it is interested in."

fruit shipped.

tion bureau in all that appertains to the business.

Each one telegraphs daily to headquarters his

sales or offers on fruit, condition of cars of fruit

under his inspection, and any other information

of value to the growers and shippers. These tele-

grams are sent in cipher, for the exchange has its

own code, and, as soon as deciphered, any mes-

sage of importance is telephoned to the sub-ex-

changes especially interested. In the afternoon,

and until late in the evening clerks are busy de-

ciphering, tabulating, and mimeographing in the

daily bulletin all information received in these

telegrams during the day. That bulletin goes

out to all the sub-exchanges on the 3 a.m. paper

trains, "so that on the following morning every

sub-exchange and association may know what was

done on the previous day, and virtually know the

condition and whereabouts of each and every car

States and Canada in quest of crop and market-

ing information. An agent is stationed in Lon-

don, England, to watch the Italian and Spanish

crops of oranges and lemons, and to report on

market conditions in England, Germany and other

European countries that are contracting a healthy

with those countries is increasing annually, owing

to wide advertising and to the excellence of the

000 in advertising California's oranges and lem-

ons. Many of you have probably noticed in our

daily papers large and prominent advertisements

depicting trainloads of "Sunkist" and "Red

sands of valuable silver orange spoons and knives

have been given away. Each constituted part of

the propaganda of advertising instituted by the

their disposal they are enlarging the market for

California oranges. Their object is to send them

at as low a cost as possible into every city,

town and village in the United States and Can-

ada, and so successful have they been that one

may travel from Victoria to Halifax, and at

every place that deserves a name one may buy

the sun-kissed oranges of California. The trend

of this trade to the East has become so systema-

tized that the writer was able to buy two good

No. 2 oranges in a small village in Ontario for

five cents, whilst only a few days earlier he paid

a similar sum for two very poor No. 3's in the

home State of the orange—and smaller oranges

tion of their product, the exchange hopes to en-

courage the demand to keep pace with the in-

creasing supply, and thus do away with the bogey

of overproduction. They are looking forward to the time, not very far distant, when Southern

California will send out annually 75,000 cars of

very marked influence in lessening bad debts. By

coming personally in touch with all the merchants

and jobbers in his area, the Eastern sales agent

is able to reduce the chance of bad debts to a

minimum, and this is by no means a small saving

in a business which registers so many failures.

sales of the exchange amounted to \$51,442,168.61,

and of this large amount only \$391.45 was lost

exchange, dealers and commission men had

charged 5 per cent. for guaranteeing sales, which,

in the above transaction, would have meant a tax

of \$2,571,716.98 upon the growers. This alone

sub-exchanges, and retains only 7 cents per box

for expenses, as it has been found that, notwith-

standing the extensive and costly system employed,

the selling cost does not exceed seven cents per

box. The members of the associations are paid

on the pro-rating system, which means that each

will receive "the average price of that season for

every box of every variety and grade of his fruit, according to its quality." The members may

have individual accounts kept, or they may pool

their results. The pooling system may be worked

in two ways: The members of an association may

pool their sales for a certain period of one, two,

or four weeks; or a portion of the crop may be

pooled, say 20 per cent., to be delivered within a

certain period. The success of the pro-rating system is owing, I think, to the standardization

of packages, grades, and sizes. The grower gets

paid for exactly what he delivers. If he brings

his fruit runs to choice and standard, he receives

prices accordingly-lower than the average, proba-

bly-but he can raise no objection, for the remedy

is in his own hands, namely, to produce better

in fruit that grades high, he gets fancy prices. If

The central exchange collects all bills for the

is certainly a remarkable result.

For the three seasons preceding 1908-09, the gross

Such a widespread agency system also has a

By obtaining a wide and thorough distribu-

in the latter case, at that.

Through every legitimate means at

Ball" oranges on the way to Canada.

