tising funds, and Florida fruits were effectively displayed there before the hundreds of thousands of people who saw that exhibit. We also arranged for the broadcasts featuring Florida fruit on the National Farm and Home Hour, in connection with the Florida Fair at Tampa and the Florida Orange Festival at Winter Haven. Since the first of the year the Commission has had an exceedingly capable sales promotion man visiting markets, analyzing conditions and getting the trade to more energetically push the sale of Florida fruit. We have also encouraged by advertising in this state the sending of gift boxes of Florida fruit to people in the North.

Publicity, with which I am primarily concerned, has taken many forms. Our contribution of grapefruit to the Red Cross for free distribution in the flooded areas of Pittsburgh, Johnstown, Wheeling and Cincinnati, and in the storm-stricken cities of Tupelo, Mississippi, and Gainesville, Georgia, brought us favorable newspaper publicity throughout the country. Next season we plan to extend to newspapers in other Florida markets the citrus recipe contest conducted so successfully this season by the New York Post. We are now arranging to have Florida grapefruit and oranges included in the diet of the American Olympic teams leaving for Germany this month, and to get the co-operation of their coaches in publicizing the health values of these fruits in training athletes.

Another thing which we propose to do is to ad-

vertise Florida fruits more effectively to the mnay hundreds of thousands of tourists who visit this state each winter, so they will be real boosters for it when they return to their homes. The best place to do this, of course, is in our hotels. We have seen one Tampa hotel man greatly increase his trade and popularity by sending free oranges to his guests shortly after they register, and by serving them free grapefruit and orange juice in unlimited quantities at a "citrus bar" placed in front of the elevators in the main lobby each morning. We want other large hotels to advertise Florida fruits in similar ways, and they have promised to do so. The Florida State Hotel Association has recently appointed a special committee to discuss with members of the Commission the details of such a plan for next season. Tourists, and home folks, too, should be able to buy fruit of good quality throughout the season. They should be able, also, to go into any Florida drug store and restaurant and buy a glass of fresh orange or grapefruit juice at a reasonable price. The Florida Citrus Commission fully appreciates the importance of our undeveloped home market. Through the hotels and eating places we propose to make visitors conscious of the fact that our fruits are the most important and the most dedesirable thing which we have here. When people learn how good these fruits really are, there will be no difficulty in selling them at prices which will give growers a profit upon their labor and investment.

## FACTORS IN THE MAINTENANCE OF MARKETS

## A. W. McKay, Orlando

Nothing is more vital to Florida citrus growers than the development and maintenance of markets. I am glad that this Society with its record of distinguished service in the field of production is devoting so large a part of its program to the problems of marketing.

In the short space of a single paper, it is only possible to present a few of the problems involved in developing and maintaining markets. It is to be hoped that the leaders in the industry will be stimulated to make contributions to this question from their experience.

The present situation with regard to citrus fruits is summed up in "The Agricultural Outlook for 1936," issued by the United States Department of Agriculture. I want to quote one paragraph from the section on citrus fruits:

"Production of oranges and grapefruit, com-

bined, increased from an average of 37,340,000 boxes in the period from 1919 to 1923, to 62,271,000 boxes in the period 1929 to 1933, which is a gain of about 60 per cent. On a per-capita basis, however, the increase between these two periods amounted to about 45 per cent. Indications now point to around 5 per cent. to 7 per cent. increase in population by 1935. Based upon trees now in groves and the probable trend in producing capacity, it appears that production during the next 10 years can easily average 15 to 20 per cent, above that of the last 10 years, and it is not improbable that it will average considerably higher. If production increases at an average rate 3 to 4 times as rapidly as population and the increase in production of other fruits continues at a much slower rate, it seems inevitable that unless consumer demand increases more rapidly than it did from 1919 to 1933, the retail prices of citrus fruit will have to decline to the relative level of other fruits if the larger crops are to be marketed."

This summary seems to me pessimistic, possibly because it does not take into account the efforts the industry is making and will make to increase demand. It does, however, present accurately the problem before us. Lower prices, or reduced shipments are in prospect, unless the industry can broaden demand, and reduce the costs of marketing. The improvements made during the last 25 years in producing, packing and marketing Florida citrus fruit are a guarantee that the industry will not stand still.

In order to maintain markets for any commodity, certain fundamental factors must be considered. The first and most important of these is the product itself—its quality, appearance and the degree to which it meets the needs of the consumers. Florida citrus growers are fortunate in that they produce a commodity which appeals to the consumer. Practically everybody likes citrus fruit. Practically everybody is convinced that it is healthful and should be made a part of the diet. In competition with citrus fruit from other areas, Florida oranges have the reputation of containing more juice of equally good, or better, flavor than that of the competitive fruit and Florida grapefruit is generally recognized as the best

grown. This good will on the part of the consumers is worth millions of dollars to the industry. Our job is to maintain and capitalize on the good will that has been established. It is the best possible foundation for the right kind of a merchandising and advertising program.

