarmed in countless numbers on fruit trees in certain orchards, but infested nearly all kinds of deciduous fruit trees grown in California. In a special circular, which Mr. Howard issued last year, when the insect appeared in the States of Virginia and Maryland, he says as follows:---"In the course of twelve years the insect spread through all the fruit growing regions of California, through Oregon and into the State of Washington. It is known as the worst insect pest of deciduous fruit trees on the Pacific coast, and has caused great pecuniary loss. Many crops of fruit have been ruined, and thousands of trees have been killed.

The above quotation shows what a serious pest this insect is, and it is of great importance that fruit growers in Canada who may find suspicious insects on their fruit trees, should send specimens without delay, either to the FARMER'S ADVOCATE or to the writer, for examination, as any neglect of indifference in such matters may result in enor-mous losses for themselves, and the country at large. Many of our injurious insects might have been controlled with comparative ease, had they been detected on their first introduction, and the proper steps taken to eradicate them.

The following is a description of the San José scale :--It is a scale insect, and belongs to the same group as the well-known Oyster-shell bark-louse of the apple, but may be easily distinguished from that species, and, in fact, from all Eastern species found upon fruit trees, from the fact that the scale is perfectly round, or, at most, very slightly oval. It is flat and adheres closely to the bark, which it resembles in color. When full grown, it is about one-sixteenth of an inch in diameter. In the middle of each scale there is a small black or yellow point. When occurring, as the scales frequently do, in large numbers, on twigs or leaves, they lie close to sach other, in many cases over-lapping. They are then difficult to notice without close examina-tion, as they manufacture without close examination, as they merely give a grayish, slightly rough-ened appearance to the bark, as though it had been dusted with ashes. When the scales are crushed by scraping, a yellow, oily liquid appears, and this will at once indicate that the scales are living.

During the winter, the insect is in the halfgrown or nearly full-grown condition. The young egin to hatch and to crawl from under the female scales, shortly after the trees leaf out, and from this time through the summer there is a constant succession of generations. The young lice are at first very small, yellow, crawling creatures. For a few days only are they able to move about, during which time they spread out over the new growth of the tree. They then pierce the bark with their beak, and remain in that place for the rest of their lives, each one protecting itself with a waxy scale, which is secreted from its body.

This insect affects not only the young twigs and limbs, but is also found upon the leaves and the fruit

REMEDIES :-- When trees are found to have become badly infested, the safest and most economical course will be to cut them down and burn them. Where the attack is less severe, insecticidal washes may be used successfully. From the experiments which have been tried in the United States, it has been found that the ordinary kerosene emulsion, Riley-Hubbard formula, is an effectual remedy, where carefully applied. Mr. Howard says (Insect Life,

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ness. As it cools it thickens into a jelly-like mass. This gives the stock emulsion, which, for a summer wash, must be diluted with nine times its measure of warm water before using on vegitation. The above quantity of three gallons of emulsion will make thirty gallons of wash.

For a winter wash, the dilution of the stock emulsion may be made with five times its quantity of water instead of nine.

RESIN WASH.

For summer :--

Resin.... Caustic soda (70 per cent. strength). . 5 pounds. 21 pints.

The resin and soda are broken up, and together with the fish oil are placed in a large kettle, suf-ficient water being added to cover them. The whole is then boiled for several hours, or "until the compound will mix properly in water without breaking up into yellowish flakes." Winter wash :--The same ingredients in the fol-

lowing proportion :--

Resin				1		×.			 					.30	pounds.
Caustic	sods	h												. 9	pounds.
Fish oil				 										.44	pints.
Water t	o mi	ak	e	 	2	÷.,	ŝ	į.	 i,	4	i,	k	ι.	.100	gallons.

Mr. Howard states that of the too above, the kerosene emulsion is more lasting in its effects, as in a rainy season the resin wash is more apt to be washed away.

Farmers' Institutes.

KILDONAN.

A meeting of the above Institute was held in Kildonan East School on December 4th. A large Kildonan East School on December 4th. A large representation of the parish attended the meeting. Mr. Jas Elder, President of the Manitoba Central Farmers' Institute, addressed the meeting. Mr. Elder said that he had addressed several meetings of this nature in Manitoba, but never felt so happy in commencing an address. To see so many ladies and young men in attendance was encouraging in-deed The speaker then remarked that he intended to confine his remarks chiefly to agriculture, but to confine his remarks chiefly to agriculture, but that, as the meeting was one of a social nature, he would not limit himself to this subject. He said the object of the Institute was to advance agrisaid the object of the institute was to advance agri-culture in every way possible, to teach farmers to think more about their work. He was sorry that the farmers of this country were "a discouraged people"; true, they had many things to battle with—"hard times," etc., but getting discouraged would not better their position. Mr. Elder then gave instances of the hardships the early settlers of in Ontario (this was not new to the early settlers of Kildonan) had to contend with, but more prosperous times followed, and he believed we were on the eve of better times in Manitoba. The eradication of weeds was then dealt with, and the speaker cau-tioned all farmers not only to discuss the best system of destroying these pests, but to carry it into practice. In different sections of the Province different kinds of weeds were most troublesome, and we had to learn the best method of keeping them under control. In portions of the West the "tumble weed" was, perhaps, most troublesome; in the Red River Valley, French weed and Canada thistle. Reference was made to the bulletin on noxious weeds issued by the Department of Agri-culture, which should be read by all, as it dealt at length with different methods of eradicating weeds. Mr Elder then spoke on dairying, and gave it as his opinion that the best time to have the cows calve was in the late fall, or about New Year; they would then milk well all the winter, and when spring came would pick up again and milk well till the grasses began to fail, when they could be let dry, and this would be just about harvest time, when all hands had plenty of work without milking cows. He had found it a good plan to sow wheat on the summer-fallow, about half-bushel per acre, late in the season, when it was pretty well cleaned; this made a fine fall pasture for the stock, remaining green till hard frost came. It also did the summer-fallow good by tramping it firm and leaving it in first-class shape to put the drill on in the spring. An interesting discussion followed. The Kil-donan church choir furnished music and assisted the lecturer in making the meeting of deep interest to all hands had plenty of work without milking cows.

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year, has been detected in an orchard in British Columbia. Steps have been taken to secure, if possible, its eradication before it spreads any further. This insect has had attention drawn to it of late

by its unexpected appearance in injurious numbers in the Eastern States, during the summer of 1893, and the Division of Entomology at Washington, under the direction of the United States Ento-mologist Mr. L. O. Howard has during the past mologist, Mr. L. O. Howard, has, during the past summer, adopted such vigorous measures to combat it, that there is reason to hope that in all the localities from which it has been reported the insect has either been eradicated or brought under control.

Up to 1892, the Ssn José scale was thought to be confined in North America to the Pacific States, where it has shown itself to be a most destructive enemy of the fruit grower. It was first brought to California on fruit trees imported from Chili about by fruit shippers in 1873, from the name of the place in California where it was first noticed. It spread rapidly for seven years without any particular at-tention being paid to it. In 1880, however, Prof.

page -"Remedial work against this insect is oner-101):---- Remedial work against this insect is oner-ous; but our experience has shown that three sprayings, at intervals of ten days during the latter part of May and June, will practically destroy the insect. Whether the spraying be conducted with very considerably diluted kerosene emulsion, or with a resin wash, while during the winter, a single application of either of the three winter washes application of either of the three winter washes mentioned below will greatly reduce the numbers of the insect. Among the winter washes, our experience leads us to give the preference to strong kerosene emulsion, next to the winter resin wash,

kerosene emulsion, next to the winter result wash, and finally to the lime, salt and sulphur mixture." Mr. Howard also reports with regards to some investigations made by Prof. J. B. Smith, in New Jersey, that this latter gentleman "visited a locality at Atglen, Pa., and found that in an orchard of over seven thousand trees, all of certain varieties, and a few of others, were infested by the scale. As a result of his recommendations, keroscale. As a result of his recommendations, kero-sene emulsion has been applied three times to most of the trees, at intervals of ten days, up to the first week in June. The treatment has been absolutely successful." And Prof. Smith himself says (Insect Life, VII., page 167):—" Kerosene emulsion diluted nine times has been used successfully in one case on the meture scales just before the young large the mature scales, just before the young larvae emerged. Diluted from eleven to fifteen times, it has proved ineffective against all the scales on the runks.

It may not be amiss to repeat here the formulas for the preparations mentioned :-

KEROSENE EMULSION:

Coal oil		2	gallons.
annon soan	or whale-oil soaD) 5	pouna.
Water	OF WHILE OF SOLL	1	gallon.

Boil the soap in the water till all is dissolved; then, while boiling hot, turn it into the kerosene, and churn it constantly and forcibly with a syringe

lecturer in making the meeting of deep interest to all in attendance.

BIRD'S HILL.

Mr. Elder reports a very successful meeting of the above Institute on December 5th. He discussed Institute work generally, and turned to talk on roads and road making, after which a free discussion took place on various important topics, many of those present taking a lively part. Mr. Elder thinks there can be no doubt of the success of this Institute.

HILTON.

Messrs. Bedford and Leech attended a meeting at Hilton recently to organize an Institute. The meeting was not as large as it might have been, but it is hoped good will result.

ROSSER'S.

"Another excellent meeting," reports Mr. Elder, "and great interest in Institute matters." Mr. Elder says he did not confine himself to any set peech, but talked on general topics, pointing out the great good that should accrue from Institutes. LITTLE MOUNTAIN.

Another good meeting was held here, all present manifesting a deep interest and asking many questions. Mr. Elder says he feels immensely en-couraged as a result of his trip in the Red River Valley.



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WANTING A MOTHER ; OR,

Photographed for Santa Claus.

BY LAZ.

