fence. The proprietor holds it on, till he is tempted by a high price to dispose of it —this increase in price being caused by improvements in the neighborhood. His profit is to be obtained, not from his own labor or industry, but from that of his neighbor. And now it is proposed to impose additional taxes on the improved farm, on the other no such taxes is to be levied.—ASST. ED.

P. S.—Since writing the above the Board of Trade have held their meeting, and though the proposal was not adopted by the meeting, notwithstanding the efforts of its author, Mr. Wilkes, of Toronto, we still deem it our duty to protest against any such measure as impolitic, unjust and inimical to the interests of the farmers and the country at large. It is well that we be on our guard to oppose every attempt to legislate against farmers, as the promoter of this scheme seems desirous of doing. He is defeated for the present; but the snake is not dead but scotched. The measure embraced in that resolution to modify the duty on breadstuffs and other products of the soil, we propose to take up in our next number. It is our great desire to keep from the politics of party in our agricultural writings, but when the interests of farmers, and capability of progress are assailed, or even threatened, we must resist them firmly and fearlessly.—ASST. ED.

Farmers' Clubs.

We have received several letters from different sections of the country asking our advice about the formation of Farmers' Clubs, and inquiring what would be a suitable constitution. To some of them we have written in reply. We will now give a general reply that may answer all. The constitution and by-laws of such a club may be very simple. In all such cases the fewer and less complicated the rules are the better.

Some such constitution as we here give will be sufficient for a Farmers' Club :—

1. This meeting shall be called the ———— Farmers' Club.

2. The object of this Club is the improvement in agriculture, both in the science and practice of its members.

3. Other members may be admitted by a vote of two thirds of the members present at any regular meeting.

4. The meeting of the Club shall be held fort-nightly, or monthly, or otherwise, as may be deemed advisable. Its officers shall be a President, Vice-President and a Secretary.

The members of the club will determine for themselves when and how often their meeting shall be held. They can also, if they think it better, appoint a Board of three or five Directors. Their place of meeting may be a section school-room, but we would think it better if they met at the houses of the members alternately. As a Farmers' Olub, unlike an Agricultural Society, will be composed of few members, a very good number being from twelve to twenty; their meeting at the houses of the members will give it more of a social character, besides it will tend to make the families more interested in farm life and farm work, teaching them the importance of agricultural science as well as practice. It is very desirable that our young men should know and prize the professions of farmers.

At each meeting a subject should be chosen for especial consideration at the preceding one; and it would be well if one of the members was appointed to read an essay on it, either original or not, then let the subject be thoroughly discussed. To be well conversant with the subjects, the reading of good agricultural papers will be a valuadle aid, and also of any agricultural book available; and, above all, that knowledge that is only to be acquired by the experience and careful observation of the working farmer. The experience of actual life and diligent practice is the best school. Though having studied farming ourselves as a science, we are more indebted to our many years acquaintance with its actual working than to all that books have taught us on the subject.

It would make those club meeting more social, and add much to their pleasure, if the mistress of the house in which they meet for the time, were to give the members a lunch, a cup of tea, a pie, or anything readily procured—*pot-luck* we have heard it called. We know what genuine hospitality is, and if each in turn be the hostess, it will increase the interest of the proceedings, and ensure permanence in their well doing.

In another column will be found a sketch of the working of a Farmers Club' elsewhere. We will be glad to hear from our friends of the formation and progress of their clnbs.—ASST. ED.

Agriculture.

THE VALUE OF LEAF-MOLD IN POTATO CULTURE.

