THE VICTORIA COLONIST

#### P.UP.AL. SUBURBAN~ TRAINING AND SPRAYING OF FRUIT without fruit; this is generally accounted for TREES by the fact of the cane being retained in a

By James Simpson, 1519 Blanchard Avenue, Victoria.

In the issue of the Colonist of January 2, 1910, there is an article on training and spray-ing of fruit trees by W. J. L. Hamilton, Salt Spring Island, and I should like to write a few words about the advice he there gives fruit growers. In passing, I may say that I have often

Phone 312. orge's School for Girls ARDING AND DAY SCHOOL 1157 Rockland Avenue. term opens Tuesday, January parders return Monday, January 10. Frincipal: Mrs. Suttle. (At home Friday.) IVE STOCK FOR SALE

their utility spoiled.

only things to suffer. The truth of the matter is that this

spraying mania is mostly a fraud. See the re-

sults on fruit, extracted and printed by the

Colonist of December 31, 1908, from that ex-cellent paper, Horticulture. The statements therein are amazing, and, in my opinion, are

directly traceable to spraying with deleterious-

compounds, such as arsenic, arsenites, benzine.

bisulphide of carbon, carbolic acid, copperas,

corrosive sublimate, hydrocyanic gas, sul-

phuric acid, kerosene, lime, lye wash, salt sul-

and all of the above are in the government

rule book to apply to plants. Surely the peo-ple who advised the government to issue such things were old chemists and not practical hor-

ticulturists, as the merest tyro with any knowl-

edge of structural botany whatever; and the

tenderness of the epidermis of plants would

certainly never recommend the application of

strengthen the plant, and at the same time kill

the insect which troubles the grower, and such

has been found and is well known to many in

Victoria, the results being quite manifest in

AMATEUR'S GRAPE VINE

What is wanted is something to soothe and

such wicked destroyers of vegetation. -

the size and beauty of the fruit.

phur, all of which are detrimental to plant life,

LE-Yearling Jersey bulls, re-d, from 3-year-old cows, giving 000 lbs. of milk in the year, av-est 5.5. These are prize with the Prices very reasonable, A. H. s & Son, Pender Island, B. C.

January 18, 1910.

Choicest

h Grocery

254

.35¢

; Joshua Green, president of t Sound Navigation company; Burns, manager of the Alaska p company; John TV Heffer-rett G. Griggs, Walter Oakes, S. Gibson and others. Charles ody and Capt. J. S. Gibson managing owners. naging owners

Her History verett G. Griggs came to Vic-masted and in distress. She German bark Columbia, and ind from Kobe to Royal Roads tht in a heavy gale and Capt. th in a heavy gale and Capt. ng was engaging in setting assages attached to kites the hope that they would ore—thinking there was no m escaping shipwreck and n on the Vancouver Island n on the Norwegian steamer isles, outbound from Victoria ber piled high on her turret ted the distressed vessel and to Victoria thereby earning salvage money. The Colum-tesquimalt for some months 05 was sold, being bought in McDermott and associates 0. The Columbia was re-the Lord Wolseley, and was tacoma and re-rigged as a d schooner, the unique rig-ne of its kind-created much Seventeen hands work the ne of its kind-created much Seventeen hands work the ereas 32 were formerly re-tut while operating expenses cut, the world-wide period ion in the shipping business I holds as to sail craft, was ered in and the reduced untervalanced any saving in The steam craft, hard put argoes, edged into the trades. prior to that been the par-byline of the windjammers. Griggs lost no money for 's while in commission. rnings were not available ids. The vessel has been for ver a year.



ancourt Builds Launch rom Victoria to Setits in Gulf of Georgia

portation service between ancouver and the Gulf isbeen established by A. R. of Ganges harbor, with Winimac, recently con-rre. While the steamship lucted a fairly good

slanting position, thus inducing the sap to rush up to the top in spring and spend all its vigor in nourishing these upper growths, leaving those below almost without support. To obviate this, it is a good plan to take down the cane and keep it as low and cool as possible until the buds begin to swell; the point should be kept lower than the middle part, and it is quite easy to effect this by laying the cane along the front of the house, if it is planted read Mr. Hamilton's papers with much pleas-ure, though sometimes, as in this case, I could there, or along the back if necessary, as the

