

## PRACTICAL FARMING.

### MERITS OF THE COW-PEA.

Much has been written in praise of the properties of the cow-pea, both as a fodder and as a manure, but not one-half of its merits have been so far revealed. As a crop it will do well on any soil, even on very poor land it will thrive with but little attention, and a modicum of manure. A sandy soil, however, is preferred, by all the leguminous family, which embraces the pea, bean, lupin, lucerne, clover, vetches, etc. As it is in the light of a manure that we wish to treat this subject, we will say little of its excellent properties when used as a food for stock. To show the high estimate in which this family is justly held as a green manure, the following figures are availed of: In a crop of thirty bushels of beans there are 2,600 pounds of grain and 2,200 pounds of straw, which contains ninety-nine pounds of nitrogen, sixty-seven pounds of potash, and twenty-nine pounds of phosphoric acid. A crop of red clover, weighing two tons, contains one hundred and two pounds of nitrogen, eighty-three and a half pounds of potash, and twenty-five pounds of phosphoric acid. In addition to these properties all leguminous crops contain a large proportion of lime. The amount of lime contained will be better explained when it is stated that as ninety pounds would represent a crop of clover, a wheat crop would be represented by ten pounds, potatoes, twenty-seven pounds, mangels forty-three pounds and turnips about seventy pounds. The proportion in favor of the leguminous crop, it will be seen, is very considerable. The most striking peculiarity about the leguminous plants lies in the fact that they can be practically independent of the soil for their supply of nitrogen. It appears from the experiments of Helriegell and Willfarth, and later of Lawes and Gilbert, on leguminous plants generally that there exists in the root-nodules, or small excrescences on the roots of these plants, certain minute organisms, which are capable of assimilating free nitrogen, and rendering it in available form to the plant. These organisms, act, therefore, as carriers of nitrogen between the air and the plant, and the root-nodules become a storehouse from which the leguminous crop derives its nitrogenous food. Manures of a nitrogenous character, are, therefore, not required to be applied to this class of plants, the manures which would benefit most are those which contain potash. The land on which such a crop has been grown will contain a much larger proportion of nitrogen than before.

### BUFF PLYMOUTH ROCKS.

To the query "What makes the best all-round farmers' fowl?" for eggs, table and market, and, why? the writer would respectfully submit that the breed best suited for the farmer for the purposes named, is, without doubt, the Buff Plymouth Rocks, and will endeavor as briefly as possible, to give positive proof that such is the case.

We will take them from the shell, and consider them from every practical point. They are very hardy and vigorous, a large per cent. of eggs hatching large, healthy chicks. They grow rapidly and attain their full development ahead of nearly all the middle weight varieties. Being vigorous, strong and healthy, they are good foragers, getting their own living handily in season if allowed their liberty, being much better in this respect than the heavy weights and heavy leg and toe feathered varieties, and also the light weight birds, as they are more easily domesticated than the latter.

For eggs, there is an abundance of proof, that, taking the year through, there is no variety of fowls, on earth, that will outlay them. This has been proved beyond a doubt. The writer is prepared to substantiate the above. Their eggs are good size, and a rich brown color, and will be chosen instead of a white egg, almost invariably if people are given their choice. We have never known eggs from any variety to be more fertile, as we know instances where whole sittings have hatched, after having been shipped several thousand miles.

The table and market we consider their strong points. From the time they leave the shell, with proper care, they are always plump, and we do not have to wait until they are fully grown before they take on flesh, as is the case with many of the heavy weights.

When matured, they have round, plump symmetrical bodies, and rich, tender flesh, which never fails to please the epicure.

We have all noticed in the dark varieties that when dressed the dark pin feathers are very noticeable. The Buff Rocks are an exception, as skin, shanks and feathers are all a golden hue. The above reasons, with many others that might be given, are ample proof to the writer's mind that they are pre-eminently the farmers' fowl as well as the fanciers.

Another positive proof is the fact that they are more eagerly sought after by farmers and fanciers than any variety that has ever been before the public.