In reference to the value of decayed leaves in the cultivation of the potato, Mr. Talbot de Malahide, Malahide Castle, writes as follows to the Irish Farmers' Gazette :—

"I think it is the duty of every landowner to communicate any fact which has come to his knowledge which is likely to be of service to the agricultural community. I will therefore give the result of my potato-digging. I have about an acre and a half of Scotch downs which I have just lifted. They are in very good condition, and will weigh, I am told, upwards of ten tons. There are very few bad ones among them, and I understand that it is one of the best crops in the neighborhood. The curious part of the case is, that last year, in order to swell my manure heap, I carted an immense quantity of leaves, and mixed them with the farm-yard manure. This I have used both with the potatoes and root crops with the best effect, and the leaves appear to have had a powerful effect in preserving the potatoes. All the parties concerned with the digging of them have been struck with this fact."

WHAT IS GOOD FARMING?

In an address delivered to the farmers of New Jersey, by the Hon. James W. Wall, he alluded to the enormous increase which has taken place of late years in the agricultural produce of England. Less than a century ago the entire production of wheat in this country fell short of 16,000,000 bushels. In 1870 the yield exceeded 100,000,000, averaging thirty bushels from each acre devoted to this staple. Mr. Wall pointed out the direct agencies by means of which this increase was brought about by English farmers.

In the first place, he said, it is to be found in their systematic attention to all the requirements of good farming, in the skill and exactness with which all the operations of plowing, harrowing, clod-crushing, burning and scarifying are performed; in the perfect condition of "tilth" to which they bring the land preparatory to the reception of the seed; in the careful selection of the best varieties of seed wheat; in the extensive and prudent use of their barn-yard manure; in the perfection of all their instruments of tillage; the strength and discipline of their draught animals; in the assiduity with which they extirpate every weed and remove every rock that can interfere with the cultivation of the land. Nothing is left to casuality or chance.

No expectations are indulged that the bounty of Providence in an unusually favorable season will atone for their shortcomings and neglect. Everything which human foresight, scientific skill, intelligence, well-directed labor and mechanical aid can accomplish is done, to ensure the highest yield from the land. It is next to be seen in the extraordinary liberality with which they restore to the earth, by means of purchased manures, all those elements of fertility which are exhausted in the process of cultivation.

It is estimated by chemical analysis that wheat absorbs forty of every hundred parts of nutriment contained in the soil. Now some idea of the enterprise of English agriculture may be formed, added Mr. Wall, when I state to you that in a single year, the year 1837, the first year of its general use as a fertilizer, the foreign bones imported were valued at the custom house at $1,500,000, since which it is estimated that the amount paid for imported bones alone amounted to $150,000-000. Since 1841 upwards of 1,500,000 tons of guano have been used.

Mr. Wall also spoke in high terms of the English system of drainage and the rotation of crops. "I believe," he remarked, "that nothing more perfect in rural economy can be conceived than their rotation of root and grain crops. The root cultivation has indeed been the salvation of England. With as much truth as force has it been said that the power of the British empire rests upon her coal, her iron and her turnips."—*Live Stock, Farm and Fireside Journal.*

AGRICULTURAL EXHIBITIONS.

If a man goes to one of these exhibitions with his eyes open, he will learn, more than in any other place, the importance of combining brain and hand labor. It is by the application of brain labor that the horses, cattle, sheep and swine have attained almost a state of perfection. By spending a day among the best specimens of these animals, a farmer even of moderate brain capacity will learn the ways and means of improving his own stock, and of raising larger crops at a less expenditure, and gain much other very useful information.

The occupation of the farmer develops the whole man. Though he may not know it, or be able to define any of the sciences, he must, to some extent, become a chemist, botanist and naturalist; this, too, while working year after year without opening a book on any of those subjects. Labor and thought should go hand in hand, lending their aid to each other. And as he labors and thinks, he will occasionally catch an idea of the source of that sunshine that lights up even the log cabin, as nothing but a faithful and loving wife can do. It is as much a duty and should be the pleasure of the farmer to seek, by all laudable means, to increase and prolong these beams of sunshine, as it is to provide food and shelter for those dependent on him.