cap will not then rise to the top so quickly. not agree with him. Firstly, then, about his training of fruit trees in the vase form. I Again, if the canes are kept tied up, the top of the house being warmer than the lower part have seen in Scotland forty years ago that system thoroughly thrashed out in writings, is a further inducement for the upper growths to take all the nourishment. A practical garand also thoroughly practiced, and quite agree dener does not often take down his vines, bewith the value of an open tree and thorough exposure of the shoots to sun and air; but cause he knows how to regulate the heat in all parts of the house, and this somewhat obviates the difficulty referred to. The pruning of there is no use whatever for galvanized wire or galvanized eyes screwed into the wood of the tree, as the whole thing can be easier and vines grown on the extension system is somewhat similar, only that last season's growth much better done by the knife alone. One-year-old trees only should be planted, and they is often shortened only instead of being cut back. The canes while dormant need no heat; should be headed down to 18 inches from the instead, a good frosting helps them. The difground, and the first branch should be from ficulty one has with a vine in a house in which o to 12 inches from the ground. Trees for a there are other plants needing heat is to keep good paying and easily managed crop should the new growth back as long as possible, as be planted 12 feet apart and never allowed to when once this starts it must not be checked get more than 10 feet high, as they are thus easily pruned, dressed, thinned and gathered. by either cold or draught.

# Fruit Trees for Walls

Spraying I find since coming here almost A reader residing on the marshy tracts an unmixed evil. Today I pruned a lot of which border the River Thames asks for adthree-year-old trees, the skin of which had vice regarding some fruit tree borders he has been reddened, burned and hardened by the just made, and the description of trees to plant sprays in common use, and thus their healthy there. Assuming the locality to be but little elevated above high water mark, deep draining and vigorous growth set back for years, and cannot well be performed, as there would be a Tomorrow I go to prune and dress a good orchard on the Victoria Arm. Last year this same orchard was sprayed under and by the difficulty in getting rid of the water. Drains, therefore, of a depth of 3 feet will serve, and about 8 feet apart, will not be too close; as superintendance of a government official, and this is not an expensive affair, it had better be the spray was not much more than dry when done securely at first, and care should be taken another and a higher government official came around and said it had not been half done. The that the outlet does not get choked. The draining being finished, the border may have proprietor then told him to see that it was attention. Generally the surface soil in such rightly done, and so it was done the second places is fairly good; therefore, it need not be deeper than 2 feet at the most, provided the time; but as the trees are very bad now with greenfly eggs, oyster scale, woolly aphis and nesting caterpillars, the trees had been the bottom is sound and healthy.

The next thing to consider is the proper-width required for the wall trees. Wall borders are too often badly used. While a good fruit crop is always expected, a heavy vegetable one at the same time seems hardly fair to the trees. The temptation to plant early vegetables on such a border is too great to be resisted, but it should not be overdone. If possible, make the border about 12 feet wide, and set off a portion of 4 feet nearest the wall for the use of the trees alone. The border being prepared, there remains only the arrangement of the fruit trees that are wanted, and, as there will be aspects of all the four quarters, they may be arranged somewhat as follows: South, peach and nectarine; west, apricot; north, cherry and plum; east, cherry and plum. The following is a 'suitable selection: Peach, Hales Early; nectarine, Elruge or Lord Napier; apricot, Hemskirk; plum, Victoria and Golden Drop; cherries, Mayduke for east or west aspect, and a Morello for the north. Peaches and nectarines will sometimes do on east and west walls. The Jefferson and Or-

leans plum may also be planted on the north walls, if those above do not occupy the whole. Pears might also be planted, if desired. But as many of the most popular fruits of these are better flavored when grown as pyramids graft-ed on the quince, in the South of England, they are not recommended as wall trees here; and as a pear requires a larger space on a wall than

The canes in the cool vinery are now ready any other fruit tree, it is better to have other for the pruning knife, as most of the leaves fruit when wall room is limited. Vacant spaces and those remaining have no may often be employed on the sunny side with further useful function to perform. Now is tomatoes; or, on the cool sides, red or white currant may be grown, which, if netted, will keep a long time. I have also seen goosebersimilarly treated .- Donald McDonald, F. L. S.