BY LAZ. "Mister, please, I want to be took." Baroni, the great photographer, looked up from the por-trait he was examining. He was at first amazed, but a smile brake out on the face, where the celebrities who sat before his camera were accustomed to see only a frown. Before him stood a bareheaded gamin, a bootblack, with the box on which he earned his living suspended from his shoulder by straps. From the box projected the end of a brush. The boy's pose was graceful, respectful, pleading. His face was handsome and winning. "How did you get in ?" asked the photographer, who wondered how the boy had passed the line of call-boys stationed in the office and reception room as a guard to the studio, into which no one entered without first sending in a card. "The swell lady wuz kickin' up a muss, end I says to meself,

"The swell lady wuz kickin' up a muss, end I says to meself, 'Here's yer chance, Nebby,' end I up the stairs end here I is. End, please, mister, do, won't yer take me !" Cassandra had come that -morning to sit, but Baroni had found so much fault with her that she had gone away in a rage. As the bootblack had stated, he took advantage of the avgitement her guit had caused to alin unobserved into the excitement her exit had caused to slip unobserved into the

"I wus hangin' aroun' all mornin' waitin' for a chance, and now, please, Mister Baroni, don't put me out. I'll work fer ter pay yer, end I do want a picter. Make a picter uv me, won't yer!"

yer?"
In his carnestness the boy forgot himself, and the natural pose he assumed delighted Baroni's artistic eye.
"Nebby—what is the rest of your name?"
"Chuduazer," and the namesake of the Hebrew king unonaciously put out his hand in beseeching gesture and approached the artist, almost touching him.
A call-boy came in with a card, but Nebby did not notice him, so absorbed was he with the desire of being photographed.
Nor did the artist look at it. He sat twirling it in his fingers while he gazed at the gamin. A more interesting face he had never seen in a child. It was delicate, refined, sensitive, all out of keeping with the coarse clothes and careless manners of the street arab.
The call-boy looked in wonder from his employer to the

out of keeping with the coarse clothes and careless manners of the street arab. The call-boy looked in wonder from his employer to the gamin. A fear that he might be discharged for neglect of duty had led him to seek for assurance in the face of the artist that Nebby was welcome, and when he found the strange boy there by permission, his astonishment knew no bounds. "May I come in ?" asked a soft voice from without. "Yes, certainly," Baroni replied. The call-boy sped to the door, and as he opened it, a well-dressed middle-aged lady entered the studio. "A new sitter" she asked. At a glance she had noted the beauty of the boy whose name was most uncomely. "Yes, would you like to see him pose!" "Very much," replied the visitor, as she seated herself on the chair the call-boy pushed to her. A singular group. The handsome lady, the famous artist, the grotesquely beautiful gamin, and the faultlessly dressed call-boy, who was eager to throw the bootblack into the street. "How did he pat in ?" asked the lady, who was none other

street. "How did he get in ?" asked the lady, who was none other than Madam Barnauld, the satirist. "Cassandra was here, got up in a ridiculously extravagant style, and I refused to let her sit. She raised a hubbub going out, and Nebby slipped in." Madam Barnauld threw up her pretty jewelled hands and exclaimed: "Mercy, Baroni. You will soon be a bankrupt if you treat your patrons so

exclaimed: "Mercy, Baron. You will soon be a bankrupt if you treat your patrons so. "Fudge!" ejaculated Baroni, and snapped his fingers. Meanwhile Madam Barnauld was closely studying the gamin as he stood gazing at the portraits on the walls and

easels. "No wonder you smile, Baroni ; that boy's face would dispel a darker frown than yours. Come here, Nebby." The gamin promptly obeyed. She laid her haid upon his shoulder. Her husband was dead and she had no children, nor pets but her hands. She fondled and caressed them. Baroni smiled grimly when he saw one of them on the solled, weatherbeaten coat of the street saw one of them on the soiled, weatherbeaten coat of the street

his request as a Christmas present for Santa Claus.' They would sell like hot cakes, and Nebby would realize a handsome sum above their cost." "I will do it," cried the artist. "But do me a favor, please. When he comes, ask him how he means to direct the package. I intend to get it." The next week went by like a flash with the artist, who was oppressed with patronage, and consequently in a most disagreeable humor. He was rich and had no patience with the exacting demands of his patrons. But he smiled every time he thought of Nebby, whose pictures were piling up in the finishing department.

time he thought of Nebby, whose pictures were piling up in the finishing department. At the appointed time Nebby presented himself. The moment was a proud one with him when the call-boy obse-quiously opened the door and said: "Mr. Baroni expects you." "T ain't got much money, but I hope you will trust me, Mister Baroni," was his greeting to the artist, who excused himself from a veratious patron to welcome the boy. Baroni handed him a picture done up for the mail, then showed him one he was keep ng for himself. Nebby was delighted with the correctness of the portrait. He did not notice the wondering looks of the other visitors, of whom there were several in the reception room, but proceeded at once to

notice the wondering looks of the other visitors, of whom there were several in the reception room, but proceeded at once to empty his pockets of all the money he had. "No, not now; only tell me how you mean to direct it." "Let me whisper it." The artist bent over and Nebby whispered something to him. A smile brighter than any the gamin had yet called forth lighted up the artist's dark features. When Nebby was again on the street he had his picture, all his money and the happiest heart in New York. The day before Christmas, Madam Barnauld sat in her boudoir eagerly awaiting the call of the mail carrier.

The day before Christmas, Madam Barnauld sat in her boudoir eagerly awaiting the call of the mail carrier. The postmaster had promised to send her a certain package. Presently her maid brought her the letters. She tossed them all aside and took the flat package that they covered. It was addressed to "Santy Claus, Sumwhere Neer Hevin." She tore it open quickly and Nebby smiled at her from the card she lifted. His position was so natural that she almost involun-tarily replied "No" to the question "Shine?" that seemed to have just fallen from his lips to the bottom of the page, where it was printed. In the package she found a note.

have just fallen from his ups to any it was printed. In the package she found a note. DEER SANTY CLAUS:-Ef yer ant tew bizzy I wud ax yer ter cast yer eye over the inklosed countynance end see if ye kin 'member it. Pleaze put Nebby-what's his last name he don't know-on yer list so he won't be missed, end send him some presents. I'd like ter hev a muther, ef yer don't mind my tellin' yer what ter bring. There ain't been no womun kist me ner run her fingers throo my hair since muther died. I'll be home all day Kristmas-number leven Avenue C, room 23. Wrote by Dan fer yourn. NEBBY.

NEBBY. P. S.-Don't forgit the muther if yer got won convengent. Christmas bells were ringing and Nebby heard them. Boys and girls were shouting merrily in the streets, but he did not join them. He did not look out of the window. If he had, he could have seen only the roofs and walls of the opposite houses. After he ate his lonely breakfast he had set down on his one chair by the little window. His room was really only a window, and was one of the small divisions of a house rented to bootblacks and newsboys, peddlers and men of roving trade.

rented to bootblacks and newsboys, peddlers and men of roving trade. Dan looked in about the middle of the day and asked if "Santy" had come, but did not deride the faith Nebby express-ed by his waiting. Just as the darkness began to fall there came a resounding rap on his door. He thought that a very noisy Santa Claus, but called out bravely : "Come in!" The door was rudely opened, and there stood a tall coach-man, who looked as if he did not relish his errand. "My lady is here," he said, gruffly, and then stood aside respectfully, revealing Madam Barnauld. Nebby's face lighted up with welcome; but when he noticed her rich furs and remembered the coachman's rough manner, he feared she had come to arrest him.

her rich furs and remembered the coachman's rough manner, he feared she had come to arrest him. "Nebuchadnezzar." Her voice was tender and musical. "Santa Claus has sent you the present you asked for. He has bidden me to be your mother." Nebby understood at once, but he protested. "Santy Claus must hev got mixed. Yer were ment fer some rich orphing."

"No; he sent me to Nebby, No. 11, Avenue C, room 23, and here I am. Will you come?" "Yes, indeed. I'd go anywheres with yer." Then he hesitated.

Call me mother, Nebuchadnezzar, and I will call you

Neeb." "May I bring my ole friend, 'mother?" Although he ut-

tered the last word timidly, he had asked the question eagerly, as he laid his hand on the blacking-box that had been his constant companion since his mother died.

"Yes, Neeb, you may." Seated in the carriage, Madam Barnauld drew the boy to her and run her fingers through his soft, glossy hair. Of these fingers, with their shining jewels, a critic had once said :

MINNIE MAY'S DEPARTMENT

MY DEAR NIECES,-I wonder what you would like me to write to you about this time! You know when you sit down to write to a friend how you naturally recall her face to your memory before you begin your letter. I found myself trying to do this before I began my letter to you just now, but of course my imagination had to be brought into play to supply your faces, instead of my memory, as I have never seen you all. Still, I feel as though I have had quite a good look at you, and many of my younger nieces seem to look very happy and good-natured and full of fun, and, perhaps, some slight amount of mischief. We are near the beginning of another year, and I feel as if I would like to have a better talk with you about how it is to be spent. I have written you a great many sensible, practical letters about your clothes and your homes, and how to make them and yourselves neat and attractive. But now I want to talk about your very selves. Of course it is only natural and right that you should be as happy as possible and full of fun, but there is something more than that. While school life lasts it is sufficient if you do your daily tasks, learn your lessons, and keep from breaking rules, but later on you will find there are wider claims by far; and it is of this time that I would like to talk to you. What sort of women are you going to make of yourselves? Are you just going to be content with getting all the fun you can out of life, and letting the more substantial things go? It is so easy, so very easy, to do this, but it is a great mistake. You could not possibly make a greater. You know how it is at school. I am sure you will admit that you enjoy your holidays more, and, indeed, not your holidays only, but your school days as well, if you work honestly while you should work. I dare say most of you have experienced a miserable regretful feeling on the closing day of a school term, if you have allowed yourself to be idle and thoughtless and your time has been wasted. And, then, on the other hand, what a feeling of honest satisfaction you have when you have worked hard and done your best, and can you not imagine that it will be ust the same when you are older and you look back and see that you have wasted your time and not made the most of your opport unities. I can assure you it will be just the same, with this great difference: that you cannot so easily make up for a lost year as you can for a lost term at school. Perhaps you are beginning to think that I would have you work all the time, and do nothing else, but it is not so. Your youth is the play time of your life, and you should be as happy as possible in it, but that need not prevent you from working, too. Work has been called the "greatest of earthly blessings," and you certainly would not be very happy if you had nothing to do. So what I want to say to you is, "Have a purpose in life." Make up your mind that your life shall not be spent in a butterfly chase after pleasure, shall not be spent in a buttering chase after pleasure, but that you will try to make something of it. Of course, we cannot all expect to do something great or to be something great, but whatever your work in life is, resolve to do it well, and you will ennoble it. There is a homely little rhyme that I have heard somewhere that exactly expresses my meaning. Probably some of you have heard it, but in case you have not I will put it in here :-

"If I were a cobbler, I'd make up my mind The best of all cobblers to be; If I were a tinker, no tinker you'd find Should mend a tin kettle like me."

arab. "Why do you want to be photographed?" she inquired. "Why do you want to be proved as a provide the providet the prov

Her voice was tender and her smile winning. He lifted his head and looked defiantly at the call-boy. "Not before him, missus ; I ain't tellin' him." Baroni sent the call-boy out of the studio. "Now, Nebby." Madam Barnauld's voice was full of en-couragement. Her tender tones and soft smile warmed the heart of the street boy, and he told his story. "Well, yer see, missus, Santy Claus hez been kinder for-gettin' me since mother died 'bout two years ago, end I tho't I'd send him my picter took by Baroni; he'd mebby think I wuz worth a present or two." Madam Barnauld turned and looked out of the window, one hand still rested on Nebby's shoulder. Did that hand in-voluntarily close and press him! He glanced at her quickly, as if it had. Her other hand was raised to her eyes. Was it only the gleam of the cold diamond on her finger, or did a tear glisten there? Baroni thought it a tear. He too was deeply touched.

