cities. After all, there is nothing the matter with the community that could not be cured if folks would only pause on their mad rush after the things that do not satisfy, namely, riches and pleasure, and take their enjoyment out of the simple things of life. Let them taste the pleasure of service by extending the helping hand to those less fortunate than themselves, and things will soon improve. When this condition, in the minds and hearts of the people, comes about, the country will come into its own. But will it come; yes, but not until we have all been encouraged with the rod of affection, then in our common woe we will cast aside all false ideals and learn to work together for the common good.

Norfolk Co., Ont. CANUCK.

Be Friends With the Boys.

EDITOR "THE FARMER'S ADVOCATE":

The season of the year is again at hand when one hears the pioneers of our land telling of the social intercourse which prevailed in those days of long ago. The corn husking, quilting, and wood-cutting bees, which the present generation have never enjoyed except in imagination, and are not likely to, for the developing of the country has unfolded new entertainment, the greater part of which is light, frothy amusement, wasteful of time and destructive to character.

On the long winter evenings and stormy days of summer and winter, when time is the most abundant product of the country, it is often wastefully used. If we would plan our work so as to save time, many are the hours which could be spent in reading good books and studying some art or science, for I have found these to be the best possible recreations for a young farmer. There has been no end of jokes about book-farming, but it has come to be seen that thought is as good (if not better) on a farm as anywhere else. It is by thought that we develop the mind and we need to store a fund of intellectual and physical strength for the time when we become the leaders of Canada and have to put our shoulders under the world's burdens.

Moses lived his first forty years in a palace, but the next forty had to be spent in the country to fit him to see and do the Divine will, so as to lead the Israelites. Therefore, why is the current of our young people flowing to the cities? Human nature is to blame; it craves for praise and applause, women seek it in dress and men in fame. And in the city the opportunities appear greater for the displaying of dress, which is of all vanities the most foolish, and the winning of fame which is of all follies the most absurd.

We who are interested in the social welfare of the country should take advantage of this human failing by organizing Young People's or Literary Societies, and lead this failing into proper channels so that the young life may get praise and applause for that which deserves it. I knew of a successful Club that met weekly, and one of the conditions under which members were admitted, was that at every meeting they were required to give a one-minute address. This Club had forty members, so you may imagine the interesting time spent at the meetings and their educational value.

There are also other reasons why so many leave the farm, such as the grudging way some farmers give spending money to their sons and daughters, which in most cases is earned ten times over and then has to be asked for. There is yet another cause. In the life of every boy there comes a period of restlessness and discontent; at this time he often leaves home, for it will take more than the natural love of parents to entice him to stay.

The birds are as anxious for the welfare of their offspring as is mankind, but no sooner can the young soar away and find their own food, than they leave to return no more. So it is with animals, man no exception. Therefore, if parents desire their children to remain at home they must understand their minds. Mere nature will never prompt them to stay or return, for the children feel that they are ready to do as much for their parents as they have done for them. They never think that a return of their kindness is required. This can only be secured by parents making the children their friends. This is an old subject for a young farmer to deal with, but I trust that we will all do our duty and so leave on the sands of time a period of social perfection in rural Canada.

Wellington Co., Ont. SAM PAGE.

Automobiles, Farm Machinery and Farm Motors.

Cleaning and Grading Grains and Seeds for the Spring Seeding.

It has been clearly demonstrated that it pays to sow only the sound, plump seed. The difference in the crop grown from graded seed and from grain as it comes from the thresher, less the dirt, is visible in the gowing crop. The scales show a difference in yield up to 10 bushels with oats, and 9 bushels per acre with winter wheat in favor of sowing large seed. The small kernels are as good as the large for feed, but are not able to throw out and nourish as strong a plant as their plumper brothers. It must be remembered that a miniature plant lies dormant in the kernel of grain. It is a rule of the universe that we reap as we sow, and the farmer who neglects to properly grade his seed grain suffers financial loss by his neglect.