Great progress has been made in improving the quality of Florida citrus fruit. Twenty-five or six years ago, when I was first in Florida, the state crop ran from four to five million boxes annually, made up principally of seedling oranges. The production of grapefruit, Valencia oranges, and other budded varieties of oranges, was relatively insignificant. The season ended about March 1st. There were no modern packing houses and many of you remember the crude methods of grading and packing that were universal.

Since that time, modern packing houses have been built and modern packing house machinery installed. Treatment to prevent decay has been developed, coloring rooms constructed and the color-added process has appeared. The grading of citrus fruit and the attractiveness of the package has improved immensely. Improved methods of fertilization and pest control, and the production of improved varieties have done their part to make the fruit more desirable. In addition, standard grades have been adopted and inspection of all shipments has become compulsory. This is an impressive record of progress. During this period the Florida crop has increased from five million to 25 to 30 million boxes annually, and the cash income to the state from citrus fruit has increased proportionately.

While these changes in the production and handling of the fruit have been taking place, equally important changes in the habits of the consumer have been under way. Twenty-five years ago it was customary to serve half an orange as a breakfast fruit. Today the average consumer drinks a glass of orange juice representing probably two average sized oranges. He does not see the orange from which the juice was extracted and does not care particularly whether it was bright or russet, or Fancy, No. 1 or No. 2 grade, except as the grade of the fruit may be related to the quality of the juice.

The "drink the juice" campaign has been of un-

told value to orange growers. Grapefruit growers have not received the same benefits. In fact, there is evidence that up to the present time changes in consumption have been a handicap in the sale of fresh grapefruit. I believe, however, that the possibilities of poularizing fresh grapefruit juice are almost as great as was the case with oranges when the "drink the juice" campaign was begun.

The next step in the improvement of the quality of our fruit should be a guarantee of the quantity, quality and palatability of the juice in every box shipped from the State. There is nothing more harmful to the industry than the shipment of fruit that is green or dry, or is below standard for any other reason. Everybody knows this, yet every year the inducement of an immediate profit to a few individuals is so strong that the practice goes on. We need a new point of view and an aroused public opinion to correct this abuse. In effect we are selling gallons of orange juice and gallons of grapefruit juice rather than boxes of fruit. We are delivering citrus juice to the consumers sealed in nature's own containers, and the quality of the product is even more important than the appearance of the container. We need, in my opinion, strengthening of existing laws and the setting up of standards applying to the quantity and quality of the juice contained in a box of fruit.

A second factor in the maintenance of markets is the cost of the product. The costs of marketing and transportation may be further reduced, but the Department of Agriculture's impartial survey of the situation shows that the days of extremely high prices for citrus fruit are over, at least for some time in the future. does not mean that the grower who has a good grove, well located, and who gives it the attention he would give to any other business, will not make a profit. On the contrary, I believe there are substantial profits ahead for this type of operator. The growing of citrus fruit is growing out of the promotional stage and is coming into the hands of men who know their business. This is a healthy development.

From the standpoint of maintaining markets, it is obvious that the cost of citrus fruit to the

consumers must be in line with prices of competing products. This does not mean that citrus has to compete directly in price with other fruits. Consumer preferences, if maintained, will result in a premium for citrus fruit. This preference, the supply and the purchasing power of consumers will determine the price. There is an opportunity here for the State College, the Federal Department of Argiculture, and other research agencies to be of great assistance to Florida growers. What is the price at which Florida citrus should be retailed to bring the highest net return to all producers? What kinds and grades of citrus fruit do various classes of consumers want? We need answers to these questions in order to market the crop intelligently.

A third factor in maintaining markets is the experience, ability and financial strength of the marketing organizations handling the crop. This problem involves not only the agencies operating in Florida, but the whole chain of distribution. I will confine my remarks to Florida. Is our system as efficient as it should be? Almost any grower will tell you that it is not. What is wrong with the system? The answer is, in nine cases out of ten, that there are too many shippers; that consequently orderly distribution of shipments is impossible and that marketing costs are too high.

With respect to costs, it no doubt is more expensive to maintain the 250 to 300 shippers now operating in the State than it would be to support fewer organizations handling the same volume. The investment in packing facilities is too heavy. It is the exception when a grower does not have 10 or more buyers or solicitors call on him in the course of a season. All this costs money, which is deducted from returns for the Florida citrus crop.