grades, and a trifle rough. The highest price was £16 10s. The next animal sold was a well built, round-ribbed, smooth, compact, little beast weighing 1,250 lbs. He was sold for £18 105. Here was £2, or practically \$10, more money for an animal 75 lbs. lighter in weight. Quality has another advantage fully understood by feeders, namely, that animals of good quality possess in a marked degree the ability to utilize their food to better advantage; that is, although they may not increase in weight more rapidly than ordinary steers, yet the increase is put on the higher priced portions, consequently the animal commands a better price per pound. At the Illinois Experiment station 69 steers

were graded according to quality, a record be-ing kept of all cost. The following is a list of profits according to grading:

rom 1,250 lbs. up, command the highest price for export trade at centres where export conditions are studied, provided they are of desirable conformation and finished:

Beef Characteristics Briefly Defined.

must be low set, broad, deep, smooth and even, with parallel lines, says the Farm and Ranch Review. In all lines of business the producer must cater to the consumer if he would suc-"tucked up" appearance, just behind the fore-leg, for this indicates a lack of constitution. A full flank, even with underline, is also very desirable, and any animal seriously cut up there

is deficient in depth from loin to flank, which is very objectionable. Broad buttocks and a full twist, well let down, are also important.

Quality, as before intimated, is desirable, and this is best told by handling, although a trained eye is seldom deceived. The flesh on the high-priced portions should feel firm, yet: mellow, and be very uniform, alike free from hard rolls or blubbery patches. A coarse, bony, slab-sided animal, bare of flesh on ribs and back, with dairy thighs, a harsh hide and wiry coat, is about the most undesirable type imaginable. That a mellow, elastic hide indicates a good doer is known to all stockmen, and the reason is that the secretions of the skin are in perfect order, and from that we can justly conclude that the inner skin, the lining of the stomach, etc., is also in the best condition; thus the animal is able to assimilate the full nourishment which his food contains, consequently gains rapidly and has that thrifty, sleek appearance we all admire.

The beef steer should show strong breed character, that is, be a good grade of one of the beef breeds. He should be active and vigorous, which denotes good rustling ability, but not restless, as a fidgity disposition is not conducive to heavy fleshing, insomuch that it does not indicate that desirable, contented temperament which stockmen prize. ' Combine aptitude to put on flesh rapidly with an early maturing predisposition, and the vital question of the beef producer as regards type is solved. This phase of the matter is of greater importance under present conditions than when the open range provided all needed food; then it. mattered little whether extra feed was required to produce beef; now it is desirable to. practice economy by husbanding your re-sources in every possible manner, and one of the best and surest ways is to use animals of the type which it has been proven give most gains for food consumed.

Broad, deep bodies, naturally well-coated with flesh, are essential, and long, well-sprung ribs give this formation; these points along with long, deep hindquarters, dare not be over-looked. They must also be good handlers, and should be possessed of an abundant coat of long, fine hair. You can afford to overlook a rather conspicuous, tall head, an unsightly horn, etc., yet, of course, other things being equal, have these minor points as nearly perfect as possible, but never forget that utility in a sire is all essential, and under no circumstance sacrifice it simply because in some trifling detail he does not reach your standard.

Always remember that the sire is at least half of the herd, then you will more likely realize the enormous advantage of having that half, which is embodied in one animal, of the highest possible standard. When the breeding of sire and dam for several generations back are alike uniform on both sides of the genealogical tree, the dams' influence on the offspring is very marked, although not to the same extent as the sire's, but where either one is of mixed breeding, and most cows which produce beef steers are, how extremely important it is that the sire should be not only a splendid specimen of a beef bull, but that his progenitors should also be of an equally high standard, similar in type, and that the mating in each case for at least the last four crosses back would niche well, then when a bull bred in that manner is mated with cows of mixed breeding, his influence is immensely more impressive than the dam's, consequently his prepotency will stamp itself in the offspring to, at least, a three-quarter extent. Individual excellence in a bull is extremely important, yet reasonable assurance that the sire's superior qualities will be handed down as a universal heritage to his numerous progeny. This is where well-mated, pedigreed animals have the advantage, and a great advantage it is. Breeding is merely handing down the merits or demerits of the ancestors. If your females are a poor class of grades

to begin with, and you feel you cannot afford better, yearly cull out a few of the worst, and on no consideration sell cows that produce fairly early maturers; also be slow to part with any of their female progeny.