Presently she faced the boy agaln. Tendernsss had over-

Presently she faced the boy agaln. Tendernsss had over-flowed her heart, and he saw it in her eyes. "Please, missus," he pleaded, "ask Mister Baroni ter take me. I ain't got much money now, but I'll work fer it." "You will take him, Baroni?" "Of course I will." When they entered the operating room Baroni directed the boy to pose as if asking a gentleman to have a shine. In a few minutes the plate was inserted. Nebby, with his cap on the back of his head, his box unslung and ready for action, took a step towards the artist's assistant, to whose feet he pointed with the index finger of his disengaged hand and exclaimed, "Shine?"

with the index finger of his disengaged hand and exclaimed,
"Shine?"
"Capital—hold that!" called Baroni.
He was looking through the camera.
Another moment and Nebby was transferred to the glass.
"Well, there ain't nuthin' slow 'bout that," he !excalimed,
his spirits having risen equal to the occasion.
"That is all this time, Nebby. Come next week and the
photograph will be ready for you"
With a "thank yer, missus and mister." he was gone; but
in a moment he was 'back, interrupting Baroni's enthusiastic
declaration that that was the first time in years he had photographed unaffected naturalness.
"How much will it cost, mister I"
"We will settle that next week." Earoni replied, and with
another "Thank yer," Nebby bound out of the reom and
hurried into the street to brush together more nickels.
"Why not strike off a thousand?" suggested Madam
Barnauld "and label them 'Nebby, whose picture was taken at

"Her sentences glitter as brilliantly as the diamonds upon the fingers that pen them, and as coldly." How soft and gentle was the caress these famous fingers

gave the boy the woman's heart had adopted, and how fond the kiss she impressed on his lips. The money realized from the sale of Nebby's pictures he

gave to Dan.

Neeb is happy with the mother whom Santa Claus sent him, and her heart runs over with love for him.

Good-Night.

The tales are told, the songs are sung, The earlies are told, the songs are sung. The evening romp is over, And up the nursery steps they climb, With little buzzing tongues that chime Like bees among the clover.

Their busy brains and happy hearts Are full of crowding fancies, From song and tale and make believe A wondrous web of dreams they weave And airy child romances.

The starry night is fair without, The new moon rises slowly, The nursery lamp is burning faint, Each white-robed, like a little saint, Their prayers they murmur lowly,

Good-night! The tired heads are still On pillows soft reposing, The dim and dizzy mists of sleep About their thoughts begin to creep, Their drowsy eyes are closing.

Good-night! The tired heads are still Good-night: "Ine tired neads are still On pillows soft reposing. Good-night! While through the silent air The moonbeams pale are streaming. They drift from daylight's noisy shore,— "Blow out the light and shut the door, And leave them to their dreaming."

The Newly Wed-"Edith did the hatefullest thing at our reception, and I'll never forgive her. Cousin Jane-" Why, what could it be?" "Sh addressed Charles in the most pitying manner, and said, 'I hope you'll be happy.' The way she uttered that word 'hope' was positively unbearable." "She

I am not prepared to defend the grammatical construction of my little favorite, for it certainly leaves something to be desired, but its spirit is fine, and we could not do better than imitate it. So when the question comes to you, "What sort of a woman am I going to be?" make up you mind that your standard shall be high. Some one has spoken of "a woman perfected" as being "Earth's noblest thing," and surely it is worth your while to try even in a slight degree to attain to that. In order to do this you must cultivate unselfishness, for to do this you must cultivate unsemanness, for it is the keynote of all true nobility. More than two thousand years ago that wise old philosopher, Plato, said, "The love of self is in reality the source to all men of all offenses," and we cannot begin too soon to fight with this giant. A well-known lady novelist, in one of her books, remarks : "If a man is of no other use in a household, he seldom fails to give the women about him abundant opportunities for self-denial, and thus calls into exercise the noblest part of their nature." This seems a somewhat sweeping assertion as far as the men are concerned; for my part I do not believe that they have a monopoly of the vice of selfishness. But any one a monopoly of the vice of semsness. But any one who has either brothers or sisters, and who is on the lookout for these "opportunities," will find them every day. So to all of you I would say, "Live much in the lives of others" and be content with doing your best. Probably no very great things will ever be required of you, but I cannot do better will ever be required of you, but I cannot do better than end by reminding you of what George Eliot says about this. She says: "The growing good of the world is partly dependent on unhistoric act; and that things are not so ill with you and me as they might have been is half owing to the number who lived faithfully a hidden life and rest in unvisited And once more, just a few lines that Mr. Lowell has written of woman's life :

"In herself she dwelleth not, "In herself she dwelleth not, Although no home were half so fair; No simplest duty is forgot; Life hath no dim and lonely spot That doth not in her kindness share.

, 1894

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THE FARMER'S ADVOCATE.

"She doeth little kindnesses Which most leave undone, or despise; For nought that sets one heart at ease, And giveth happiness or peace, Is low esteemed in her eyes."

Three Connoisseurs.

FROM THE ORIGINAL PAINTING BY P. C. GILARDI.

-MINNIE MAY.

A picture of three elderly ladies surrounding a A picture of three elderly ladies surrounding a table, drinking tea, or engaged in any pastime in which they showed a zestful interest, would prob-ably be entitled "Three Gossips." But the trio in our picture are gentlemen, and they are not drink-ing tea; they are connoisseurs. What they would be if they were not looking at pictures, it is not for us to say. They might, however, remain connois-seurs all the same, for they are very knowing old fellows. Evidently they have seen life in all its phases and tasted all its pleasures, and have a rich fund to draw upon in the stories with which they fund to draw upon in the stories with which they enliven the hours which they pass over their wine and cigars, and cards and pictures. No doubt they are connoisseurs in all these things; and it would be quite rash to suppose that any one younger than themselves could give them any points touching the amusements of an elegant and elderly leisure. Their

librarian, understanding at once what is wanted, calls to the assistant: "Marie, a novel for a middle-aged lady." The works of fiction were spiced to suit the period of life. In the present picture we

have a portfolio to suit elderly connoisseurs of the epicurean school. Signor Gilardi excels in con-

versation and genre pictures, with accessories-and frequently with subjects - taken from an earlier century. In his costumes and other details he displays the knowledge of an antiquarian. Of his skill in composition and his mastery of expression, our pictura is a signal proof.

Mourning Customs.

The ancients had queer ideas about mourning for their dead. The Egyptian women ran through the streets crying, with their bosoms exposed and their hair disordered. The Lydians regarded mourning as unmanly, and they compelled men who went into mourning to put on female garments. In Greece, when a popular general dies, the whole army cut off their hair and the manes of their horses. At the present day, the Arabian women stain their hands and feet with indigo, which they suffer to re-main eight days. They also carefully abstain from milk during this time, on the ground that its white color does not accord with the gloom of their minds. In China, mourning for a parent or husband is required by law, under the penalty of 60 blows and a year's banishment. When the En:peror dies, all his subjects let their hair grow for a hundred days. In the Fiji Islands, on the tenth day of mourning, the women scourge all the men except the highest chiefs. In the Sandwich Islands, persons desirous of going into mourning paint the lower part of their faces black, and knock out their front teeth. No doubt this causes a very sincere kind of mourning for the time being.

What Shall We Have for Breakfast?

At no time are appetites so capricious as in the morning. Most people enjoy dinner, hunger being the inevitable result of exercise or a forenoon of labor. The evening meal is usually an occasion of the good cheer and healthy digestion, but the complaint is general that nothing relishes for breakfast. Housekeepers have their inventive faculties constantly on the rack in endeavoring to serve the same article of food in different ways, and each time have it taste better than before. Variety is the key-note to success here, but seems sometimes and in some places quite unobtainable.

A breakfast dish that relishes oftener than almost any other is an omelet, and there are "ways and ways" of making omelets. Every housewife knows the original method, but a slight digression will be found palatable as well as economical.

Soak a cup of bread-crumbs in a cup of sweet milk over night. In the morning add three well-beaten eggs and a pinch of salt. Have a well-greased skillet, moderately hot, into which pour the mixture. Cook slowly until a golden brown; this may be determined by raising the edges with a knife. Brown in a hot oven and serve immediately.

amusements of an elegant and elderly leisure. Their present occupation recalls a scene in a French cir-culating library. A lady enters and intimates to the librarian her taste in reading The appreciative

St. Kilda's Lonely Isle.

The people of St. Kilda, an island in the Atlantic, to the west of Barra, are shut off by stormy weather from the mainland for eight months out of every twelve. Their crops having been ruined by last month's storms, they sent off messages in a box, which was thrown into the sea, and which luckily floated ashore, or they would have starved luckily floated ashore, or they would have starved long before the summer, when they would have received their next visit from Scotland. Stores sent from Glasgow were safely landed last week. It is an extraordinary little settlement. There are seventy-seven inhabitants, including the minister and schoolmaster. They are fairly well off, with tolerable houses and good food and clothes. There are 1,000 sheep, which are common property, and each inhabitant possesses a cow. There are no horses, and the women do the horses' work. In winter the men weave the cloth with which the people are clothed, and in summer they are occupeople are clothed, and in summer they are occu-pied with their farming operations. They marry among themselves, and the race has so deteriorated that half the children now die of lock-jaw a few days after their bith. There has been some talk about the islanders removing to the mainland, but the majority are inclined to stay where they are. They are simply out of the world from the beginning of September till the middle of May.— [London Truth.

Old Christmas.

It's a long way round the year, my dears,

A long way round the year ! I found the frost and the flame, my

dears, I found the smile and tears !

The wind blew high on the pine-topped

And cut me keen on the moor ; The heart of the stream was frozen stDl,

As I tapped at the miller's door.

I tossed them holly in hall and cot, And bade them right good cheer, But stayed me not in any spot, For I'd travelled around the year

To bring the Christmas joy, my dears, To your eyes so bonnie and true : And a mistletoe bough for you, my dears, A mistletoe bough for you !