This is supposed to be a strictly practical article, but I am sure that the reader will bear with the writer in just a word for the fancy. Can

you think or name a more beautiful bird than one having the correct Rock symmetry and characteristics, and which has a beautiful rich golden buff color?

The farmer desires something practical: In the Buff Plymouth Rocks he can have it, and with it he can have the most beautiful domestic fowl yet produced.

### CARE OF HONEY.

There is no limit to the time that honey will keep if not abused. Thoroughly sealed comb honey is usually in its highest state of perfection, and extracted honey is just the same, providing it has been sealed over before extracted, or left in the comb until it thoroughly ripens.

Comb honey usually remains in liquid form, but in some instances it granulates in the comb the same as extracted. It has been said that honey from alfalfa is more apt to granulate in the comb than almost any other, and this has been my experience.

Granulation of extracted honey is no detriment to it, and is always proof of its purity. Adulterations, such as glucose, etc., never granulate, hence when you see honey on the markets, especially during the winter season, that is in liquid form, you may look upon it with suspicion. Now most people think it the reverse of this, and this is the principal reason that adulteration is practiced to such an extent.

The bee journals and producers of honey generally, have done everything in their power to educate the masses, in regard to this one fact, and progress seems to be slow. Comb honey has never yet been imitated by man, although it has been published that comb honey is being manufactured by machinery, but it is not true. Comb honey may be adulterated by feeding bees cheap syrups which will store in the combs, but it can only be done through them.

Honey improves with age, and the older it is the finer the flavor. Extracted honey is much easier kept than comb, as the latter is liable to get soiled and must be kept in tight cases to exclude dust and insects. Extracted honey may be kept in any quantity, either in open or tight packages. Tin cans are mostly used, and a very convenient and cheap package is the common fruit can, which, having a large opening, will admit of removing the honey after granulation and using it in this form.

Honey should always be kept in a dry place, and away from a cellar, except the same is very dry and well ventilated. Heat does not damage honey, but tends to ripen and improve it, but dampness and darkness will not agree with it.

Honey that remains in the comb for some time after being stored is always the best article when extracted, but more pounds are secured by taking it away as fast as well stored.

### ADVANTAGES OF DAIRYING.

Dairying has many advantages. It makes a finished product, ready for the consumer, whereas most other lines only produce raw material. Now it is well nigh axiomatic that the production of raw material stands lowest in remunerativeness. The grain grower is, comparatively speaking, poor; the livestock grower, who feeds the products of the farm, thus carrying the work of making the finished product a step farther, is almost invariably a step higher on the ladder of prosperity. The dairyman who makes a product ready to go at once into consumption, ought to be still more prosperous, and he is. Compare the dairy districts with those where dairying is not carried on, and the fact will be manifest. No other branch of farming condenses freights so well as dairying. This, when distance to market is considerable, and freight is high, is a very important matter. The difference between the freight on a ton of grain and a ton of butter is considerable, of course, but the difference in the value of the two, which respect out of sight. Cattle and swine grow to bear the freight charge, is away in condense freights, and are, to the extent that they do so, very advantageous, helping to place the stock grower in a better condition than the grain grower, but dairying carries the work of condensation a great deal farther, and puts the dairyman in a position of comparative independence as to freights. Dairying never wore out any man's farm. Grain farming does it. Land may hold its own as a stock farm properly managed, but with equally good management the dairy farm improves all the time. The necessary removal of fertility is practically nothing in dairying, while on the other hand the dairyman can often profitably purchase and feed by-products, which is in effect appropriating for his own land the fertility of the soil of the grain farmer. There are other advantages in dairying which we will not pause to enumerate. One thing, however, is to be remembered, with all the advantages that dairying possesses, poor dairying never pays. It is only with good cows, well fed and well managed, and careful attention to the work all along the line that all the advantages of dairying can be reaped.

### AN EASY TEST.

Timmins—I have never been able to make up my mind whether I am a genius or not.

Simmons—It is easily tested. Just act like a hog when you are in society, and if you are a genius people will admire you for it.

## THE KLONDIKE'S RICHES.

### DOMINION SURVEYOR WM. OGILVIE TELLS OF THEM.

An interesting lecture at the Canadian Institute, Toronto—Canada (has 100,000) Square Miles of Gold Region—Silver, Copper, Lead and Asbestos Were Also to be Found.

