

## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN  
THE DOMINION.

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JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"  
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prefer to cling to their own rather than listen to others. These are the men who must be shown and sometimes convinced against their wills. They may have missed many opportunities through being too busy to think, but work is uppermost in their minds, and most of their thinking is done during the few minutes it takes them to drop off to sleep at night. There is no doubt but that more money is lost yearly on many places because more up-to-date methods, the result of thought, are not brought into play. There is no use of any of us thinking that because we have had years of practical farm experience, and have made, by hard work and close saving, a few thousand dollars that there is no more agriculture for us to learn. It is a subject the depths of which will never be fathomed, and the wider knowledge, practical and scientific, men young and old get, the better will they be equipped to make a success of it. It is not to boost agricultural colleges that we write, but it is to impress upon readers the importance of recognizing in the calling a big work for a big man who cannot afford to let an opportunity slip past of adding to his knowledge. In short, no man knows it all about farming; most of us know comparatively little, and we should make the best possible use of our colleges, institutes, representatives, bulletins, live stock branches, fruit branches, and all the many aids to a wider knowledge of the greatest subject on the curriculum.

### The Source of Success.

With all the agitation for the improvement of agricultural conditions farmers should remember that their success on the farm will not depend entirely upon any legislation or decisions in their favor. Success must emanate from their own brain and their own ambition. In the convolutions of brain matter are little germs of success, and when they are isolated from their neighbors and nourished with ambition on the in-

dividual's part then results begin to appear. Transportation facilities, better markets, and general improvement all add their quota to agricultural betterment, but proper tillage, good seed, good stock and good farming generally have been most pronounced in the acquisition of success. This remark should not discourage agriculturists from exerting their influence on every occasion in the direction of legislation favorable to them and the community, but in so doing let us remember that our success is largely of our own making right at home.

### A Compromising Body.

The struggle between organized capital and individual effort has been going on since time immemorial, and life would not be worth living if there were no struggles. The combat is usually more pleasant, however, when the opposing forces are routed and we obtain possession of the trenches. Yet with every victory there must be defeat, and it is the latter result that causes dissatisfaction. Some theorists or dreamers would like to see capital so curbed that the people would control it, but the human race at this stage of the process of evolution would, we fear, misuse the power if it were vested in them. However, our pessimism is not unconquerable, and the efficiency of commissions, unshackled by political standing or support, is not to be disputed. They compromise between organized and unorganized; between the weak and strong; between capital and individual. The Interstate Commerce Commission of the neighboring Republic and our own Railway Commission have solved many embarrassing problems, and have meted out justice to the individual and community where appeal to our country's courts was out of the question. In doing so they have not jeopardized the larger interests upon whom the country depends, to some degree, for growth and development of resources. The railway companies of the United States do complain that their profits are not so great, and embarrassment will result if they are further interfered with. However, many nefarious practices have been dispensed with, and the whole system is now more acceptable to the people at large.

Where monies accumulate and development progresses, the people, through the Government, usually throw in their offering to assist and better conditions, but they expect something in return. When millions of dollars are expended on improved waterways, docks, piers and harbors we look for recognition from ocean transportation companies. When railroads are subsidized we also look for some return. So it is with all publicly-bonused enterprises, and when the Government assists corporations and agriculture they are both children of one parent, and in the subsequent control of each a capable mistress in the form of a commission is a very efficient means of home management.

### Business and the Crops.

The importance which the "crops" have in the business world is mirrored in some of the statements of prominent men and leading periodicals of the United States, made since it has been known from Government crop reports that the 1914 wheat crop of that country is likely to yield in the neighborhood of 900,000,000 bushels. A few only of the comments are sufficient to show the influence which a good or poor season for the farmer has upon the financial condition of the biggest enterprises in the country. We quote some of these comments:—

"If the farmers are prosperous there will be a lot of business for the railroad companies. There will be a demand for every sort of merchandise; the banks will strive to lend their deposits, and to that end will make the terms as easy as possible. This will be favorable to more buying of land, and more building of houses and barns. A great part of the wheat is exported and brings in money from the foreigner. We do not rejoice over bad crops abroad, but if we have heavy crops when Europe has not enough to eat, it does our philanthropy good to save the poor foreigners from starvation and it adds a lot to our bank account."