-December St. Nicholas.

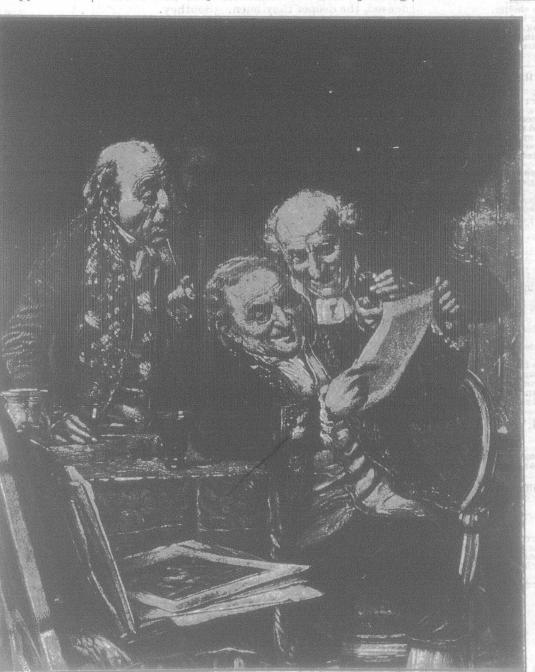
Work for Children.

It is better to let children earn money then to give it to them. and most of them like to do so. In cities there are many things that children can do, but I can not write of them, as I have never lived there. In small towns, where one can have a garden, let the children raise a few rows of some vege-table that sells well. Teach them just how to be and weed

them just how to hoe and weed

and care for that especial sort. In this way they will learn much of nature, and the exercise will be good for them. In living on a farm, let the boys have a few rows of corn all their own,

and the girls a few chickens. Our children all like to earn



Beyond.

BY ELLA WHEELER. It seemed such a little way to me Across to that strange country, the beyond; And yet not strange—for it has grown to be The home of those of whom I am so fond; They make it seem familar and most dear, As journeying friends bring distant countries near.

So close it lies that when my sight is clear, I think I see the gleaming strand; I know I feel that those who've gone from here Come near enough to touch my hand. I often think, but for our veiled eyes, We should find heaven right 'round about us lies.

I cannot make it seem a day to dread When from this dear earth I shall journey out To that still dearer country of the dead, And join the lost ones so long dreamed about. I love this world; yet shall I love to go And meet the friends who wait for me, I know.

I never stand about a bier and see The seal of death set on some well-loved face, But that I think, "One more to welcome me When I shall cross the intervening space Between this land and that one over there, One more to make the strange beyond seem fair,"

And so to me there is no strange beyond seen And so the grave has lost its victory ; It is but crossing, with bated breath And white, set face, a little strip of sea, To find the loved ones waiting on the shore, More beautiful, more precious than before.

THREE CONNOISSEURS

dish, besides utilizing scraps that might otherwise be wasted.

Cream codfish served with dry toast, eggs boiled, poached and scrambled, bits of fried ham, broiled mackerel, are seasonable and can be kept on hand.

mackerel, are seasonable and can be kept on hand. Potatoes may be served in a dozen different ways. Graham Gems.—One cup of white flour, three cups of graham, three teaspoons of baking powder, and sweet milk to form a batter. Bake in quick oven. Serve oatmeal, cracked wheat, rolled hominy,

cerealine, etc., as often as they are relished, not oftener. Fresh fruit is usually tempting to a listless appetite, but apples are best baked. Cocoa is nourishing and refreshing, and should be substituted for coffee three mornings out of the week Insist upon a little exercise in the fresh air before partaking of the morning meal. —Mrs. Lillie Arndt.

Opportunities wear the humblest dress; they hide themselves behind the simplest disguises; there is nothing in them that arouses our interest there is nothing in them that arouses our interest or awakens our suspicions; for the most part we pass them by as the most commonplace things in our environment. This is the subtle and danger-ous test which they apply to us. If they came with their value disclosed by the splendor of their their there would be no test of character in the attire, there would be no test of character in the manner in which we met them.

something, and have something that they can feel is their own. If they desire something that we do not feel able to get, we give them some chance of earning it, if possible.

The eldest, a girl, wants an organ, and she is studying hard, fitting herself for a teacher, so that she can get one. The next two, a boy of eleven and a girl of ten, have just planted a lew rows of raspberries. They are to have the care of them, and I will buy their berries. Another child has a small potato patch.

I know a girl who has a hen she calls her "missionary hen," as all the proceeds go in the missionary box. Where there is no florists they could raise flowers or plants for sale. It is much better to give them something to do at home than to let them work for someone away where we can not watch over them. J. L.

Mrs. Golightly.

The time has come to speak, I think, For on the square I met My beauteous widow, fresh and pink, Her black gown touched at every brick With tender violet.

And at her throat the white crepe lisse Spoke in a fluffy bow Of woe that should, perhaps, ne'er cease-(Peace to thy shade, Golightly, peace) Yet mitigated woe.

In her soft eye, that used to scan The ground, nor seem to see, The hazel legend sweetly ran, ' I could not wholly hate a man For quite adoring me,

Christmas Eve.

806

God bless the little stockings, All over the land to-night, Hung in the choicest corners, In the glow of crimson light, The tiny scarlet stockings, With a hole in the heel and toe, Worn by wonderful journeys, The darlings have had to go.

And heaven pity the children, Wherever their home may be, Who wake at the first grey dawning, An empty stocking to see ! Left in the faith of childhood, Hanging against the wall, Just where the dazzling glory Of Santa's light will fall !

Alas! for the lonely mother

Alast for the lonely mother Whose home is empty and still, Who has no scarlet stockings With childish toys to fill! Who sits in the swathy twilight, With her face against the pane, And grieves for the little baby Whose grave is out in the rain!

Oh, the empty shoes and stockings Forever laid aside; Oh, the tangled, broken shoe-string That will never more be tied ! Oh, the little graves at the mercy Of the cold December rain ! Oh, the feet in the snow-white sandal, That never can trip again !

But happier they who slumber, With marble at foot and head, Than the child who has no shelter, No raiment, nor food, nor bed. Yes! heaven help the living, Children of want and pain, Knowing no food nor pasture— Out to-night in the rain.

A Laugh in Church.

She sat on the sliding cushion, The dear wee woman of four; Her feet in their shiny slippers, Hung dangling above the floor. She meant to be good ; she had promised, And so, with her big brown eyes. She stared at the meeting-house windows, And counted the crawling flies.

She looked far up at the preacher; But she thought of the honeybees Droning away in the blossoms That whitened the cherry trees. She thought of the broken basket, Where, curled in a dusk heap, Three sleek, round puppies, with fringy ears, Lay snuggled and fast asleep.

Such soft, warm bodies to cuddle, Such queer little hearts to beat, Such swift, red tongues to kiss you, Such switch text the second second second second feel in her clasping fingers The touch of the satiny skin, And a cold, wet nose exploring The dimples under her chin.

The annules under her cam. Then a sudden ripple of laughter Ran over the parted lips, So quick that she could not catch it With her rosy finger-tips. The people whispered: "Bless the child !" As each one waked from a nap; But the dear wee woman hid her face For shame in her mother's lap. —Emily Huntington Miller.

"Be Ye Kind."

"Be ye kind to one another," Little sister, little brother; Hear the gentle Master saying— Heed his words, no more delaying: "Be ye kind."

"Be ye kind," for tears are falling, "Be ye kind," 'tis Love's voice calling; Little lives are often dreary, Little hearts grow often we "Be ye kind."

Genuine Gems.

Kind words are the music of the world. They have a power which seems to be beyond natural causes, as if they were some angel's song, which had lost its way and come on earth, and sang on undyingly, smiting the hearts of men with sweetest wounds, and putting, for the while, an angel's nature into us.- [Faber.

New occasions teach new duties; time makes ancient good uncouth ; They must upward still and onward who would keep abreast of

truth.

Modesty seldom resides in a breast that is not enriched with nobler virtues.-[Goldsmith.

It is success that colors all in life; Success makes fools admired, makes villans honest; All the proud virtue of this vaunting world Fawns on success and power, howe'er acquired. Thomson.

There is a divinity that shapes our ends, Rough hew them how we will. —Sho -Shakespeare.

Ingratitude is a crime so shameful that the man was never yet found who would acknowledge himself guilty of it.--[Anonymous.

The love that survives the tomb is one of the noblest tributes of the soul.—[Washington Irving. Virtue is bold and goodness never fearful.

-[Shakespeare.

Through the ages one uncessing purpose runs, And the thoughts of men are widened with the process of the -Tennyson. suns.

THE QUIET HOUR.

"Christ With Us."

"Had we in Bethlehem been, when Mary came For shelter from the storm," we muse in pity, "Our homes had not been shut to her in shame, She had not been an outcast from the city. She had not passed, forsaken and forlorn, From kindred doors, an exile and a stranger. Her has in prove purels had been been From Kindred doors, an exile and a stranger. Her babe in royal purple had been born, Nor lain, among the oxen, in a manger. On bended knees had many a worshipper, On Christ, the king, in royal love attended, And subject hands had offered gifts of myrrh, And frankincense and gold and jewels splendid."

And frankincense and gold and jewels splendid." Nay, Nay, for Christ is ever at our door, For shelter sweet, and kindly pity pleading, And we—we only, like the blind of yore, Discern him not, bard-hearted and unheeding. With beggar hands He asketh us for alms, He pines upon the threshold of the palace; We know Him not, but scorn His outstretched palms, And, while He bungers, drink of plenty's chalice. Daily we meet Him seeking mercy sweet; With tender eyes of orbhans, wan and wistful, He haunts us in the starveling of the street; Among the sad, the tearful, and the tristeful. For still he loves the lowly and the poor, And he who scorns in pride his outcast brother, Had turned of old the Saviour from his door, And he who scorns in pride his outcast brother. But, ah ! the crust, the cup of water cold, For Christ's sweet sake to whose needeth given, Will yield us gain of grace a million-fold With rich requital in the courts of heaven.

Christmas.

Great cities are illuminated at birth of princes, but at the birth of the Prince of Peace an illumination was hung out in the vault of heaven, the midnight sky blazing suddenly with the glory of the Lord, and echoing with voices and ministrelsy of angels before the eyes of simple shepherds. Men of science, who had long studied the heavens, saw

bright signal lamps, hitherto strange to them, and quite unrecorded in the register of their researches. which led them to believe that the long-expected King of the Jews had been born.-Goulburn.