Mr. Wm. Ogilvie, F.R.G.S., surveyor to the Dominion Government, who has recently returned from the Yukon district, delivered on Saturday night in the Canadian Institute at Toronto, a lecture on that wonderful Eldorado of the north.

Mr. Ogilvie described first, and at considerable length, the various routes at present in use for reaching the rich gold country. He explained that to a large extent his hands were bound until he had made his report to Ottawa, and he would mention no opinions as to the most feasible route other than to urge strongly that it should be all-Canadian. He told, too, with much detail as to names, dates, and locations, the history of the gold discoveries on the Yukon. Then he described the methods of mining, the social regulations among the miners, the superficial character of the country, the geological formation; told stories of fabulous wealth,

of great fortunes made and lost, and hinted at the prospects for the coming year.

Not having the advantage of a map, the audience could not very clearly grasp the situation and character of the various routes, though it was an easy inference that they were all three exceedingly difficult. The history of the gold discoveries in the district he traced from the early seventies to the present time. To a North of Ireland man named Harper was given the greatest credit for years of prospecting, often amid dangers and discouragements, which eventuated in July last year in the discovery of the hidden treasury of the Klondyke by a man named Siwash George, who lived with the Indians of the district. He, in accordance with the unwritten law, among miners, revealed the find to three prospectors, and soon all the miners on the Yukon were hurrying to the scene, and within a few weeks hundreds of claims were staked out on Eldorado and Bonanza creeks. Those two creeks, Mr. Ogilvie was confident, would turn out 60 to 75 millions in placer mining, and they were but a fragment of the gold-bearing district. Over the whole of an area 550 to 600 miles in length by 100 to 150 miles in width, 90,000 to 100,000 square miles, rich prospects had been found. It was the largest and richest gold area in the world.

Regarding quartz mining he said he had been shown samples of ore that assayed \$100 to \$1,000 to the ton. The only question was whether the mother lode would be found of several large lodes, or a succession of small ones that it might not pay to work. Mr. Ogilvie showed a little bottle with \$95 worth of free gold in it that he had washed from one shovel full of pay dirt, that a miner had given him. One man had taken out \$15,000 in eight hours. From one pan, which was washed \$555, another man had washed \$555. Speaking of the possibility of starvation in the district this winter, he said there were five or six thousand miners in there, but the same conditions had existed last year, and they had got through all right, and he thought they would this year, but they would have to be careful.

### THE MINERS.

The men in there were of all nations under Heaven, pretty nearly. In the early days there had been no cliques, no factions, no politics, but since the saloons had been started things had been different. Affairs were managed by miners' meetings, and the miners' meetings were dominated by the bar-room loafers, whose votes were cast, regardless of justice, for the man who treated offest. Mr. Ogilvie told some very amusing stories of the miscarriage of justice in these meetings. They had finally fallen into disrepute, and the industrious miners were very pleased at the arrival of the Canadian police. Six hundred and fifty miles of the Upper Yukon, the more navigable part, and the richer part of the river, Mr. Ogilvie said, belonged to Canada. On the lower slopes and along the rivers the country was very well wooded, but there was not any more than would be needed for the development of the country, and the Canadian Government should take immediate steps to insure its preservation. Circle City, in Alaska, had been built of Canadian timber, because there was little or no timber on the lower stretches of the river. Great herds of thousands of caribou, he said, roamed the tops of the ridges. He had shot six in ten seconds. The scenery of the mountains, rising ridge above ridge, snow-clad, for thousands of feet, was grand and sublime, scarcely to be surpassed in the world. The silence among the hills was awful. A man could hear his heart beating as clearly as he could hear the ticking of his watch at his ear. In summer the mosquitoes were worse than anywhere else in the world. They were actually maddening; fire and smoke only made them more active. Once he had bared his hand for an instant, and

killed 27 on the back of his hand with one stroke. Men had to work with gloves on, and netting over their heads.

