ment to a man to grow this crop which requires a good deal of labor. As has been previously mentioned, little improvement has been made in machinery for handling flax. J. H. Grisdale, of the Experimental Farm, Ottawa intimated that the Dominion Department of Agriculture would do all in its power to encourage this industry, and an endeavor is being made to introduce improved machinery for the use of Canadian flax growers. The question of hemp growing was also discussed. Last year an experiment was tried on the Ottawa Experimental Farm and also at Forest, in Western Ontario, and the results proved that it can be grown satisfactorily in Ontario and that good quality fibre can be made from it. It grows anywhere from seven to fifteen feet high and requires special machinery to handle it in the mill. This crop will be grown on a larger scale this coming year, as delegates of the Convention indicated their willingness to grow anywhere from five to ten acres, making a total of about forty-five acres in Ontario. It requires about one bushel of hemp seed to sow an acre, and it can be drilled in with the ordinary seed drill. H. Fraleigh, of Forest, who grew several acres of hemp last year, claimed that by setting the seed drill to sow one bushel of wheat per acre about the right amount of hemp would be sown. If hemp can be grown on a large scale in this country and machinery installed to manufacture it into fibre and twine, it is believed that a profitable industry can be built up that will work somewhat in conjunction with the flax industry.

The utilization of the waste products of flax was explained by Dr. H. E. Howe, of Montreal, and it is remarkable the number of products which can be made from what hiterto has been considered waste material.

The London Board of Trade and Canadian Club entertained the delegates to the Convention at a banquet on the evening of Wednesday, February 28, at which the chief speakers of the evening were Sir George E. Foster, Minister of Trade and Commerce, who spoke on "Production and Development", and Dr. H. E. Howe, whose subject was "The German Alarm Clock." Besides addresses from several local men, J. H. Grisdale, and W. B. Roadhouse, Deputy Minister of Agriculture, Toronto, gave optimistic addresses. Sir George Foster emphasized the fact that production is the basis of of interchange, but that too few were engaged in the actual work of producing things. The activities of the city are largely the passing of something from someone to someone and taking a toll. This, claimed the speaker, is not production. People have grown rich by speculating, but that has done nothing to make an extra blade of grass grow. No man has the least idea of the natural riches of Canada and the thing to do now is to produce, not speculate. The war has made men's minds clearer, the world has been thrown together, and every part knows every other part better than it did before. This will have a tendency to make business different when the war ceases. Many things will be changed, and the speaker urged business men and manufacturers to forget petty jealousies and bickerings and to unite. Every man is a part of the nation itself and it is necessary that there be more humanism in business. The lord and his gardener, the employer and the employee have fought and died side by side in the trenches, so it is necessary for the employer and employee in this country and in every country to get together so that when this war is over we may not plunge into another war.

Dr. Howe in his address referred to the commercial warfare carried on, and showed how the Germans had established themselves in every country. Particular attention had been paid to education, organization and scientific research. It was left to the German to perfect many of the inventions of men in other countries. Consequently, when the war broke out things essential to the protection of Great Britain were manufactured only in Germany. The war has been a big alarm clock which has awakened the allies collectively to the trade dangers which threatened them, and the speaker trusted that now that the alarm had been sounded that all would remain awake.

The Flax Growers' Association elected A. Tippling, of Wingham, as President; F. J. Lockhart, Parkhill, Vice-President; A. L. McCready, St. Mary's, Secretary, and William Forrester, Mitchell, Treasurer.

Canada's Young Farmers and Future Leaders.

A Four-Year Rotation.

EDITOR "THE FARMER'S ADVOCATE":

On a Western Ontario farm at the present time, and under present conditions, I would grow wheat, rye and hairy vetch mixed, corn, oats or oats and barley mixed, and clover hay, in a four-year rotation in the order named.

The rye and hairy vetch are grown after the wheat for pasture and to plow under for corn the next year. This keeps the ground covered and adds to it both in fertility and humus; more so, too, if the rye and vetch mixture is top-dressed with from three to six loads of manure after it freezes up, or early the next spring. I would pasture this rye and vetch crop, if I needed it; if not, I would plow it under for corn the last week in May in this locality and then cultivate and hoe the corn thoroughly until it begins to tassel. If for the silo, I would plant a mixture of Wisconsin No. 7, or Whitecap, and Longfellow or Bailey, a dent and a flint mixed, a peck to the acre, in hills 3½ feet apart both ways, being careful to have the rows as straight as a string for easy cultivating and harvesting.