The Good Shepherd.

Ye shepherds of the midnight flock, Why start ye as with sudden shock, Outstretched beneath the moonlit rock ? A mightier shepherd from on high Descends to share your ministry— Straight stripping off Heaven's shining dress For sin and shame and nakedness, For sin and sname and nakedness, Bloodstained, along the lost sheep's track— Though angels could not bring them back— The Son himself, in mortal guise, Climbs peak on peak 'mid thundering skies! And, dying, wins from Death the prize!-C. A. Fox.

The chief joy of the Christmas festival is con-nected with the children. May we, who are grow-ing up into Christ, cultivate the sweet, happy mind of a loving child, and placing our hand in our Father's, tread bravely through the mists and shadows here : "careful for nothing" but that He may be glorified in us—in our lives. That was the one desire of the Holy child Lesus. May it be our one desire of the Holy child Jesus. May it be ours in a greater measure than it has been hitherto; so shall we spend in deed and in truth a holy, happy Christmas.

When, in the pathway of God's will, Thou seemest at a stand, Fretting for wings to scale the hill, And tired of foot and hand; At blested Bethlehem leave thy gloom,

And learn Divine content. By manger, workshop, cross and tomb, Thy Lord to triumph went.

A Christmas Resolve.

BY F. L. N. One Christmas eve, long time ago Three children stood in the firelight glow, Dorothy, Ellen, and sturdy Ted, Waiting, before good nights were said, To send a message of childish haste The the children's coint for wint or wint To the children's saint o'er the wintery waste.

Dangling down from the mantel swayed Stockings the longest that they could find. Stockings the longest that they could find. Santa can't miss them unless he's blind. Hurry, St. Nicholas, over the snow As fast as the reindeer fleet can go ! "

Above, in the low-roofed chamber wide, Dorothy drew the curtain aside; The full moon rode in the sky a queen, Flooding the earth with a silver sheen. See! the stars gleam out from the blue depths high As they must have gleamed from the Bethlehem sky

The silent beauty and peace of earth Touched the children and hushed their mirth; Then Teddy said, "Did the Bethlehem star Feel glad to be sent on that errand far? I should like to have been such a shining light To guide wise men to the Christ that night."

Dorothy smiled. "Mother says, you know, That thousands now to our Christ would go If only they understood the way; And they live in our own good land to-day. Then there are the heathen who've never heard Of God and of Jesus—not a word.

"Perhaps 1 we try we can be to them Lights like the star of Bethlehem." "Why, so I will," was the quick reply; And Ellen echoed, "So will I." Good words and brave, which an angel kept And wrote in God's book while the children slept.

Years have passed : at this Christmas-tide The three are scattered. The home fire-side Claims good Dorothy, 'mother's right hand ;' Ted works for Christ in a foreign land, And little Ellen away at the W est, Each guiding to Jesus as each can best.

DECEMBER 20, 1894

Be ye kind," lest your to-morrow May bring bitter pain and sorrow, For the words of cheer unspoken, For the links of love's chain broken : "Be ve kind."

Three bright stars pointing the way above. Three warm hearts, filled with a heavenly love, Telling the story again and again Of Christ and His love to sinful men. But the work is great and the workers few; Christ needs more laborers: Christ needs you !

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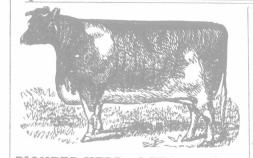
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J. G. Templeton: Dear Sir—I have been troubled with rheumatism in the knees and shoulders for 14 years. The joints would swell agood deal and were exceedingly painful. Sometimes it was so bad that I found it almost impossible to work. You will remember that I obtained a box of powders from you on the 25th, at 9 o'clock. The two powders which I took helped me won-derfully, and after taking four powders I was walking around with no pain, and capable of doing a day's work. Yours truly, Say not: No medicine will cure me until you have tried "Pink Powder."

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DECEMBER 20, 1804

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522,524,526 MAIN ST., WINNIPEG Hundreds of orders coming to hand from all parts of the country. Send us a trial order and you will be sure of satisfaction. This week we are selling: -Silk handkerchiefs at 10, 15, 25, 50, 75 cents each. Silk ties, ladies', at 25, 50, 75 cents, lovely goods. Kid mitts at 75c. and \$1.00, worth much more. Lovely pocket hand-kerchiefs at 5c. each, colored border. Ladies' cashmere hose at 25, 30, 35, 40, 50 cents, wool hose from 25c. up. Corsets at 25c., 50c., 75c., cheapest in town. Ladies' wool vests at 50c. Excellent spools at 25c. a doz., all numbers. Dolls for Christmas at 25c. and 50c. Beautiful large albums at 75c. and \$1.00 each. Hand-sleighs at 25c., 40c., 50c. and 75c. Another wholesale stock of dress goods. A good costume, six yards double width, heavy goods, for \$1.95. Another line of heavy Scotch Tweed effects at \$2.95 a costume. Women's \$2.50 but-ton boots for \$1.50. Men's felt-lined electric slip-pers, \$1.00. The most comfortable house slip-pers, \$1.25. Women's felt-lined electric slip-pers, \$1.00. The most comfortable house slip-pers, \$1.00. The most comfortable house slip-pers, \$1.00. The most comfortable house slip-pers, \$1.00. Hundreds of other cheap lines we can-not mention. But if you want anything in winter wear or in Christmas goods, send to us. Satisfaction guaranteed. Send for samples.

Satisfaction guaranteed. Send for samples.

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A grand lot of young pigs in April and May at low prices. Orders now being booked. Cor-respondence solicited. 77-y-m

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THE FARMER'S ADVOCATE.

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TAMWORTH BOARS WINNIPEG PRODUCE & COM.'S CO., Ltd., FOR THE NEXT 30 DAYS at the FOLLOWING PRICES FISH, FRUIT, GROCERIES, ETC., BUTTER, ECCS, CHEESE, POULTRY, BEEF, PORK, GRAIN, ETC-

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They are the best blood in America. Grand Bronze Turkeys, toms and hens, from my mammoth 23-pound hens and 40-pound goblers. Prices moderate. Write and send stamp for reply.

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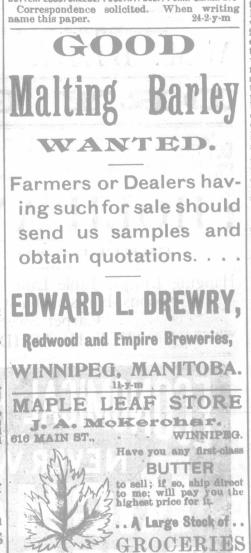
61-y-m FORT RJUGE POULTRY YARDS Has for sale a few choice White and Barred Plymouth Rocks, Wyandottes, B. Leghorns, Ducks and Bronze Turkeys and Rabbits. Write LING, Winnipeg. 10-y-m S. LING. Winnipeg.

MUNGER'S AMERICAN STRAIN. Martin and Annual and Annual A Having and Brooding. 4 Brooding Pana for 1894.

white the Line. and and Eggs For Salo at all Times. Coirs, Tries and reading Pens Mated for Cast Results. Reading constants and and Results. AN NUNCER DOLLS IN

ANDERSON'S PATENT DOUBLE ACTING ORCE PUMP (for Hand Power or Wind-Mill)

The Pump proper, that forces the water, is placed near the bottom of the well; is always PRIMED and lubricated; cannot possibly freeze. Has no leather suckers of any kind, no stuffing box, no rod working inside the conducting pipe — all of



Are prepared to fill all orders for

and solicit your consignments.

-0-0-AND-0-0-ROVISIONS Always fresh, and prices right. 23-m Let Us Hear From You.

MARKET DRUG STORE 291 Market St., directly opp. Meat Market, WINNIPEG, MANITOBA.

C. N. EDDINGTON, PHARMACEUTICAL CHEMIST. Farmers, con-sult yourown in

terests, and prove this to be

the proper place to procure Pure

STOCK GOSSIP.

499

the Farmer's Advocate.

FLOCKS AND HERDS IN MANITOBA. J. A. S. MACMILLAN.

J. A. S. MACMILLAN. J. A. S. MACMILLAN. On the 22nd of November a representative of the Farmer's Anvocare made a flying visit to the sheep ranch of J. A. S. Macmillan, to the pig ranch of J. D. McGregor, and to the Experimental Farm—all in the immediate vacinity of Brandon. Mr. Macmillan's flock of 20 Shropshires we found in good, hardy con-dition; they were finding their own living in the wheat straw piles just outside the corral where they are confined at nights, with nice roomy sheds, into which they may go if they so choose. He is pretty well sold out of rams, there only being half a dozen left in the sale pen. The rams were confined in roomy pens by themselves, and were in remarkably fine ewes for early lambs, he will not have the majority come in as early as usual next season. He has an abundance of hay and oat sheaves, besides the wheat chaff piles, so looks forward to the winter quite contentedly, and we have no doubt but that, under the care of his ax-oulent shepherd, this yaluable flock will win-ter in good shape. Mr. Macmillan intends spending the winter in England.

<text>



STOCK GOSSIP.

600

FLOCKS AND HERDS (CONTINUED). K. M'KENZIE, EX-M. P. P.

K. M'KENZIE, EX.M. P. P. On a recent date a short call was made at the home of Kenneth McKenzie, of Burnside, and many an old settler who, way back in the seventies, partook of the hearty hospitality of these worthy pioneers, will be pleased to learn that Mr. and Mrs. McKenzie are enjoying good health in their comfortable home on Rat Creek. They reported fine crops on their own and also on the adjoining farms of their sons, James and Kenneth, and said that the stock had all gone into winter quarters in good shape. A large barn has been built in late years, which affords ample accommodation for the harge number of horses, and for the few Short-horse now kept. The little flock of sheep, oniefly Lincolus and Leicesters, have separate compartments. compartments.

WM. KITSON.

Binding timents. WA KITSON. Torn make call was on Mr. Wm. Kitson, and the source of the source of

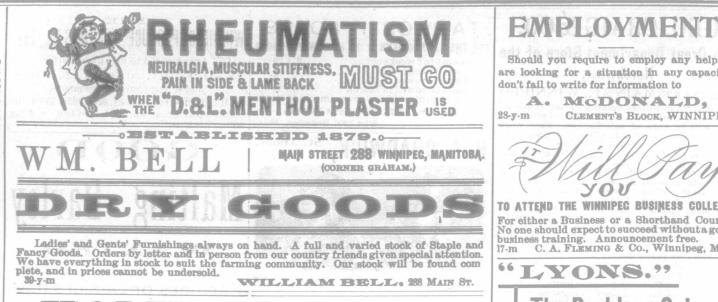
JAS, GLENNIE.