Right down to the bed rock, he said, the earth was frozen solid, eternally. Above the pay dirt, or gravel, there was about twelve feet of muck imbedded, in which was a network of trees that had fallen during ages, all sound, because, preserved in the frozen ground. In the pay dirt he had found buffalo horns that could not be distinguished from the horns found on the prairies to the south, showing that the buffalo had once roamed there. Very few shells were found in the gravel, but in the clay surrounding the coal beds there were impressions of tropical leaves, also indicating what the temperature must once have been.

### OTHER MINERALS.

Gold is not the only mineral in the country. There were indications, Mr. Ogilvie stated, that some of the richest copper deposits in the world would be found there. Lead, silver, and asbestos, were also found, and there were immense coal deposits within ten miles of the Yukon.

Concluding his intensely interesting lecture Mr. Ogilvie said he had met some Canadians who had seemed to be ashamed of their country. They had no need to be. In places where men's souls were tried he had found no men to surpass Canadians. He did not speak in the spirit of boasting or egotism, but to make a fair, just, manly statement, for all-round, resourceful energy he knew of no race of men to excel Canadians. He urged his hearers never to be ashamed of Canada anywhere or under any circumstances. The riches he had talked of were in Canadian territory, and should be utilized for the welfare of Canadian

### SNAKES IN INDIA.

Deaths from Snake-Bite and Other Notes of Interest in Snake-bite.

The statistics of the number of snakes killed during the years 1895 and 1896 afford less scope for comparison as some districts as Delhi, Rohtak, Multan and Sialkot, have apparently taken advantage of the recent decision of the local government that it is not obligatory on district boards and municipalities to pay rewards on snakes at all. So that from 940, 279, 874 and 466 respectively they only paid on 1, 28, 0 and 57 last year. It is to be remarked that the effect of stopping payment in these districts has caused no increase in the loss of human life. In Delhi and Sialkot the number of men killed by snakes is about the same in each year. In Rohtak the deaths have certainly increased from 13 to 40, but, on the other hand in Multan, when 874 snakes were killed, 87 men died of snake-bite, whereas in the year following, when no snakes were being destroyed, only 32 came to grief.

Every one has heard of the story so firmly believed in by the natives, that if you kill a snake its mate will take revenge on you, and the above figures seem to warrant the supposition that the Multan snakes, at any rate, stick to the maxim of

### "LIVE AND LET LIVE."

The Gurgaon authorities should be able to test the whispered suspicion, that the majority of snakes for which rewards are claimed are carefully reared for the purpose, as 2,700 and 2,600 were paid for in 1895 and 1896 respectively, at a total expense of 1,080 rupees, while the deaths from snake-bite were about equal in number to those in Sialkot and Delhi during the same period. It would be interesting to know whether any such discovery led the authorities in Hoshiarpur to cut down the rewards given from 2,672 rupees in 1895 to 214 rupees in 1896. In that district also the death rate among human beings from snake-bite actually decreased though only from 36 to 32.

The two worst districts in the Punjab, as far as the mortality among the people from snake bite is concerned, are Lahore and Gujranwala, with an average of 85 and 115 respectively during the last two years. In these districts about the average number of snakes appear to have been killed, and probably they are neither more nor less infested by snakes than the districts around them. It would, therefore be of more than passing interest to discover whether Lahore and Gujranwala have reputations for a particular prevalence of poisoning cases; for just as a cholera epidemic, when men are buried quickly, and no questions are asked forms a useful opportunity for an unfaithful wife to get rid of her husband by a dose of arsenic so in out-of-the-way villages many a death is put down to snake-bite to avoid awkward questions. Even where the whole village knows of the real facts, they hush it up to prevent the annoyance which an official inquiry would entail on them; for beside the trouble and bother of having to give evidence, there is the burden of providing for all the minions of the law, who would come to the spot to make that preliminary investigation in which lies such a large portion of their profit.

### TOLD IN A WHISPER.

Is that one of your servants, madam?  
No, no! Don't speak so loud. That's the cook.

Old Gentleman, dictating indignant letter—"Sir, my stenographer, being a lady, cannot take down what I think of you. I, being a gentleman, cannot think it; but you, being neither, can easily guess my thoughts."