The exchange this past season has spent \$100,

habit of eating California oranges. The trade

The exchange goes further afield than the United

keting and central exnange, and ket to the

DED 1866

de grower. ck, and he association for a cervill do as and turns elieve that i't trouble ing on the square deal sales agent b-exchange e fruit to ntage, and n the cennge to see shipments olaced, so es may be However, wer is not

sition to asked to may gain g for a he is elled to d when he in his may folnovements stination, ruct the t whether accept or tever ofmade on idea is to greements as little is conith good sociation exchange of this change in s offered. agent of ates with

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should be

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ninating oyed for whole central al manice staff. ast is a lely by iversion tors are s showondition any innipment. ant cense. They

informa-

THE FRUIT-GROWERS' SUPPLY COMPANY. This is a concern closely allied to the exchange under the same directorate, but with a special manager. It was organized in 1907, for the purpose of purchasing supplies for the packing-houses in the exchange, and has fully warranted its existence by the great savings it has effected. Manufacturers are no longer able to charge exorbitant prices, and it is considered that non-members of the exchange have also benefited, in so far as they now get their material at about the same price as the exchange members.

A SUMMIMG-UP.

The exchange is an organization that is easily separated into three component parts, still it is hard to consider them apart from each other. It has been developing in men's minds for twentyfive years, changing here and adding there, gaining the confidence of its members more every year of its existence, imperceptibly increasing its strength in many quarters, growing "from precedent to precedent," until the three parts, although separate in function, are strongly united in purpose. It is the smooth working together of the parts that makes the organization strong; it is the division of duties that makes it work-If there is any strongest link, it is the local association, which comes in direct contact with the grower, for without the grower there can be no association, no sub-exchange, and no central exchange

Therefore, the exchange is a growers' organization, and they are led to see that it is such by the rules and agreements which respect their individuality, and do not attempt to smother it. In this way, it seems to me, one of the greatest objections to co-operation amongst fruit-growers or farmers is overcome. The grower, no matter how small he is in acres, can feel that he has an equal chance with his more fortunate neighbor who owns a large number of acres. On the other hand, the larger grower, by sacrificing what he might consider his legal rights, gains a certain moral strength, which, in addition to probably natural aptitude and business acumen, usually places him in a guiding position in the affairs of the organization. The theory is not to force a member to do anything against his will or judgment, but to show him that it is to his advantage as a matter of business expediency. has abundantly proven the wisdom of this course.

To sum up, then, I have been impressed most strongly by the following three points: 1. The organization is built upwards with a

strong local association as the basis. 2. The clear division of duties amongst the three parts.

3. Recognition of the individual by elasticity of rules and agreements.

These three factors have contributed much to the success of the California Fruit-growers' Exchange, but, before trying to apply such principles to other parts, we must also take into consideration two other factors which were inherent, and as

such have been taken for granted, namely 1. The citrus fruits can be held over a comparatively long period, thus lending themselves to a wider and longer distribution. They are not quickly perishable as are many of the deciduous

fruits.

2. The class of people engaged in the citrus industry in California is above the average; in many respects, such as in business acumen and in general education, they are much above the aver-

Special Inquiry into the Fruit Growing Conditions in Canada.

The Dominion Minister of Agriculture has authorized a special inquiry to be made into the fruit-growing industry of Canada, under the direction of J. A. Ruddick, Dairy and Cold-storage Commissioner. The well-known fruit-grower, W. H. Bunting, of St. Catharines, Ontario, has been engaged to conduct the inquiry, and it is safe to say that no man in Canada is better equipped to undertake this important work. The officers of the fruit division will collaborate with Mr. Bunting in this work, as far as their other duties will permit them to do so. He will be assisted also by local officials of the different Provinces and districts. The report will be available for the Dominion Conference of Fruit-growers that is to be held at Ottawa some time next winter. investigation will be conducted with a view of securing some reliable data respecting

1. Area and extent of land adapted to fruitgrowing in the various Provinces.

2. Varieties of fruits which have been found to be most profitable and successful in the several

Provinces or sub-divisions of the same. General trend of the industry towards concentrating the production of large quantities of standard varieties

Difficulties which are likely to be encoun-

Methods of production ..