Abundance of Nutritious Cheap Food Fodder, both appetizing and nutritious, can be grown in abundance in the west, and right here is one spot where a deviation from common practice would be found profitable. The chief fodder used is hay, cut and saved whenever convenient, without any thought as regards nourishment or palatableness. Without nourishment, gains cannot be made, and, unless the food is well saved, animals will not consume it as readily, and it is well known that a large portion of the food consumed is required to maintain animal heat and build up waste tissue. Only what the animal eats in excess of these requirements can be converted into increase of weight. Now if the food is not palatable the animal will not likely eat any more than the needs of the body demand, consequently he is boarding at your expense, whereas you should be receiving profit.

## Maintenance Ration

animal requires for bodily support; this we call "maintenance ration."

Under favorable conditions 80 per cent of maintenance ration is required to keep up the heat of the body, and the 20 per cent for building up waste tissue. Thus we can understand how necessary it is that our cattle should be sheltered during winter storms, for if they are not they simply take what would I have

growing peas with the oats, for the reason that peas are considered the best grain for finishing beef cattle. Cattle, fed on a part pea meal ration, will handle firmer and stand shipping better than those fed on other grains; yet we do not recommend this process for the west at present, but simply sowing oats and peas mixed, about half and half, and cutting green for fodder. If sown in that proportion there will be considerably more oat than pea plants, owing to the difference in the size of kernels. The crop can be harvested with the binder, if desired. Peas do well throughout the west, so this is not an experiment, although we do not know of peas and oats being grown together for the purpose mentioned.

Every beef cattle man should have a good patch of rape where he can turn his cattle, young things, cows and all, to graze when his common pasture becomes scarce. It is advisable to have a piece of pasture in conjunction with the rape where the stock can get a certain amount of drier food, or else it is likely to scour them severely at first. If a pasture of this kind is not available, hay or straw will answer the same purpose, and, if not any of these substitutes are convenient, it will be found well to only allow the stock short periods on the rape until their digestive organs have become accustomed to the change of food. Dwarf Essex is the variety to use, and it

can be sown either broadcast or in drills. If the land is reasonably free from weeds, sow broadcast, about 3 lbs. of seed per acre. If the land is dirty, or you fear extremely dry weather, sow in drills, using about 31/2 lbs. of seed to the acre. The handiest way if you intend sowing in rows is to take your seed drill and without good ancestry back of it we have no . securely plug two-thirds of the spouts. This in most cases will leave the rows about 21 inches apart, but anything from 18 to 24 inches is considered suitable. For July or early Aug-ust feeding it should be sown in May; if for later feeding, sow in June. A good plan would be to sow at intervals two weeks apart, perhaps three sowings. Rape is also suitable for late fall and early winter feeding.

There is always quite a percentage of inferior grains that it is well to feed on the farm; in fact, as a rule it pays best to feed all coarse or secondary grades of grain, selling only, as grain, that which commands seed prices, and wheat for flour. This inferior grain should be fed as chop to calves and export steers.

There is no doubt but that the first twelve months of the animals' life is the most important period, and the old adage applies here with peculiar force "Well begun half done." It has been demonstrated time and again, at numerous experiment stations, that at no period in an animal's life can such cheap gains be made as during the first year. The younger the animal the greater its ability to digest in proportion to its live weight. The approximate rates from numbers of experiments show that as 3, 7 and 12 stand in relation to each other, so is the cost of grain in cattle, first, second and third year.

The point is, keep the young things growing, and, as previously stated, it is only what they digest in addition to their maintenance ration that can be used for increase of weight.

What flesh an animal loses in winter, whether through cold or scarcity of food, must Conditions should be studied to lessen as be built up a second time (by food), and that is far as practicable the amount of food which the a direct loss to the producer, for he has twice to manufacture, if you will permit the term, that for which he will only be paid once. Ju-dicious feeding, with fair shelter, and good sires, can save one year from the average time required to fit for export under former range conditions. That means a great saving of feed, also much less capital involved, through saving of holding over an extra year, and in addi-

# Fancy gave a profit each of \$18.15 Choice gave a profit each of \$15.67 Good gave a, profit each of \$4.09 This shows how quality counts when records are kept. Steers from 2 1-2 to 3 years old, weighing