In early days we read of the grain being tossed into the air in order that the breezes might be able to grasp and carry away the light straws, dust and dirt. The fanning mill or winnowing machine was unknown, and there was some excuse if inferior seed was sown. With the first mills manufactured the construction was such that the cleaning depended principally on a blast of wind. Many such machines are in use to-day. The grain passes down over a sieve or riddle, which separates the chaff from the wheat and gives the wind, generated by a fan revolving in a drum, a chance to blow out light-weight kernels and dirt. The good grain falls on a screen, which, if of the proper mesh, will remove small kernels and weed seeds, leaving only clean, sound, plump grain to be bagged for seed or market. The efficiency of these mills depends to a large degree on the operator. If care is taken to put in the proper screen, the right shake used, the correct amount of wind generated and the grain run through slowly, a fair sample for seed can be produced with these old mills. Too many get in a hurry. They want to get the work done quickly, but, cleaning grain for seed is one job where time should not be considered a factor. The writer well remembers the time when he and the hired man were entrusted with the important task of preparing grain for seed. No attention was paid to selecting sieves or screens. The all-important point was to get through with the work. The sieve was kept loaded all the time, and a small mesh screen was oftentimes used to prevent emptying the chess box too often. The fact was, that we didn't understand the importance of selecting good seed, and it is just possible that there are many to-day who have not observed the increase in yield due solely to grading. It stands to reason that a big kernel should produce a sturdier, healthier plant than a tiny one. Screens can be purchased for the old mill that will give a fair sample and will certainly remove weed seeds. Fanning-mill manufacturers have evolved a mill, equipped with screens, arranged in such a way that one variety of grain can be separated from another, the weed seeds all removed, and a uniform sample secured.

While there is a supply of grain in the bin is the time to commence grading and cleaning. Time is usually not so valuable during January as it is in April. It may be necessary to screen out over half the grain before a satisfactory sample is obtained. What if you do? The stock relish the small grains as well as the large. Financially it pays to thoroughly clean and grade grain for seed. For instance, if you grow 20 acres of oats and graded seed yields 8 bushels more per acre than ungraded seed, you have 160 bushels more grain, worth at 50 cents per bushel, $80.00. This is almost found money, as the difference in cost of labor between running the grain through the mill and properly grading it only amounts to a few cents. By paying more attention to the cleaning of grain, even with the old mill, the average yield per acre would soon be greatly increased.

The weed problem is a serious one. Usually enough noxious weeds find their way to the farm without sowing them, and yet a lot of bad seeds are being sown with the grain and grasses every year. One spring, officials of the Seed Branch, Ottawa, secured over 4,000 samples of grain that was prepared for sowing. Out of 978 samples of oats only 12 per cent. were free from weed seeds, and as many as 4,838 noxious seeds were found in one pound of one sample that was actually being sown. Is it any wonder that weeds spread? Yet, by use of a fanning mill and the proper size of screens, these enemies of the crops can be separated out and destroyed. It is more difficult to remove weed seeds from grass and clover seed owing to the similarity in size. However, screens can be secured which will remove a large number of weed seeds.

With each fanning mill is a set of screens and sieves with directions for using. By experimenting, the size mesh or perforation to use for the various grains is determined. On every mill is a means of regulating the amount of wind that will strike the grain. It is important that this be properly gauged. If not, too much of some grains will be blown over and not enough of others. Wind is still a factor in grading, although the system of screening has been greatly improved. Wire mesh and perforated zinc screens are in use. A fanning mill will last a life-time, although it may be necessary to purchase new screens as they rust out in time. The first cost is so small that no farm should be without a good mill. If judiciously used it's price may be made up in one year by sowing only first quality seed.

Operating An Old-style Mill.

By an old-style mill is meant one where grading is done by a single screen, one or two sieves being used to remove chaff and dirt. Set the mill firmly and put in the screens and sieves recommended by the manufacturer; adjust the shake to suit, and open up the wind. Fill the hopper with grain and commence turning. This is all some operators do, but the grain may be smaller or larger than the average, and in order to get the desired grade the screens may not suit, or the wind may be too weak. Re-adjust things by putting in another size screen and note results. There should be several sizes with every mill. The lower screen does the grading and takes out weed seeds. The small grains and seeds drop into what is usually termed the chess-box. To make a good job, the grain must be run through slowly and the screen kept clean. In some mills the small seeds are separated from the grain as it leaves the hopper and are run into a receptacle by themselves. For grading oats some find a screen with a mesh 2 by 12 or 2 wires to the inch one way and 12 the other gives good satisfaction. A 2 by 5-mesh sieve in the upper shoe may also be used. To screen wheat with the old mill, a 2 by 11 or a 9 by 9-mesh, depending on the size of wheat, might prove serviceable if a three-sixteenths-inch perforated sieve is used on top. Cockle can be removed by a 7 by 7-mesh screen. When cleaning barley put 2 by 10-mesh screen in the lower part of the mill and five-sixteenths-mesh screen in the upper. For peas a 2 by 5-mesh screen and a five-sixteenths-inch sieve is used.