Facilities of distribution and marketing. Possibilities of over production, etc., etc.

Mr. Bunting will probably proceed to the Maritime Provinces, accompanied by his Secretary. some time next week. It is expected that it will require three or four months to complete the in-

POULTRY.

Commercial Poultry Raising.

Editor "The Farmer's Advocate"

Many of the questions relating to poultry in your valuable paper, though interesting, are only especially so to the farmer who raises poultry as a side line. As yours is a Farmer's Advocate, this is as it should be; but as a subscriber who is very appreciative of your paper, I should like to read the experiences and opinions of poultry specialists. For instance, how many acres of land should be used to keep about one thousand head of poultry, and to keep them in a healthy condition? I have seen it stated more than once that each bird should bring in at least a dollar per year clear profit, so that 1,000 birds should produce an income of \$1,000.00. Now, can this be done by a man who raises nothing but poultry, buying all his feed, etc., and raising from incubators for egg production and crate fattening? I should like to hear the experiences of a poultryraiser (but not a fancier) on these points.

The question raised by your correspondent is, perhaps, easily answered in the abstract; but it is another matter to put theory into practice. Undoubtedly one dollar a head is not an unreasonable profit over and above the cost of feed, and this amount and more is made when comparatively small flocks are kept. To keep a thousand laying hens with an annual crop of 5,000 to 7,000 chicks is a more serious matter. The question of making poultry a profitable success on pure commercial lines, apart from the fancy industry, seems to me to depend entirely on the annual crop. Many farmers de not make their industry profitable because they only reap half a crop, while with others reaping a full crop a good profit is made. The half crop may be necessary to meet the expenses and the other half to make up the profit. With a poultry farm where it is necessary to raise, say, a thousand birds to meet the expenses, it will be necessary to raise another thousand to provide the profit; it will therefore follow that to such a poultryman starting out with a complete hatch of two thousand chicks the mortality is a very serious problem, as all the birds that die must first be charged up against the profit, so that when a thousand have died and he is left with half a crop he must barely meet his expenses and there is nothing left for profit; and as with the graingrower who has a poor crop, the quality of the grain is poor, so with the poultry farmer raising only half a crop, the survivers of the flock are like the shrivelled grain—a poor investment. This has seemed to be the most serious defect in poultry farming on a large scale: the science of artificial incubation, as it is understood at the present day, when put to a practical test fails so often to produce chicks with their natural vitality sufficiently developed to stand the ordinary knocks of a chick's life. If a poultry farmer could count on hatching over 50% of the total eggs set, and could raise to maturity 75% of the chicks he hatches, I believe he could make a profit of from one to two dollars per head on the total number of laying stock of the previous winter. As to the quantity of land required to raise poultry successfully, it is not easy to set a fixed rule, so much depends upon the soil, topography, situation and of the land. In my opinion, chicks should be raised under as natural conditions as possible; they should have freedom to roam at will on ground that is able at the same time to supply an ample amount of green fodder. I would like to have a five-acre orchard, corn field, or field otherwise shaded with trees upon which to raise two thousand chicks; this leads to the question whether it is not essential to associate with poultry farming, fruit farming, market gardening, or other employment of the land to make a profitable success of the poultry branch of the industry. Where these are properly associated I am quite certain, in my own mind, that the poultry proposition will more than hold its own in providing a fair profit to the proprietor; but I do not believe poultry farming standing by itself, except under very exceptional conditions, can be made profitable L. H. B. from a commercial standpoint.

Broody Hens and Non-Summer Layers.

This is the natural brooding period of the hen, and as persistent broodiness is a bad fault, especially where hens are kept principally for egg production, it should be carefully culled and bred out of the stock. If a hen is going to be broody at all she will show signs of it in the summer months, and in some of the breeds which are known as persistent sitters individuals will show a desire to sit several times in a season. Broodiness at long intervals and easily broken up is considered by some to be an advantage, for it gives the hens short rests from laying. Hens of the sitting breeds often are found to lay better during the moulting season than those of the non-sitting varieties. The natural rest period with the hen is during the moulting season in the