A general beef farm means that the animal

ceed, and here, it is perfectly understood that trade requirements call for a thick, even covering of meat of prime quality in the regions of the high-priced cuts, which roughly speaking means the upper half of the body from behind the shoulders backwards, and as a natural result if the animal does not come up to this standard his value is lowered in proportion as he departs from it. This proves to us the necessity for a broad, straight, smooth, even back, deeply fleshed, a thick, broad loin, ribs long, arched and evenly covered, a full, deep, wide chest, large girth, full crops, and long, deep, wide hindquarters. There should be no

conducted a fairly good has been impossible for ver a great deal of terri-in a meagre way, and for this poorly-covered section forward to the time when with sufficient capital would din establishing a service ld give the settlers access tets as well as an easy way supplies. ancourt has had built a going cruiser, 52 feet long beam, equipped by the Hin-to co with a 35 h. p. 3-cyl-n engine. The boat has a miles per hour and is so to have a large carrying oth for the agricultural the islands and mercantile m Victoria on the return oat in addition to making as Sidney. Chemainus, Nanaimo and several other er towns, will also be able of these sections, because t has been necessary for the sum successary for the is being appreciated ers. It is also of advan-oria as the wholesale and sts will have their markets Mr. Bittancourt's plans ng other things that of the set on the Mr. Bittancourt's plans ng other things that of is patrons located on the

on of a Chicago judge ten-hour law for women opposition all over the e Chicago Federation of decided to appeal to the aid in arousing public vor of legislation limiting of working women. A ision was handed down ed States Supreme Court n appeal case. Like the the question of limiting rs for women to ten was sourt. The highest tri-land declared that the society demanded such t duture generations were the protection of women.

nilear, district president nists' union, says that a aken by the machinists est showed 97 per cent of e in favor of obeying in-om the railway depart-American Federation of that department decide the switchmen's strike.

the time to regulate their area. That pruning of some sort is indispensable, no plant affords stronger proof than the vine. If left for a year or two the annual growth becomes a tangled mass, and if any bunches are produced the grapes are about the size of peas. Thus an annual pruning is necessary to keep the growth within bounds and concentrate its vital and fruit-bearing force into the grapes themselves. Amateurs either grow their grapes on the lateral form or single rod each year, or one can may extend over the roof of the whole louse. In either case it is necessary to prune back last year's growths to a couple or so of eyes, excepting where a new piece is needed for filling up a gap, when it is just shortened a point or two. From the two eyes or buds left new growths will appear in spring earlier or later, according to the warmth of the house, and if they are robust they will produce the bunches of grapes that are expected. If weak they will show no fruit.

Few things are more simple than the art of runing, although many fail over it. A sharp knife and confidence are the chief qualifica-tions. The cut should be clean and not too near the bud and at a sharp angle of at least 45 degrees.

## ··· Cleaning and Painting

After the pruning is completed, the operation of rubbing off the loose, stringy bark is undertaken, leaving the stem a rich brown color; it is then painted all over, particularly at the joints, with some such material as Gishurst Compound, a sort of soapy glue, sold in boxes at the seed shops, Abol, or other adver-tised wash. These will kill red spider, and other pests that may be hybernating behind the loose bark. If the rafters are dirty these also should be washed, or, better still, painted, filling up all holes with putty. If the pruning is done during the next few weeks, when the canes are thoroughly dormant, there is less likelihood of the cuts "bleeding" than when the work is left until later. Amateurs often complain that all the bunches come on the upper growths, leaving the bottom branches

# THE BEEF STEER

As the season of the year is again at hand when the subject of feeding steers is in order, we purpose to deal quite extensively with this extremely vital question to Western progress. Owing to there being more damaged grain some sections this season than usual, we strongly advise "steer feeding" on a much more extensive plan than heretofore. The chief essentials required to produce

prime beef at a profit are: 1st, good cattle; 2nd, abundance of nutritious cheap fodder; and 3rd, general good management.

Present conditions are more favorable than the open range for producing typical export steers. When the range was practically unlimited steers were allowed to remain there until they had attained their full growth and a fair degree of fatness, consequently they were usually sold at 4 or 5 years, according to size and condition. A marked and important change has taken place in the profitable type of beef cattle within comparatively recent years.

Formerly size and fat seemed to constitute all that was desired; now the greatest attention is paid to quality in all leading markets, young finished animals not exceeding 3 years being in demand. In the past there has been too little discrimination paid to quality by buyers in the west, thus placing a premium upon size, even if coarse. However, we have good reason to believe that day is near its close.

How quality counts on the British market is shown by the following quotation from an address delivered by John McMillan, M. P.

market in Glasgow one morning and saw six steers sold, they would average 1,325 lbs., all not be impressive sires.

