as business men as well as fruit growers, to the proper solution of these difficulties rather than singing "blue ruin from the housetops" into the ears of the very people who are reaching out every year for a supply of our products?

Not Too Much Good Fruit.

The approaching season should be a good one for the growers but the stage has been prepared in the minds of the public for a session of over production and low prices very good medicine for the consumer but mighty poor solace for the grower who is depending upon the proceeds of his fruit to buy shoes for the children and pay some of the other sundry expenses which must be met in the course of life's journey. From present appearances we will be blessed this year with a good crop of fruit from strawberries clear through to winter apples but there is no reason to believe that the crop will be phenomenally large in any line as "Nature's thinning" has already been very much in evidence with at least several of our standard fruits. The weather during the time of fertilization has been anything but favorable to this most necessary process so that "setting" has not been at all in proportion to the amount of blossom. In the case of apples the weather has provided the most favorable possible conditions for the growth of fungous diseases so that the grower who has clean apples this year will be the one who has been on the job persistently and often with the spraying outfit, working hard to produce marketable fruit. I mention these factors simply to offset the idea that has already become too prevalent, that every old tree, in everybody's backyard is going to be loaded to the breaking point with high-class fruit. I am fully satisfied that the producer of apples, who is properly caring for his orchard this season and who is wise enough to have a proper selling connection, will make some money, but I am not so sanguine about what will happen the grower who has been neglecting his trees.

The Science of Selling.

The large producer of fruit is usually a pretty fair business man and in my experience, most of them in Ontario have done well and are continuing to make The salvation of the smaller grower is undoubtedly to join with a number of his neighbors and form an association so that the combined out-put will permit of the employment of a business manager to run the association and market the fruit. Let me emphasize right here the importance of a business manager in every sense of the term. Many of our associations are falling down right now because of the fact that the manager is either not a thorough business man who knows the trade and has selling connections, or is handicapped by the petty interference of members at every turn until his usefulness as a manager is utterly destroyed. Of course it follows that a capable manager, who can make a success of the business, must be paid well for his services and here is another stumbling block in many of our associations; member: fail to realize the fact that a good man cannot and will not work for a mere pittance and the fellow who is willing to do it will usually prove to be incapable. This is common logic which applies to business in every path of life. As growers, we have a great deal to learn about the art of selling. To refer once more to the successful manufacturer or wholesaler I might say that the strongest element in the success of his business is his ability to satisfy his customers and keep them coming. This is his constant aim and commands most of his attention. An article might be constructed of the best material, in the best possible way and yet if it did not meet the demands of an exacting public the energy and cost of production would be lost. It must be a "good seller". How much time do we fruit growers consume in studying and acquainting ourselves with the likes and dislikes of the consuming public? How much thought do we give to the manner in which he likes his fruit brought to his door? How seriously do we consider the impression which our package of fruit is going to make upon the consumer after he has paid some real money for it? These are the questions which should be the burning ones in the minds of fruit growers who are anxious to establish permanent trade connections and thereby a sure outlet at fair prices. People are becoming more discriminating all the time. Quality at fair prices is in constant demand. Inferior fruit is a menace to any market, the people don't want it and the interests of the grower would be much better served if such stuff were never put up and nothing but first class goods offered. Let us continually have the consumer before us and endeavor to make the impression so favorable that he will want more of the same brand

In spite of the fact that our country is at war, we are enjoying a great period of prosperity; thousands of people in our cities and towns are living better than they ever lived before; there is an abundance of money in circulation and many people will consume large quantities of fruit this year who have heretofore not been in a position to do so. This element in itself will enormously increase the home consumption of fruits of all kinds and should more than compensate for the restricted export facilities which promise to face the apple trade. Many industries have been waxing fat upon the outflow of money which is bound to go on as a result of the war. Let the fruit grower take some comfort in the fact that the tide will turn his way when he puts his luscious berries and fruits on the market. Nothing is more appetizing or tempting than good fruit—let us see to it that nothing but the real good fruit gets on the market.

Satisfy the Consumer.

As fruit growers we discuss the improvement of our marketing facilities, transportation evils and methods of distribution—and these are vital questions which will stand a great deal of improvement but the ghastly fact remains that none of us are trying hard enough to satisfy the consumer and make him come back for more. We can increase the home consumption of fruits enormously if we strive to please the eye as well as "tickle the palate" never forgetting that the consumer must have a square deal in every particular and full value for his money. The tendency to "just put a few nice ones on top" is one of the frailities of human nature and is not by any means limited to fruit growers. "Put a few nice ones in the bottom" is a safer maxim and should be preached to every berry picker and fruit packer in the country. I have frequently watched packers, especially of apples and peaches, who had no financial interest in the fruit and yet would over-face deliberately, in order to finish off a nice looking package; never thinking of what the impression of the purchaser would be when he opened the package.