As a means to this end, he should encourage every effort made by wife and children to make and exhibit at these gatherings such articles of utility and taste as may come within their means.—They doubtless would like to go and enjoy becoming part and parcel in these agricultural jubilees. What a change from the routine of daily toil to ride a few miles to see what others have done in the various departments of industry, and learn at what trifling expense many things can be made that will contribute to the convenience and adornment of the house.—*Lansing Republican.*

TO SEPARATE LIGHT GRAIN FROM GOOD.

A correspondent of the American Artisan suggests the following plan :—

For wheat, take lye from wood ashes, strong enough to bear up a potato. Pour the grain into the lye, skim off all that floats, pour off the lye. The grain can be rinsed if thought best, or it can be dried for sowing. It will not hurt the grain if it is not allowed to remain in the lye.—The grain should be spread so that it will dry quick. This method of treating grain not only removes light weight, but destroys insects or their eggs that may be in the grain. For lighter grains make the lye less strong.

LIQUID EXCREMENT.

A cow, under ordinary feeding, furnishes in a year 20,000 lbs. of solid excrement, and about 8,000 pounds of liquid. The comparative money value of the two is but slightly in favor of the solid. This statement has been verified as truth over and over again. The urine of herbivorous animals holds nearly all the secretions of the body which are capable of producing the rich nitrogenous compounds so essential as forcing or leaf-forming agents in the growth of plants. The solid holds phosphoric acid, the lime and magnesia, which go to the seeds principally, but the liquid, holding nitrogen, potash and soda, is needed in forming the stalks and leaves. The two forms of plant nutriment should never be separated or allowed to be wasted by neglect.

The farmer who saves all the urine of his animals, doubles his manurial resources every year. Good seasoned peat is of immense service to farmers when used as an absorbent, and the stalls of animals should be so constructed as to admit of a wide passage in the rear, with generous room for peat to be used daily with the excrement.

A NEW STEAM PLOUGH.

The Scottish Farmer of Nov. 18, makes mention of a new steam plough and subsoiler combined, just turned out of the Banff Foundry. The inventor is G. W. Murray, and it was made for L. Livingstone Learmouth, of Linlithgow. It is made of Swedish wrought iron, so that it can work among the stones and rocks of Scotland, steel ploughs there being too much addicted to the breaking of shares, "skifes," &c.

The principal new feature of this plow is that there is a combination of the common plough and the subsoiler, or it can be used for ploughing without subsoiling. This particular implement cuts three furrows as a plough simply, or two with the subsoiling apparatus attached. The subsoiler loosens the soil in the furrow from 3 to 9 inches, as desired; it simply breaks up or loosens, without bringing the subsoil to the surface. The cost of the implement is £125, or $625. This of course does not include the cost of the engine for running it.

FARMS AND FARM LABORERS.

Another serious drawback to agricultural labor is that there are too many farmers; or, rather, that there are too many men in the farming profession. I do not believe there are in the United States, this day, ten farmers out of every hundred who make more than a bare living. I myself would not work for a man who did not farm on a profitable basis. I should know that I would not reap any advantages in any shape. What we want is intelligent labor, not merely brute force—labor that will know how, when and where, the cause and effect; mind and swelling muscle acting together. It is foolish to think that such can be had for the small pittance of twenty or thirty dollars, when other branches of business hold out greater inducements.

Bnt some will say that farming cannot afford such expensive labor. I think it will. Those who cannot make their farms profitable enough to pay intelligent labor, must be satisfied to go on with such as has strength enough to hold the plow handles and follow the horses. With all our improved agricultural machinery, intelligent labor is not, nor will it be, equal to the demand. Farming must be carried on in the future more as a business and not left open to every adventurer who has failed in everything undertaken and jumps into farming as the last resource.—We see it every day—men buying farms who can hardly tell an ox from a cow, thinking if they cannot do anything else they can farm. If such thought at all they would know that to be a successful farmer needs as much tact, energy and business qualifications as any trade or occupation existing.—Cor. in *Moore's Rural New Yorker.*