EN ET MA

How to Produce This Type of Animal

This is an important question, and one that has been taxing the skill of our best breeders for many years. The typical beef steer of today has evolved from the rougher, mixed-bred cattle of ages ago through the persistent, intelligent, systematic efforts of generations of farseeing stockmen, and we maintain that by careful mating, always using the best pedigreed bulls of individual merit and early mauring strains which you can afford, that your herd will rapidly improve. Such sires impart to their offspring early maturing qualities, and these stand out prominently, above all other sources, as the means of producing juicy, marbled meat, the kind consumers crave and only top-notchers produce. By using, then, the best bulls, combined with judicious, liberal feeding, results will compensate you for the outlay and toil. Many claim it is impossible when purchasing bulls to distinguish the early maturers from others, but we think this idea is largely erroneous. The low-set, blocky type are generally early maturers; then again, bulls are usually purchased before they are full grown, and the pedigree will show their age, so you can tell by size and general appearance if they are rapid developers. Unless they are naturally thick and growthy, showing that they are advanced for their age, have nothing to do with them. When purchasing bulls, remem-ber you are purchasing them as transmitters of beef qualities, and this will guide you while making selections. Constitution is all import-He says: "I was standing on the cattle ant, the vital organs must be strong, and masculinity prominent, for without these they can-

profit and utilize it to assist them in withstanding severe climatic conditions.

## Necessary Shelter

Formerly, with the open range, stock could find shelter either in scrub or coulees; now fences frequently debar such protection, and as a more intensive line of farming is beginning to prevail, it stands to reason that better shelter must be provided. Good sheds built in some sheltered spot, open on the least exposed side, with trees planted some little distance from them on every side for additional protection, would prove of great advantage. Suitable tree seedlings can be had through the Forestry Department, Ottawa, without cust, to those who properly prepare the soil for them.

#### Varied Diet

The value of an article is largely determined by the cost of production, and it has been. proven that better health and greater gains accompany a varied diet when feeding cattle. The cultivated grasses-bromus, timothy, and western rye grass-should be more universally grown; they have been tested and the results are highly satisfactory. Alfalfa, red and alsike clovers should also receive more attention than they are getting. These clovers are a food that is not fed sufficiently to poultry. If giving fair results in some districts, quite sufficient to warrant a more universal seeding, for it is well known they make excellent pasture and good hay. Alfalfa should be cut for hay when one-quarter of the plants are in bloom; if left longer it becomes woody. Without soil inoculation it appears to grow fairly well in several localities where it has been tried in the west; where the soil has been inoculated much better results have been obtained. Begin by sowing on a small scale. Alsike in numerous sections of the west is also doing well, and although not nearly so rank a grow er as alfalfa, nor as well adapted for pasture owing to its light aftermath, it makes firstclass hay. Red clover is also giving good returns in many localities.

In addition to cultivated grasses and clovers, oat and wheat sheaves make excellent winter fodder; they are grown at present quite extensively for that purpose. We would advise

tion it is catering for export trade which was never previously done.

Top-notchers are always in demand at the leading markets at fair returns for labor and outlay.

# FEEDING FOR PROFIT

The right proportion of food for laying hens can be scientifically ascertained, but the relative question of the cost of different foods must also enter into the consideration. According to some authorities, fowls should receive about 60 per cent of grain, 15 per cent of flesh, and 25 per cent of vegetables, says an exchange. This proportion is not absolute, but relative. It serves more as a guide to the poultryman than as an infallible rule. Now the question of grain must be decided ac-cording to the locality and cost of the various grains. Where beans or peas can be obtained cheaper than grains, they take the place of the latter very acceptably, if ground and fed in an attractive form. Ground beans or peas, mixed with corn meal and bran, produce very desirable results. In the wheat-growing sections that cereal is the best and cheapest to feed, as there is no feed better for egg-laying. Oats is more oats were fed, there would be lots more eggs and healthier stock. Corn, we know, has the greatest amount of fat-producing material, and oats more muscle-forming material. Beans, however, exceed any of the grains in muscleforming materials, containing 38 per cent, com-pared to 22 per cent in oats. Lately, the writer has been feeding quite a quantity of Kaffir corn, both to the old fowls and chicks, and find it wholesome and cheap.

# POULTRY NOTES

For success in the poultry business it is just as necessary for a man to hold his temper as it is for an incubator to hold its temperature, The four signs that point to success are grit, pluck, energy and perseverance. Pluck wins. A lazy man will have lazy fowls. A good poultryman never gets the "blues."