A stop was made at Jas. Glennie's, Long, burn, but Mr. Glennie being away from home we did not inspect his Holsteins; as time was limited, we hurried on, stopping at JAS. BRAYS

JAS. BRAY S for dinner, and after a hurried look over the stock, drove back to Portage la Prairie. We were much pleased with the general appear-ance of things at "Oak Grove Farm." The Jerseys have all laid on flesh since we last saw them; they have been pastured on timothy sod, and it seems to have agreed well with them. The young bulls are a very promising lot, fit to bead herds of dairy cattle anywhere. The Yorkshires are the best and evenest lot we have seen, there being several extra handsome ones, one yearling sow, bred by Wesley Dawson, Stonewall, being a model bacon pig. Another young boars are a nice even lot, and in good growing shape. The Oxford-Down sheep are looking better than we ever saw them be-fore. Mr. Bray is feeding fodder corn (North Dakota Flint) cut and shocked in the field till wanted, when he runs it through a cutting-box and mixes with cut oat-straw and sheaves. Mr. Bray feeds his pigs on dry chop in self-feedera, giving plenty of water to drink, and he is well satisfied with the system.

NOTICES.

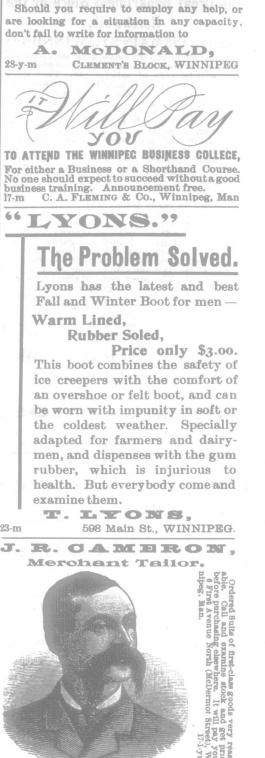
Farmers, ranchers, poultrymen, business men, and all who want stamps of any kind, brands for stock, marking tags, checks, rubber



USEFUL AND ORNAMENTAL. Hanging Lamps, Table Lamps, Pocket and Table Knives Spoons, Forks, Table Casters, Cake Baskets, .

. Carpet Sweepers, Skates. WRITE FOR PRICES J. H. ASHDOWN, Winnipeg, Man.





EAMSHIP

WINNIPEG.

DECEMBER 20, 1894

type, name or business stamps, will be able to secure them at right prices by writing A. B. Cail, Winnipeg. A job printing department run in connection turns out neat cards, letter heads, envelopes, posters, statements, etc. If type, name or business stamps, will be able to heads, envelopes, posters, statements, etc. If you want printing done, or any kind of stamps or marking devices, write to him for prices or catalogue. His advertisement will be found in another column.

in another column. At the Market Drug Store will be found a complete stock. Only thoroughly competent assistants are employed, and day or night your wants in this line will be faithfully and pleas-antly supplied. Mr. Eddington, the proprietor, has prepared a special Tonic for the Hair, to prevent it falling, and produce healthy, luxur-iant growth, which, he informs us, has pro-duced remarkable results. His Specific for Rheumatism and Sciatica is another remedy highly recommended by him for this painful disease. All communications will be promptly replied to. Other specialties are made mention of in another column.

The very liberal offers made by the Royal Crown Soap Co. are pleasing a great many people, as the numerous replies testify. Hun-dreds are availing themselves of this plan of securing nice and useful articles. Their efforts to secure such offers as are highly ap-preciated have been most successful. The Royal Crown Soap continues to be a general favorite, and its uniform good quality is con-stantly increasing the demand for it. It is not at all necessary to brand it "use no other," for those who once use it attend to that without the suggestion. The very liberal offers made by the Royal the suggestion.

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FARMER'S ADVOCATE

-AND

HOME MAGAZINE.



PRINTING Of every description neatly done at LOWEST PRICES. Write for what you want. 66-y-m

ADVERTISE IN THE FARMER'S ADVOCATE. 26-y-m Winnipeg.

Small Catalogue of Winter Sports Now Ready, and Mailed on Application.

THE HINGSTON SMITH ARMS CO.

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THE FARMER'S ADVOCATE



BEAM - HOUSE - SHROPSHIRES J. YUILL & SONS, Meadowside Farm, Ontario.

Carleton Place, Our herd is com-Richmond Hill Station. posed of seventyfive head. Leon-ard Meadowside ard Meadowside -1423-, first prize at World's Fair, **DEEP MILKING SHORTHORNS** DEEP MILKING SHORING 2 roams For sale, 4 young bulls, 2 reds and 2 roams also yearling heifers and heifer calves. The Golden Drop bull, Golden Nugget = 17518=, by Imp. General Booth = 6365=, (54353), at head of herd. Address WM. GRAINGER & SON. Lon-desboro, Ont. 13-y-om

502

figures.

6-2-y-om

AYRSHIRES

AND

BERKSHIRES.

A few good Ayr shire bull calves and heifers, Berk-shire boars and sows. For particu-

lars writ

7-y-om

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CHOICE HOLSTEINS FOR SALE

I have a few very nice pure-bred registered Bulls and Heifers for sale at very seasonable

Write, or come and see me.

THE GLEN STOCK FARM

Whiteside Bros.,

Champion Dairy Herd of Ayrshires at various government tests. Prise winners at the World's Columbian Exposition, Chicago.

Write MESSRS. ROBERTSON & NESS. Howick,

DOMINION PRIZE HERD OF AYRSHIRES

We have the oldest established, largest and best herd of Ayrahires in Canada. Choice young stock for sale at liberal prices. Satis-faction guaranteed. JAMES DRUMMOND & SONS, Petite Cote, Montreal, P.Q. 8-2-y-om

GREENHOUSE FARM.

Ayrshire Cattle, Oxford and Suffolk Sheep.

INNERKIP, ONT.

19 y-om

JOHN A. LINE, Sherwood, Ont.

heads the herd. Cows of the deep-

cows of the troop est milking strain, having won sev-eral medals at provincial tests. Shropshire sheep and Berkshire pigs. Young stock of both seres for sale. Visitors welcome ; met at train. 7-y-om Give us a call. 7-y-om

PORE ST. LAMBERT BULLS AT YOUR OWN PRICE

Jolie's Pogis of St. A. 22830, six years, sire Romeo of St. Lambert, dam Jolie of St. L. 3rd. Jolie Boy of St. A. 23713, six years, sire Romeo of St. Lambert, dam Jolie of St. L. 4th. Jolie's Romeo of St. A. 29732, five years, full brother to the above. Gipsey Boy of St. A. 25705, four years, sire Jolie's Hugo of St. A., dam Gipsey Hugo of St. A. Defiance of St. A. 25733, four years, sire Romeo of St. Lambert, dam Joliet of St. Annes. Lord Derby of St. A. 3391, three years, sire Lady Fawn of St. A. Son, dam Juliet of St. Annes. The best offer (received before the Sist December) over \$75, gets the choice of the first three, and best offer over \$50 gets the choice of the last three. They are all solid colors, and out of cows whose public records as dairy ows have never been beaten. We sold six bulls this year, same age as above (not so six bulls this year, same age as above (not so well bred), for \$625. Apply to

W. A. REBURN, Ste. Anne de Bellevue

20-y-om FOR SALE.

A 'choice Jersey bull calf, two months' old, solid fawn color—his two granddams have a butter record in seven days of 18; pounds and 19 pounds 5 ounces, respectively—to make room for new coming calves. I will deliver him free, express prepaid, for \$25.00. Address, W. C. SHIBARHR,

BRIGHT, ONT. 19-2-y-om **GLEN ROUGE JERSEYS**

WILLIAM ROLPH, Markham, Ont., offers Twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals, Prices right. 21-y-om

JERSEY-CATTLE Of the heaviest milking strains. One of the largest herds in Canada; bred closely to the great dairy oow at Chicago, also the famous two-year-old. Sires of both were sold from this herd. Also Welsh Blood Ponies for ladies' and ohildren's driving. Stock for sale always on hand. GEO. SMITH & SON, Grimsby, Ontario. 3-y-om

I I FOR I I HEREFORDS WRITE TO F. A. FLEMING, 5-y-om Weston, Ont. Imported and Home-bred



winners to our leading shows, and here also was bred Mr. A. O. Fox's noted ram "Blue Blood Yet," which so a bly piloted Mr. Fox's flock of Sbronchires at the

piloted Mr. For's flock of Shropshires at the World's Fair. Wm. Thomas will have several grand shearling rams for sale this next season, sired by his grand old sheep "Blue Blood," and also a grand lot of shearling rams by other noted sires; also about 150 splendid shearling ewes to select from. Foreign buyers always welcome. If not able to come and select for yourselves, write and obtain prices from WM. THOMAS, The Beam House, Moniford Bridge, Salop. Railway Station: Baschurch, G. W.R. 2.2.y-om 2-2-y-om

LARGE IMPROVED YORKSHIRE PIGS and Holstein Cattle.