The corn stubble is fall plowed and sown to oats or oats and barley the next spring, seeding down with this crop with 10 or 15 pounds of common red clover and 3 pounds of timothy.

The soil for oats must be thoroughly double disked, cultivated, then levelled and firmed down with harrows and roller. Two bushels of oats to the acre are sown, seeding at the same time with clover or clover and timothy as stated above. After the oats are harvested, top-dress the young clover with manure put on with a spreader, at the rate of three loads to the acre, or more if your spreader will thoroughly pulverize and put it on very evenly. This helps the young clover greatly. Take off the first crop the next year for hay, and the second also, if you need it. If not, plow it under for fall-sown wheat. After taking off the first crop for hay, top dress again with as much manure as is available, letting the second growth grow up until it is time to plow for wheat, which, in this locality, is best sown about September 10. The soil should be worked down very firmly before sowing with wheat at the rate of two bushels per care. After the wheat is harvested, the ground is plowed, rather shallow, and sown in August with rye and hairy vetch, one bushel and one peck respectively, mixed; this to plow under for corn, as stated.

The amount of seed used will vary as much as stated according to the quality of your soil. By feeding all the barnyard manure to the legume crops in this way, we get double value from it, as it makes the clover and vetch grow so much ranker, that larger quantities of potash and phosphate are brought up by the roots which go below plow depth, and more nitrogen is gathered from the air.

For years before the war began we had a three-year rotation, corn, oats and clover; but, as our land is much more fertile than it formerly was, we have added wheat, in order to "do our bit" to our utmost during the war period. Twelve years ago, when we bought it, we tried wheat, but got only seven bushels per acre in a good year; last year we averaged thirty-five bushels per acre. The first few years we kept three horses and four cows and had to buy hay and grain, or millfeed, every year. This year we are wintering thirty-two horses and cattle in good condition, and a year ago we sold over four hundred dollars' worth of fat stock in the spring. This farm had been mined by two generations of one family as renters growing grain for sale. It was an abandoned farm in the hands of a real estate speculator when I bought it. We have had a hard fight, but are winning out in good shape now.

I forgot to say that before we began growing wheat, we allowed our second growth of clover to make seed, then our corn was grown on the clover sod plowed just before planting. Having our own clover seed, we seeded down with every grain crop.

Norfolk Co., Ont. WM. G. BROWN.

A Partnership of Cows and Pigs.

EDITOR "THE FARMER'S ADVOCATE":

I would prefer a 150-acre farm, clay or clay loam, slightly sloped to the south for natural drainage, and would like to have a farm on the county road, close to a village or town, and not more than fifty miles from a good city; although I would rather have a good farm two or more miles out than a poor one close by. I seems to me there is only one way of successful farming in Ontario, and that is by keeping all the stock possible and feeding all one grows, putting all the manure possible on the land. Farmers have been too late in a great many cases realizing that the land must be fed to get good results. I would keep about twenty or thirty good cows, and ship my cream and have lots of skim-milk for hogs, as there is no better combination to-day than cows and hogs, and one can keep his land always in condition to grow crops. I would use a Babcock tester, and only keep cows that paid—not boarders. I would veal all my calves, except what heifers I wanted to keep for cows. I like the Holsteins, but believe there is good and bad in all breeds. I would pasture about thirty acres each year and would rotate with grain, etc. I would have two silos and grow plenty of clover hay, corn, turnips and mangels. I would take one or more farm journals, and always be looking out for the latest and best ideas.

Simcoe Co., Ont. H. OTTER ROBINSON.

The System on a 75-Acre Farm.

EDITOR "THE FARMER'S ADVOCATE":

Our farm is 75 acres, there being 47 acres arable and the rest woods and pasture, part of which is rocky and part first-class grass land, with running water. The worked land is part sandy loam, part clay mixed with gravel, and eight acres of heavy clay which is low but well drained with open ditches. No two fields are the same size, which makes it rather more difficult to work in rotation. This being a dairy section, cows and hogs appeal to me more than any other class of stock, there being a factory close by and a fair market for hogs either for town trade or for shipping.