For the coming season—market only choice fruit, carefully graded and packed, using every possible care to get it to your market in good condition. Use good reliable trade connections in selling, and you should show a substantia! balance on the right side. The demand for good fruit will be very large.

A. J. GRANT.

A. J. GRANT. Pres., Ont. Fruit Growers' Ass'n.

Expense of Overseas Fruit Shipments

It cost the apple growers of Nova Scotia 65 cents per barrel more in 1915-16 than in 1912-13 to land their fruit in the hands of the wholesale trade in England. The President of the N. S. Fruit Growers' Association has itemized the cost of exporting via Halifax to London as follows:

Charges Per Barrel.

	1912-13	1915-16
Inland rail	\$0.16	\$0.17
Ocean freight		1.25
Primage		
Dock dues and P. L. A.	08	.09
Cartage	.08	.10
Insurance.	02	.05
Commission.	18	.18
Handling charges		.06
	\$1.25	\$1.90

It will thus be seen from the table that during the last three years the ocean freight rate has risen 65 cents, while the remaining charges as a whole remain the same. In 1913-14 the ocean frieght amounted to 66 cents per barrel, and in 1914-15 to 78 cents. According to the same authority it would cost the Ontario shipper from 67 cents to 80 cents more per barrel.

The Cost of Growing a Barrel of Apples.

The price of a manufactured article is largely governed by the cost of producing it. This item, together with selling expenses and desired profits go to make up the wholesale quotation. The price of apples is not influenced in the least by the cost of production, except in so far as growers allow some fruit to go ungarnered on account of unsatisfactory returns, and this part of the crop withheld from consumption alleviates the congested condition of the market. This is a phase of production, but only in a roundabout way does it influence the price of the commodity. Fruit growing for the careful, industrious man is still a good business. One cannot arrive at profits and losses, however, by figuring expenses and returns over one season only. The results for a period of ten years should be considered, and from the profits or losses of a decade one can arrive at his standing in the field of production and whether it is satisfactory.

The cost of producing apples varies according to the district and the markets to which the fruit is delivered. Value of the land, price of labor, cost of packages, kind of fertilizer used and the yield all regulate the cost per barrel or box. The North-western States and British Columbia probably have the highest producing cost. In the first-named district authorities place the average at \$1.06% per box, while in British Columbia it will range about 25 per cent, higher at \$1.20 to \$1.28 per box. This was the amount announced by the Provincial Horticulturist for that Province, R. M. Winslow, to the Ontario fruit growers at their last convention at Toronto, and the same amount was attested to by a body of B. C. fruit growers before the Government. When we consider that one barrel represents three boxes the producing cost appears exceedingly high. Ontario growers, especially in the Burlington District, declare that it costs them \$1.00 to produce and mature a barrel of apples on the tree, and another dollar to pick, pack and deliver it to their shipping point.

In the Annapolis Valley, Nova Scotia, charges range somewhat lower, but their package is slightly smaller than the Ontario barrel. Manning Ells, a prominent grower there, speaking at the last Fruit Growers' Convention said: "On our farm we can

produce apples at a cost, laid down in the warehouse, of \$1.25. That means on this cost we are paying practically 60 cents a barrel interest on money invested, valuing the orchard at \$500 per acre, outside of interest and charges for equipment. The cost of growing the apples on my farm outside of interest and charges for equipment was 69 cents this year and 67 cents last year. That means laid down on the warehouse floor, everything paid for, men and horses and all charges." This is one grower's figures for a particular section of the country.

A Maryland orchardist, speaking to the Western New York Horticultural Society Convention last January, declared the cost of production to be \$1.56 per barrel in the orchards under his charge. The plantation was a commercial proposition, and accurate

plantation was a commercial proposition, and accurate records were kept of every detail.

It can thus be seen that the cost of producing a barrel of apples varies considerably in different states and provinces on this continent, and there would probably be a great difference even in the same district. There are so many details in the management of an orchard that if each and every one is not considered from the viewpoint of economy and efficiency unnecessary expense will creep in. The mixed farmer should consider his orchard one of the departments of the farm and put every bit of wisdom and energy he can husband into his efforts to produce number one fruit at the least possible cost. The exclusive fruit grower relies entirely on his orchards for revenue, and for him it is folly to neglect any detail that will make for efficiency and reduced cost, provided the quality is not impaired.