BREEDER8 OF Large Improved Yorkshire Pigs. Markham Baron, the sweepstakes Barrow over all breeds at the Guelph Fas Stock Show, 1898, bred by us. A choice assortment of Pigs now on hand. Only first-class stock abjoed to order. Markham Herd Farm, at Locust Hill, Station. 17-y-om JNO. PIKIS & SONS.

clatty of Improved Large Yorkshire Hogs



This herd has again won first prize at Toronto Exhibiton. Two hundred pure-bred Pigs, of the type most profitable to the feeder, and the pork-packer's favorite. Individuals from this herd have been prize-takers at the principal Canadian Exhibitions. I request a personal inspection of my herd. Visitors wel-come. All stock guaranteed to be as described. J. E. BRETHOUR, Burford, Brant Co., Ont. 3-y-om





THE NOME OF THE BERKSHIRES. J.G. SNELL & BRO., Ontario. Edmonton, -We are now breeding a num-ber of fine young sows, the get of Enterprise, to the imported poars star One. British Chese and a fine lot of young pice farrowed in September and October. Our Berichters won eight firsts out of eleven offered at the late Toronto Exhi-bition. Write for description and prices. 2-y-om THE BRONZE MEDAL HERD OF IMPROVED CHESTER WHITE SWINE. Headed by Cleveland Imp. 320, and Washing-ton, a three-premium winner at the Columbian Exposition, Chicago, 1893. Dorset Horn sheep, imported and home-bred. B. H. HARDING, Theoremetals Ont. Thorndale, Ont, 20-y-om THE AVON HERD OF RECISTERED TAMWORTH, CHESTER WHITE AND IMPORTED POLAND CHINA SWINE. Our herds are selected from the best strains from England and the U.S. We from England and the U.S. We have some choice young stock of Tamworthand Poland Chinafrom 5 weeks to 4 months old. Pairs not akin. Prices moderate. Correspondence solicited. Orders booked for spring pigs, Chester White. HERRON & DAFOE, Avon P. O. 22-f-om TAMWORTHS & IMPROVED CHESTER WHITE SWINE Our herds of Tam-worths and Chesters are selected from the choicest herds in Eng-land and United States; 30 choice fall pigs of the above breeds for sale, also 8 grand Tamworth boars fit for fall service, and 10 choice sous bread for breeds for sale, also 8 grand Tamworth boars fit for fall service, and 10 choice sows breed for spring farrow. Pairs furnished not akin. Re-duced rates by express. Pedigrees furnished. Send for prices before buying elsewhere. H. GEORGE & SONS, Crampton, Middlesex Co., Ont. 7-y-om Duroc Jersey Swine



Write • for • Prices. Registered pedigrees furnished. 24-om Mention Advocate. 1500 lbs. Extracted, and in sections, for sale, of Honey and Cockerels of the following breeds:-Lt. Brahmas, Br. Leghorns, G. Dorkings, Bl. Spanish. Spanish. Correspondence solicited. Descriptive catalogue free. 17-y-om CAPT. A. W. YOUNG, Tupperville, Ont he Oxford Herd of Registered Poland Chinas

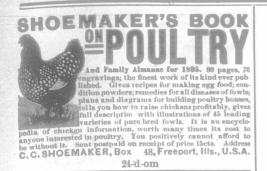




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Agents Wante

We want a smart man in every village to col-lect feathers for us. We buy Goose, Duck, Hen and Turkey, and WE PAY CASH. Now is the time. Write us what you have, and what you can collect.

The ALASKA FEATHER & DOWN CO., Ltd. 10 St. Sacrament St., MONTREAL. Branch-28 Front St. East, Toronto. "Alaska" is our name and our trade mark.





LINSEED . OIL . CAKE Whole, nutted pr meal. Car lots delivered at any point. Write for prices. BODY & NOAKES, Winnipeg Linseed Oil Mills, Winnipeg, Man. 21-om

Wire Fence, which is claimed by some to be second to none, the lateral wire of which, as well as the upright stay, being crimped at joints. Our agents build either on premises. Agents wanted everywhere in Canada, to whom sole territory will be allotted. County and Township Rights for sale. Our Gas Pipe Frame Gate takes the lead. No better or cheaper place in the city to get plain or fancy turning done. Call on, when in the city, or address, CANADA FENCE COMPANY, Cornor Bathurst and Clarence Sts., London, Ontario.

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Popular Patron

. . . IN ONTARIO . .

Is our most deservedly popular "Patron Sewing Machine." It performs all it promises. If you remit us \$26.50, we will ship it to your address; allow you to use it two weeks on trial, when, if it does not prove satisfactory in every does not prove satisfactory in every respect, you may return it at our ex-pense and your money will be refunded. We are placing our second repeat order with the manufacturers, to meet the increased demand from city and country. Remember, it has no staff of agents to support, so that you get full value for every dollar you put into it. **GRANGE WHOLESALE SUPPLY JO.**

126 King Street East, TORONTO, - ONT. G. W. HAMBLY, Manager. 17-y-om

GREENER'S RENOWNED CLOSE SHOOTING GUNS FOR GAME AND PIGEONS

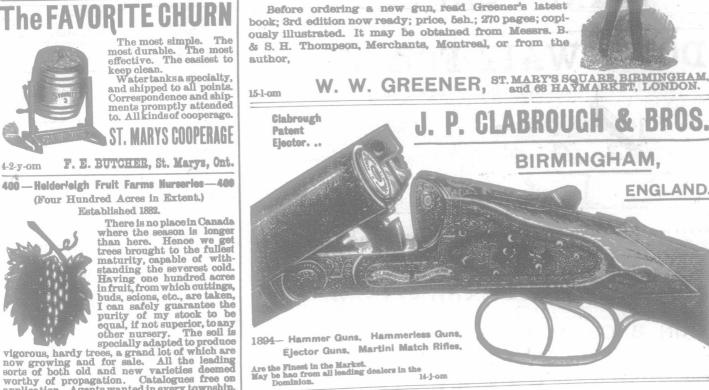
No better wire fence built than the Casey Diamond Grip. Just the thing for farmers—neat, strong and durable. Will last a lifetime, barring accidents. Uses only straight wires" with so little depression as not to cause the galvanize to crack or peel. If there is a dealer who wants something better to handle than he's had, try it. We also supply the Double Look

17-y-om

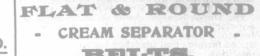
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May be obtained through MESSRS. HINGSTON SMITH ARMS CO., WINNIPEG, or any gun dealer or storekeeper in Canada. PRICES RANGING FROM \$60. These guns are specially noted for their fine shooting qualities and strong breech action, and have won more valuable prizes and made higher scores than any guns in the world.

Before ordering a new gun, read Greener's latest book; 3rd edition now ready; price, 5sh.; 270 pages; copiously illustrated. It may be obtained from Messrs. B.







Established 1882.

(Four Hundred Acres in Extent.)

4-2-y-om

There is no place in Canada where the season is longer than here. Hence we get where the beact is to be the time than here. Hence we get trees brought to the fullest maturity, capable of with-standing the severest cold. Having one hundred acres in fruit, from which cuttings, budg across the taken.

infruit, from which outtings, buds, scions, etc., are taken. I can safely guarantee the purity of my stock to be equal, if not superior, to any other nursery. The soil is specially adapted to produce vigorous, hardy trees, a grand lot of which are now growing and for sale. All the leading sorts of both old and new varieties deemed worthy of propagation. Catalogues free on application. Agents wanted in every township. 18 tf com E. D. SMITH, Winona, Ontario.

13-tf-om

The Improved KNITTER Family... Family...... Family...... Will knit 15 pairs of sox a day. Will do all Knitting re-quired in a family, homespun or factory yarn. SIMPLEST KNITTER on the Market.

This is the one to use. A child can operate it. We guar-antee every machine to do good work. We can furnish ribbing attachments. Agents wanted. Write for particulars Price, \$8.00.

Dundas Knitting Machine Co., Dundas, Ont



SURE Send us your address and we will show you o for every day's work; absolutely sure; don't fail to v INPERIAL SILVERWARE CO., Bex & Windsor,

21-L-om

The Razor Steel, Secret Temper, Cross-Cut Saw

WE take pleasure in offering to the public a Saw manufactured of the finest quality of steel and a temper which toughens and refines the steel, gives a keener cutting edge and holds it longer than by any process known. A Saw to cut fast "must hold a keen cutting edge."

a keen cutting edge." This secret process of temper is known and used only by ourselves. These Saws are elliptic ground thin back, requir-ingless set than any Saws now made, perfect taper from tooth to back. Now, we ask you, when you go to buy a Saw, to ask for the Maple Leaf, Razor Steel, Secret Temper Saw, and if you are told that some other Saw is as good ask your merchant to let you take them both home, and try them and keep the one you like best. Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the solaright for the "Razor Steel" It does not pay to buy a Saw for one dollar less.

brand. It does not pay to buy a Saw for one dollar less, and lose 25 cts. per day in labor. Your saw must hold a keen edge to do a large day's work. Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.

American Saws. MANUFACTURED ONLY BY

SHURLY & DIETRICH, GALT. ONTARIO.





The Belt with the above trade mark is the only successful one made. Used all over the world. Ten years in the market. Not any ex periment. Real manufacturer in NIAGARA FALLS ONT., CANADA; SUSPENSION BRIDGE, N. Y., U. S. A., and DURSLEY, ENGLAND. For Catalogue, etc., apply to





Allowsa Free Circula-tion of Air while Churning.

CHURNS WITH HALF THE LABOR REQUIRED BY ANY REVOLVING ONURN.

TO BE HAD FROM ALL. LEADING DEALERS.

"Awarded first prize at Toronto Industrial Fair over all competitors.

orsale by hardware dealers generally. If your dealer does not keep them write to B. R. HAMILTON & CO., Patentees, Neepawa, Man. 49-y-om.

STOCK GOSSIP.

the Farmer's Advocate.

R. B. McMullen, Goldsmith, Ont., bas a new advertisement in this issue. He breeds Poland-Chinas, and we call our readers' attention to his stock. See his advt. Messrs. J. & G. Taylor, Rock wood, have made

Messre J. & G. Taylor, Rockwood, have made an important change in their advertisment. Their hard of Shorthorns will command the attention of all S. H. breeders. See his advt. Jas. Elder, Virien, says that his advertise-ment in the FARMER'S ADVOCATE has sold a lot of pigs this year for him—could sell more if he had them. He reports the young boar he bought from S. Coxworth last summer as do-ing finely, and of the right cort. M. Maw, North Winnipeg Poultry Yards, has sold his prize-winning Barred Plymouth Rock cock, "Hero." He has a few grand young cockerels, and also some pullets from his best pens, sired by "Hero," for sale now. Write for particulars.