W. Ferguson takes pride in having his seed grain of a uniform grade. He purchased a specially constructed mill highly recommended for cleaning all kinds of grain and seeds. While it did good work he was not altogether satisfied, and proceeded to study his mill and size of screens to find out if an improvement could be made. It was difficult to keep the grading screen from getting clogged with small grains, and it was necessary to stop the mill to clean it properly. The wild buckwheat was not taken out clean enough, so he changed the shaker shaft, as he does not like a too vigorous shake, and got a different sized screen. The mill was fixed so a double-length screen would work, consequently there was double chance of removing small grains and weed seeds. By lowering the grading screen, room was made for a triangular, perforated screen for removing wild buckwheat. The grain first passes into a vertical shaft and is graded by a strong blast of wind before it finds its way to the long, grading screen, which has openings one-half by one-twelfth of an inch in size. The mill is turned to run the fan at about 400 revolutions per minute. This case is cited to show how changes can be made by the operator to make his mill do more efficient work. An assortment of sieves and screens with different-sized openings could be used in most mills. There is always room for the operator to exercise a little initiative.

There are mills on the market which are specially constructed and fitted with a series of screens to grade all kinds of grain, and even to separate one variety from another. This is done by use of different size meshes. Oilcloth or slats rest on the screens to prevent the grain from jumping and going through endwise. For instance, oats will go endwise through an opening that will permit wheat to pass, but if they are kept flat the wheat drops through and the oats are carried to the end of the screen and removed through a spout in the side of the mill. From top to bottom the grain passes through four screens, with the result that if the proper meshes are used a clean sample of one kind of grain will pass on to the bottom screen where the small grains are removed. There are spouts leading off from each screen; dirt comes out one, one kind of grain another, etc. Seeds are saved in a drawer in place of being blown out with the chaff. By use of galvanized-iron pans under each screen the grain is carried to the top of each screen, thus bringing into use the full screening surface. The end shake is generally preferred. Some mills are built with a compound end shake, while others have a side shake for the upper shoe, and end shake on the lower.

Cleaning Clover and Grass Seed.

It is generally conceded that a large portion of new weeds find their way to the farm through the medium of grass seed. Many weed seeds are similar in size to the clovers, thence separation is difficult. However, it is possible to screen out most of the small, shrunken seeds, which are worthless from a crop standpoint, and many weed seeds can be removed. To clean red clover use one-fifteenth-inch perforated sieve in the upper part, and 4 by 24 or 4 by 26-mesh screens in the lower. This will remove shrunken seeds and considerable rib-grass, lamb's quarter and pale plantain; weeds which are detrimental to a clover field. Several instances are known where screens of the mesh mentioned were purchased and tacked on a small frame and the seed cleaned by hand. It was a slow job but good work was done, and a clean sample of clover was secured from seed which looked to be half rib-grass or buckhorn. The mesh may be tacked on the frame of a fanning mill screen and used in the mill.

Alsike seed is very small, and one-eighteenth-inch perforated, zinc sieve and a 20 by 20 or 22 by 22 woven-wire mesh should be used to clean out black medick. To remove other impurities try a 26 by 26 mesh. Very little timothy of good quality should pass through a 30 by 30 woven-wire mesh. Screens 18 by 30 and 20 by 20 are also used to clean out different weed seeds. Woven-wire mesh 14 by 14 and 18 by 18 are used for screening alfalfa, and 3 by 16 and 14 by 14 for cleaning flax.

Cleaning and properly grading any kind of seed is necessarily slow work. If the sieves or screens are crowded or become clogged good work cannot be done. Many of the size screens mentioned for removing certain seeds are not part of the equipment of every mill. However, they can be secured from fanning-mill manufacturers or makers of wire cloth. The dirt, weed seeds and small kernels can be cleaned out with any make of mill by using the right sized screen in the lower shoe. Try out different screens until you get the size which gives the proper grade. Remember that best work is done by running the grain through slowly and that wind properly applied aids in grading the grain.

It is impossible to give a list of screens that will work