"When a big crop is expected the agricultural implement makers buy great quantities of bar

iron and steel; the merchants in the West and South study the crop prospects carefully and talk with their farmer customers, and if it is likely that the farmers will have plenty of money they order liberally from the manufacturers."

A railway authority states that a large crop "will cause a large indirect increase in railway traffic as well as a large direct increase. The enlargement of the purchasing power of farmers will tend to cause an increase in the movement of manufactured articles of all kinds, and this in turn will tend to cause a proportionate increase in the movement of fuel and raw materials to the factories."

Agricultural prosperity tends to strengthen confidence in the general business outlook. President Wilson predicts that within a month it will no longer be a question of "jobs," but a question of how to get enough men to fill them. Indications point to easier money during the coming winter, because, as pointed out by a business man in the Western States, the good crops will enable farmers to pay off their obligations to their local banks, and these local or country banks will pay in turn their obligations to the bigger banks in the cities, and the money will be at the disposal of business generally. It is thus seen that a large crop means prosperity for the entire country. What affects the farmer affects every line of business from the smallest country store up to the largest railroad. If the crop fails money is scarce from the little village to the great metropolis. While the farmer is not generally considered to carry much weight in financial circles when business is good, just as soon as business slows down a little and fear takes the place of optimism and confidence, then everyone turns to the crop for a cure for this evil state, and then it is that the agricultural industry of the country gets its true place as the real basis of prosperity.

### Nature's Diary.

A. B. Klugh, M.A.

Fire-flies are a common enough accompaniment to a night walk along a road which runs through damp places, but beyond the flashes which we see very little is generally known about them.

The fire-flies are really not flies at all, but little beetles. One of the commonest Canadian species, *Photinus pyralis*, is about a half inch in length, pale gray above, with a reddish prothorax with a black spot in the centre. Beneath the grayish wing-covers is a pair of large dark-veined wings which are neatly folded, cross-wise and lengthwise, when not in use. The legs are short and the antennae ("feelers") are long and kept in constant motion.

Looked at from beneath, we can see that some of the segments of the abdomen are sulphur-yellow. This is the situation of the "lamp." If the specimen is a male, the yellow area covers all the end of the abdomen up to the fourth or fifth segment; but if it is a female, only the middle portion of the abdomen, especially the fifth segment is converted into a lamp.

The light-giving organ is situated just inside the body wall of the abdomen, and consists of a special mass of adipose (fatty) tissue richly supplied with tracheae (air-tubes), and nerves. From a stimulus conveyed by these nerves the oxygen brought by the tracheae is released to unite with some substance of the adipose tissue, a slow combustion taking place. To this the light is due, and the relation of the intensity or amount of light to the amount of matter used up to produce it is the most nearly perfect known to physicists.

In some species the females are wingless, and a portion of their bodies emits a steady greenish light. These wingless females are called "glow-worms."

The larvae of the fire-flies are often termed "wire-worms," a name applied to the larvae of many species of beetles. They live in the soil, feeding upon soft-bodied insects. Each segment of the "wire-worm" has a horny brown plate above, and the head can be pulled back under the plate of the first segment. When full-grown the larvae makes a little oval cell in the earth and changes to a pupa. In about ten days the pupal skin is shed and the mature beetle emerges.

The flash which the fire-fly emits is entirely voluntary, and is a means of bringing the males and females together at mating time.

Though to inland dwellers the fire-fly is the commonest light-producing animal, it is not by any means the only luminous organism. In the sea there are numerous small forms which emit light. Sometimes if one dips up a bucket of water at night the disturbed water seems suffused with a greenish glow, and one has but to lift the bucket and set it down with a jar to produce the phenomenon again and again. One