POULTRY.

A Satisfactory Henhouse.

EDITOR "THE FARMER'S ADVOCATE":

As some of your readers may be planning to build a new hen-house, which we found a very profitable investment, we would like to tell how ours is constructed, and how satisfactory it has proven. Our hens laid steadier all last winter than they ever did before when they were in among the other stock, or even had a box stall fixed off for their roosts and so on, but were not confined in it. We have gathered eggs every day except about three since early last fall, and the year before, when the hens were all through the stables, they laid very few eggs from the first of October until February. With a hen-house there is some encouragement to clean it and keep it free of vermin. In the stables you've the whole thing to go over; sometimes the stock too, and it looks and is such a big job that it is generally let go. a hen-house it is not half the job, and it can be kept clean quite easily, at least we find it so with ours. As yet we have discovered no vermin and are striving to keep it so. The last thing in the fall, we treated the roosts, nests and walls near them with a good mite killer and again in April, and intend to do so every month, as "prevention is better than cure. We are keeping the sitters away from the others, and hope, by so doing, to keep down the vermin which the sitters are often guilty of bringing. having an incubator another season. Incubators may be unsatisfactory in some ways, but we believe Incubators they would be just as satisfactory and less trouble than the hens. Anyway they would not break or eat about half of the setting of eggs as our hens seem to be doing this year without the least excuse, as they didn't eat eggs at all before and have a supply of everything before them. Having given reasons for having a hen-house and how ours suited, we must proceed to its construction.

Some may think it is built too warmly, with too many thicknesses of lumber, and, therefore, would be too expensive, but we have found it very satisfactory indeed and better than one from which, during a very cold snap, the hens must be driven into the other stables or else freeze feet or combs or both. It is large for the number of hens, as it is 12 feet by 24 feet and 8 feet high, and we keep about fifty hens. However, it is better too large than too small. We do not confine the hens in it, but have a hole cut at the bottom of the door so that they may go out or in as they choose. The hole was open all winter, and on fine days they enjoyed themselves immensely on the straw stack and around the yard. We built and painted the house ourselves, at times when there was nothing else to do, and so the cost of construc-

tion was greatly reduced. The foundation is of stones covered on sides and top with cement, the plank sill being laid in the cement while it was yet soft. The corner posts are 4 inches by 6 inches, the studding 2 inches by 4 inches, about 2 feet centres. The plates are two 2 by 4-inch scantlings forming a 4 inch by 4 inch. The rafters are 2-inch by 4-inch scantling, forming a roof with a square pitch. It is sided with matched spruce lumber, two ply outside with tar-paper between, and one ply inside with tar-paper on the north and east on the studding. It is roofed with cedar shingles and ceiled on top of the joists, which are 7 feet from the floor, with matched lumber. There are three large windows on south side and a smaller one in the west end, and all being covered inside and out with poultry wire to prevent breakages. The three south windows are arranged so that they may be pushed up when needed open. There is also one entrance door, and a small door on a level with the dropping board to clean out, on the south side. This small door saves a JUNE 22, 1916

lot of time and tro and quickly scrap of strong planed for vermin to fin hung by wires from of inch lumber at iecting out far e from the roosts, a hens from scratch are made of plan box fastened to t forming the back that it may easily are holes cut, one sides (half out of We find these g and they are easil or such material house was built h painted inside do inside painting fil any application and is more effe with the top of grain bin in one and feed hopper winter is kept fille another hopper of gravel and a d during winter. A floor in which to trouble whatever hens look and se active and product building. A good investment. Northumberlas

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Farm Beeke

Editor "The F Beekeeping is the country. Tha has been widely d that the country bees. There is, h the farmer should

At the presen in Ontario are k in size from five who understand s of the honey bec many—the greate beekeeping indust off if this side-lin

The equipmer beekeeping are snother branches of smoker, foundation more than fifty these five coloni and given about (The average yies season was 55 point one season of Lured by the insmall amounts in chickens before the small amounts in the season of the seaso

As a side-line keeping will com of farming, but If neglected the ment deteriorate finally either swimoths, succumb winter. Such far are not only keep but may also by A neglected apia centre for many neighboring apia from the neglectobbing when the there, but, excite strive to overpowyard, and thus

The neglected neighborhood of bors are anxious making from bee and start in the about their bee often give them borhood is ove producing flora number of bees, is small. Disap thusiasm is lost are neglected, a pressure of other to the bees, and All such beekee ducing industry. one with the be kept profitable The bees will