best pens, sired by "Hero," for sale now. Write for particulars. W. G. Pettli, of Freeman, Ont., makes change of advertisement in this issue. Having rented one of his farms for a term of years, he is offering to sell choice stock at very much re-duced prices. Mr. Pettit reports fairly good sales for the dull times, and thinks the outlook for next season is quite encouraging. Boderic McKenzie, High Bluff, reports a good demand during the past few months for his

for next season is quite encouraging. Roderic MoKenzie, High Bluff, reports a good demand during the past few months for his Large Improved Birkshires; his last sales were a young boar to J. A. McGill, Neepawa, which took first prize at the Neepawa fall fair. A pair to Wellington Wilson, Treberne, the boar being the one which took first prize at the Winnipeg Industrial last summer. And also a fine young sow to Frank House, Olive, Man. He has still left a choice lot of young boars and sows not akin for sale. W. A. Reburn, St. Anne de Bellevne, writes:— "The bulls I am now offering are, without excep-tion, the grandest bred bulls that I have ever values. I used Jolie's Pogis on some of the young stock, and sold a pair of heifers sired by him for \$550. One of Jolie Boy of St. A. sons is at the bead of a large herd in Ohio, U. S. A. Last spring I was offered \$100 and \$125 for some of these bulls, the partice buying others from me, but would rather have had these. I have decided to sacrifice them, as I want room badly. The sire of four of them-Romeo of St. I. (for a great number of years my herd bull), was a double grandson of Stoke Pogis Srd; he was almost full brother to Mary Anne of St. L. having 96 same blood elements as she had; his grand dams were Jolie of St. Lame of the last two is by Romeo of St. Lamber, and out of a daughter of Lady Fawn of St. A. ; dam of the last two is by Romeo of St. Lamber, and out of a daughter of Lady Fawn of St. Annes-16 Hebe of St. Lambert and Juliet of St. A.; dam of the last two is by Romeo of St. Lamber, and out of a daughter of Lady Fawn of St. Annes-16 Hebe of St. Lambert, of Greenwood, Ont, writes to this office:—"We now have all kinds of stock permanently placed in their stalls for winter, and they are already improving with their winter rations of excellent hay and plenty of turnips, together with a very little winter, and they are already improving with their winter rations of excellent hay and plenty of turnips, together with a very little meal for the younger things. The young bulls are going forward as well as we have ever had them do. They are not only growing and put-ting on some flesh, but they are putting it on evenly and well. We now have seventeen of them of various ages and colors, from deep red to pure yellow-white, and a finer lot we have never stabled. The heifers are equally good, though scarcely in such fine form ; they are, however, now doing exceedingly well. They are a smooth, even lot, and some of them look like making winners anywhere by September are a smooth, even lot, and some of them look like making winners anywhere by September next. Indian Chief is as healthy, hearty, active and sure in his ninth year as he has ever been. He is carrying his flesh as firmly and as evenly as he did when three years old. The enquiry for young bulls has never been better, though sales are slower, because people are harder to sell to. We must take their prices, I suppose, even if we lose money." Peter Lamarsh & Bro., Wheatley, Ont.:--

Peter Lamarsh & Bro., Wheatley, Ont.:--"The Duroc-Jerseys continue to increase in popularity. I have received more enquiries for stock than ever before. Wherever intro-duced farmers find that they have unsurpassed BY

The principal advantage the farmer has when he sends to the City for his supplies is the very large stock he has to select from.

Our terms are cash with the order. We are a thoroughly reliable firm, and hundreds of farmers from all parts of Canada are concentrating their orders upon our Mail Order Department with satisfaction and profit to themselves.

We carry an immense stock of all of the following Fur Robes on hand, and can send you by express, without delay, any one or more of these Robes, upon receipt of the price. Send your money by registered letter or by Post Office Order. If the order reaches \$10 we pay the charges to any Express Office in Ontario.

\$ 5-Small Gray Goat Robes, \$5 each.

- **\$** 7—Large Gray Coat Robes, **\$**7 each.
- **\$** 8—Extra Select Large Gray Goat Robes, **\$**8 each.
- **\$** 8-Jet Black Goat Robes, small, **\$**8 each.
- \$10-Jet Black Goat Robes, large, \$10 each.
- \$10-Large Australian Bear Fur Robes, \$10 each.

80 cents per yard-Finest quality fancy striped Plush Lining for

Robes, 1½ yards wide; price, 80 cents

per running yard.

Write for Oatalogue to





504

DECEMBER 20, 1894

duced farmers find that they have unsurpassed qualities. Their quiet and contented dispo-sition, hardy constitution and excellent quality of pork make them prime favorites. The Durocs are more in demand here than ever before. I have had only one ruptured pig among the hundreds raised, and that one due to a severe accident. I have shipped and sold to following parties lately: H. M. Stauffer, Plattsville, a sow; J. E. Shibly, Harrowsmith, Ont., a boar; G. Roberts, Hepworth, Ont., a pair; Sylvester Brush, Malden, a pair; N. Far-rough, Maidstone, Ont., the fourth purchase for Mr. Farrough; Robert Roe, Newry, Ont., a sow, bred; Seth Harling, Mersea, a sow, bred; a pair to Mr. Bogie, Ulverton, Que. I receive many letters from my advertisement in the nany letters from my advertisement in the ADVOCATE

many letters from my advertisement in the ApvocATE." S. Coxworth, Silver Spring Stock Farm, Claremont, Ont. :-- "The past year has been one of the most successful since I have been breeding Berkshires. The demand has been far in excess of my supply, although prices have been somewhat low. I think Berkshires have beld their own amidst the booming of other breeds, and I think the time far distant when Berkshires of the right type will not command as high a price as any other breed. I was very successful at the Munitoba, Quebec and Outario shows during the past season, winning in all 74 first prizes, 18 seconds and 13 thirds: clie 11 diplomas and here prizes. Space will not allow me to report a list of seles, but among the most important were the following A choice pair under one year to S. W. Brown, of Portuge la Prairie. Manitoba; one pair very promising young sows to R. G. Long, of Ock or corrage a trairie. Manitoba: osc pair ver promising young sows to R. G. Long, of Od Lake, Man.; sow under one year to J. G. Bar ron, of Carberry, Man.; four sows to W. 4 McClary, Comptor . P.Q. ; sow under six must to W. J. Shables of the ron, of Carberry, Man.; four sows to W. P. McClary, Comptor. P.O.; sow under six months to W. J. Shebley of Harrowsmith, Ont.; bour under one year and boar under six months to J. W. Walker, of eithen Mills, Ont.; one two-shear Cotswold ram and pair imp. evos to Edmond Valin, of Belair, P. Q. I have recently shipped my best shearling run to J. R. Semple, of Brule, N. S. My herd of Berkshires was never in as good breeding condition as a pros-ent. I have four aged stock boars in use, and expect to be able to supply my numerous customers with pigs of the right stamp the coming season." coming season.

DECEMBER 20, 1894 THE NEW

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Chatham and Chautauqua Giant Wagor With Unbreakable Axles and Unbreakable Arms.

THE BEST MADE ON EARTH. So said the Judges on Vehicles at the WORLD'S FAIR,

Who awarded us a

GOLD MEDAL AND DIPLOMA Over the heads of numerous old and extensive builders in the United States and Canada. The axles are unbreakable, because

Van Allen's Patent Giant Arms

Throw all the load directly on the arms, and the arms are also unbreakable, because they are the best refined

MALLEABLE .: IRON,

Warranted as strong, more durable and lighter running than Steel Skeins. These Giant Arms completely revolutionize the building of wagons. Our 3-inch Malleable Giant Arm Wagon is

WARRANTED STRONGER,

Though less in price, than any ordinary 31 to 31-inch cast-iron arm wagon, and our 21-inch Malleable Giant Arm Wagon is warranted stronger than any ordinary 3-inch cast iron arm wagon, and less in price.

THE DEMAND for these wagons is so great that though we are turning out 12 per day, we are taxed to the utmost to supply it. Send in your orders early.

TERMS AND PRICES LIBERAL.

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using a wrench. The frame is solid and has no shake. The crushing rolls can not get out of line. The feed is controlled by a new patent process, and can be stopped instantaneously. This Crusher ground

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No. 16-Price, \$10.00. Real Diamond, I4K Gold. 18 New Subscribers.



No. 18-Price, \$5.50. 3 Turquois, 8 New Subscribers

The above are all guaranteed 10 karat gold, with the exception of No. 16, which is 14 karat.

"DAVENPORT" THOD

MODEL '94. TIP UP. "We have tested this gun and can recommend it highly to our Subscribers."

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same on most favorable terms.



THE AMERICAN STANDARD OF PERFECTION, AS ADOPTED BY THE AMERICAN POULTRY ASSOCIATION: Containing A COMPLETE DESCRIPTION OF ALL THE RECOGNIZED VARIETIES OF FOWLS. For Three New Subscribers. Price, \$1.00.

SINGLE GUI

Has detachable barrel, with heavy lug securely bolted, and having extra strong screw key fastening with stop, top snad action, rebounding lock, automatic ejector positive in action and perfectly reliable, drop forged steel parts, extra heavy fine steel barrels, 30 inch, carefully choke bored, finely checkered pistol grip stock, rubber butt plate and fancy checkered force-end. Thoroughly high grade in finish and detail. 12 gauge. Weight, about 6² lbs. For 12 New Subscribers at \$1 each, and \$4 additional cash. cash.

THE "DAVENPORT" RIFLE. MODEL '91. DROP BLOCK.

Has detachable barrel, sliding breech block, rebounding lock, case-hardened drop forged steel parts, fine steel barrels carefully rifled and chambered for standard long and short R. F. ammuni-tion; open sights, finely checkered walnut stock and fore-end. Finely finished and extremely accurate. 22 Calibre, 22 inch round barrel. 32 Calibre, 24 inch round barrel. Weight, 44 to 44 bs. 10 New Subscribers at \$1 each, and \$2 additional cash.

A

J. P. CLABROUGH & JOHNSON'S CHLEBRATED GUNS. Genuine Greener Pattern, cross bolt through frame and extension rib. Magnificent gun, made by J. P. Clabrough & Bro., with fine Damascus barrel, complete gun, treble bolt, Greener cross bolt, D & E. fore-end checkered pistol grip, English walnut stock, matted extension rib, circular hantmers below line of sight, 30 inch barrels. In 10 and 12 gauge. 35 New Subscribers at \$1 each, and \$15 additional cash. English Hammerless, fine Damascus barrels, made by J. P. Clabrough, %plendid leading line, fine English walnut stock, checkered pistol grip, perfectly balanced, D. & E. fore-end with matted extension rib, and automatic safety attachment. In 10 and 12 gauge: 50 New Subscribers at \$1 each, and \$20 additional cash.

W. GREENER'S WORLD-RENOWNED GUNS.

Dominion Gun-Grade A. In this gun all value is put into the barrels, locks and shooting. This new model made to suit American sportsmen. It has well-bent stock, pistol grip, horn English figured twist, and are all full choked on W. W. Greener's world-renowned method. This gun is a first-rate performer, is handles well, and will shoot and wear to the bolt, fine, handsome, strong shooting gun, matted extension rib, fine walnut stock with pistol grip, manufactured by W. W. Greener. In 10 and 12 gauge. 55 New Subscribers at \$1 each, and \$20 additional cash. Forester's Hammerless - with laminated steel barrel, Anson & Deeley actions. Greener cross bolt, fine walnut stock, checkered pistol grip; grand all-ronnd gun, made by W. W. Greener. In 10 and 12 gauge. 80 New Subscribers at \$1 each, and \$35 additional cash.

ACTIVE AGENTS WANTED IN EVERY TOWNSHIP,