I buy my pigs from four to six weeks old; Yorkshires are my favorites, for they are good feeders and strong on their feet. There is a fair demand for a long and not too fat hog for town trade, and the Yorkshire fills the bill. I find that it is easy to keep twenty head of cattle on the place, giving them all the feed they can eat, and generally have some hay to sell. There are ten cows, two horses, and the rest young stock. The milk is weighed twice a day, no cows giving less than 5,000 lbs. are kept; they have to do this with their first calf. Heifers calve when from twenty-four to twenty-eight months old. The cattle are turned out to water twice a day all winter; it takes longer to do the chores, but I think it pays, as we milk all winter and they do not gorge themselves with cold water and then come to the stable and shiver. I feed green feed when the grass begins to fail, buying very little meal except in the early spring.

I try to follow this rotation of crops as nearly as possible: corn, grain, hay, hay. No roots are grown, and only enough potatoes for our own use. The corn is planted on fall-plowed sod (plowed twice if there is time) and is planted about May 20, in hills 3 feet each way, cultivating as often as possible till about 6 feet high. I plant about eight acres as a rule, as it gives the most feed of any crop grown. In the fall I cut by hand but do not tie it. Having no silo I let it lie about a day, then draw it to the end of the field and stand it up in a long rack, good and thick. It will stay green all winter, and very little is wasted. I seed in the spring with oats, sowing 3 bushels to the acre, 6 to 8 lbs. of red clover, 10 lbs. of timothy on the high land and 6 to 8 lbs. of alsike, with a good sprinkling of red-top mixed with the timothy on the low clay. This generally gives a good cut of hay. I never seed down unless the ground is in first-class condition, preferring to sow grain two years, manuring the second year with a light coat and then seed.

The manure from the cows, horses and pigs is all thrown in the same pile and drawn out about every four weeks and spread on the snow. I think I lose a little this way, but consider the loss counter-balanced by the time saved in the spring, when time for a fellow single-handed is a big factor. I always try to get the plowing done in the fall, both light and heavy land, and get the wood cut ready to draw with the first sleighing, and get the grain fanned and do the other necessary odd jobs in the winter, for I find that if I get behind with the work it seems impossible to catch up. The farm tools and implements are put away as soon as they are finished with. I follow this outline as nearly as I can and find that a farm of this size can be handled by one man with very little hired help; my bill for help being $30 last year, not including threshing or sawing wood, which was changed with neighbors. We keep about 50 hens, Barred Rocks, as they are the best all-round hens for eggs and table purposes. The roosters are sold at six weeks old as broilers.

Grenville Co., Ont. L. S.

Make the Farm Better for Having Lived on it.

EDITOR "THE FARMER'S ADVOCATE":

I have purchased, quite recently, a 100-acre general stock and grain farm, in one of the banner counties of Ontario, soil ranging from light sand to heavy clay. Of the fences and buildings it may be said that some are in good repair, others in various stages of collapse or decay. A choice wood-lot is standing thereon, of five acres, with many trees showing signs of decay on account of the woods being used as a pasture field.

What should be my ideal as a young, married man of twenty-five, starting on this new venture? Should it be thus: Money—the mighty dollar; to squeeze every cent out of this old farm and put it in the bank, or let it out on seven per cent. mortgages? What care I in what condition I leave the old farm fences, buildings and land; I can get enough money out of it in a few years to keep myself and wife in comfort the remainder of our days in town. Nothing else matters. This sad picture is not far-fetched. We have only to drive through portions of good old Ontario to find occasionally just such cases; a ruined, abandoned farm, an eyesore to any community and a disgrace to the farmer (?). No, not farmer, but robber, who destroyed its beauty and productiveness.

But to return to my subject, I can explain it in just one word—"Progress." Each year I shall work and aim for some improvement along the different lines of my farm work; better buildings, fences, farm stock, and increased fertility of the soil. I may never in my short life-time accomplish all I have planned, still, I should have satisfaction in the thought that I had at least toiled honorably and faithfully.

In looking over the farm, I have decided on many improvements to be made year by year, as I get the opportunity. Those old zig-zag rail fences, choked full of weeds and brush, must be taken down and good wire ones erected. At the same time many of them can be disposed of altogether, making the fields larger and consequently more cheaply worked. Then that wood-lot must be fenced around to keep the cattle out, and many of the dead and dying trees cut down for firewood, giving the more valuable ones a better chance. Also, the barn should have a cement wall under it, providing the live stock with a comfortable stable for winter. A silo is needed, and the house should have a coat of paint. All this I have figured on doing as I can afford the necessary cash and have the spare time. I must have the soil in different parts of the farm analyzed to ascertain its richness, and what kind of grain, roots, hay or market produce it will grow to best advantage; and, at the same time, find how much and what kinds o f