## GREAT SOLAR ECLIPSE.

### IT WILL BE A MOST IMPORTANT SCIENTIFIC EVENT.

Astronomers Expect to See a Splendid Celestial Sight Next January—Programme of the Work.

One of the notable solar eclipses of the century, will take place on January 22, 1898. It will be visible over nearly the whole of Asia, Africa and Europe, with the exception of Spain, the west of France, Belgium and Holland. It begins on the earth generally January 22, 4.46 a.m., in longitude twenty-one degrees, thirty-six minutes, east, and latitude 0 degrees, 23 minutes north, and it ends on the earth generally at 9.59 a.m., in longitude 110 degrees, seven minutes east, and latitude 35 degrees, 36 minutes north.

Dry details these, and yet of great interest to astronomers in every civilized country in the world. India is the place where the most satisfactory observations can be taken during the coming eclipse, and many scientists are preparing to go there.

Everything is in their favor. The eclipse will occur in the middle of cold weather, and at the most favorable time of the year for travelling in India. Cyclonic storms are very rare during January and the chance of a gale or stormy weather off the coast between Bombay and Karwar is very slight. The air, moreover, is very dry over the interior, and as the percentage of mean daily humidity at stations in the Deccan, Central provinces and Berar averages about forty degrees, any instruments, such as photographic cameras, brought from Europe or America, should be so constructed that they will withstand the action of this great dryness of the air. Furthermore, statistics show that rain rarely falls in January in the Konkan and Deccan and that during January the coast districts between Karwar and Hainogeri, which include the line of totality, are unusually free from clouds.

### MUCH WORK PLANNED.

The Joint Committees of the Royal and Royal Astronomical Societies of London, has decided to send out three parties to take observations, one on the coast and two inland, at stations which have not yet been selected. The party from the Solar Physics Observatory will occupy the coast station, and all possible assistance will be rendered to it, by a man-of-war, acting under instructions from the Admiralty. This coast station will doubtless be in or near the old fort at Viziladur, as there is no better point from which to take observations. The land parties will include the astronomer Royal, Dr. Copeland, Professor Turner, Dr. Common, Captain Hills, and Mr. Newall, who will represent the observatories of Greenwich, Edinburgh, Oxford and Cambridge, who will occupy stations on the railways near the central line of the eclipse.

The weather prospects being good, and the facilities for travelling excellent there is every reason to believe that much valuable work will be done during the eclipse, not only by those who intend to visit India for that purpose, but also by the Indian astronomers, who are interested in solar physics, foremost among whom is Professor K. D. Naegamvala, who has already done good work at Pona. Of the British astronomers who intend to make observations no one has a higher rank in the scientific world than Sir Norman Lockyer, and his views, therefore, as to the work to be done, are of exceeding interest.

Speaking of the coast party's proposed programme, to which he confines himself, he says—"I am one of those who believe that spectroscopic observations during eclipses must take precedence of all others in the minds of students of solar physics, but when I say this it must not be forgotten that other inquiries remain which are much more simply carried out and which are within the competence of those unacquainted with the details of the subject. One of the fortunate things about eclipses is that photographers and amateurs can do good work as well as those more fully equipped instrumentally."

### DANGER OF CARBOLIC ACID.

It is Used Much Too Freely and Does Great Harm.

A board of health warning has been sent out in regard to the danger of using carbolic acid, either as a disinfectant or as a cleansing wash for simple wounds. Even in an ointment it is not safe. Local gangrene is said to be the penalty of too strong an application, or of a weak application too long applied.

Another point of information advanced by the board is that carbolic acid is used in surgery as a germicide and disinfectant, and not as a means of healing wounds. On the contrary, it would retard or prevent their healing if used in improper strength.

### IN THE FULLNESS OF TIME.

Mabel, how long has young Spoonmore been coming to see you?  
Four years, papa.  
You can tell him I think that's long enough.  
He knows it is. He's coming to see you next time.

### TALKING BUSINESS.

How is the boiler business, Mr. Noyes?  
Very quiet, Mr. Graves. How is undertaking?  
Quite lively, Mr. Noyes, quite lively.