Most serious, however, is the lack of orderly distribution, unnecessarily heavy shipments at certain periods, the flooding of auction markets and the blind consigning of fruit to auctions or commission merchants.

There is no question but that more money can be secured for the same volume of fruit if it is in strong hands. Stock market operators will tell you that if a stock is weakly held, that is, if it is in the hands of a large number of small speculators, it is easily driven down to unduly low levels. Similarly citrus fruit in the hands of a large number of small shippers is always in a precarious position. Some one or two or a dozen individuals will always upset the apple cart, and as conditions are at present in Florida, no one agency has sufficient control to act as a stabilizing influence.

What is the answer to this problem? Many people say that all growers should get toegther and market their own fruit cooperatively. Great progress in that direction has been made in California where two cooperatives control approximately 85 per cent. of the crop. But co-operatives in Florida control not over 35 per cent. of the total crop and the percentage is no higher, if as high, as it was 10 years ago. At present the 100 per cent. cooperative organization some growers talk about is nothing more than a dream.

Will the Marketing Agreement help? There is no doubt but that it will be of great value. It will put a degree of stability and confidence in the market which would otherwise be lacking and prevent the shipment of our poorest fruit. But the Marketing Agreement will be in effect for only one year and no one can tell whether it will be renewed. And with or without an Agreement, the number of agencies handling Florida fruit can continue to increase.

Is it possible for the most substantial of the present handlers to consolidate their marketing in a few agencies? There is very little evidence of such a trend, but it is a logical step.

Whatever the final answer may be, it is clear that more central control of the marketing of Florida citrus fruit is necessary, if it is ever to be more than a free-for-all scramble. It may come from all three of the possibilities I have mentioned—greater development of cooperative marketing, continuation and extension of the Marketing Agreement, and the setting up of joint marketing agencies by independent shippers. Whatever plan or combination of plans may ultimately be put into effect, it is at least certain that the present system must be changed.

A fourth factor in the maintenance of markets is regularity of supply. In spite of the large crops of recent years, there are markets, particularly in the middle west, which do not get a regular supply of Florida citurs fruit. This leads into the discussion of freight rates, which I understand will be presented by Mr. Case this afternoon. Florida must have an opportunity to reach all its natural outlets at reasonable rates. At present, shipments to middle western markets carry a handicap of 27 cents per box on the average as compared with rates to eastern markets an equal distance from Florida. As a result more and more Florida citrus fruit is being shipped east. On the average, this season about 80 per cent. of all shipments to auction went to the four seaboard markets, leaving only 20 per cent. for the six western auction markets. If our middle western markets were being maintained as they should be, 35 to 40 per cent. of our shipments would move into that territory.

Finally, it is not enough to produce good fruit and market it efficiently. Under modern competitive conditions we have to tell the public about it and repeat our story often enough so that it is not forgotten. Personally, I have great faith in the program of dealer service work and advertising undertaken by the Florida Citrus Commission. It is the most constructive step taken by the industry in the last ten years. The effects of this program will accumulate from year to year. Therefore, provision should be made at the next session of the legislature for establishing the Commission on a permanent basis.

Many other factors enter into the maintenance of markets. Satisfactory or unsatisfactory relationships between buyer and seller expand or construct an outlet for Florida fruit. Methods of sale, the style of package used, transportation rates and facilities, market facilities and agencies, are all important. I have selected only the few factors that I consider fundamental, and which raise some of the most difficult questions the industry has to answer.

No one can definitely chart the course of the Florida citrus industry for the next 25 years or the next five years. We do know, however, that in the last quarter of a century Florida has not only maintained its markets but has greatly ex-

panded them. This advance is evidence that further expansion of markets is possible, that further improvements in the quality of the fruit will be made, and that the changes necessary to obtain greater efficiency in our marketing system will be made.

## LOCAL USE OF CITRUS FRUIT JUICES IN CITRUS ADVERTISING

## B. L. Hamner, Tampa

Folks, I am glad to come up and sort of renew my acquaintance with the Horticultural Society. I want to compliment you in this; I think you are a lot smarter than I am, because for many years I decided to stay in the grove business, and it was rather disastrous with me, so I decided I was not smart enough to be an orange grower. I have been attending the meetings of the Horticultural Society for about 25 years, and I know the wonderful work that has been done, so whenever Floyd calls on me, I gladly respond. I certainly respect any one that has come through the last 25 years and made any money in the orange or grapefruit business. He is a better man that I am.

I believe that in life we are prone to overlook the little things. At the time I went to school they taugh that everything was made up of molecules. After I had finished they got around to the point of dividing the molecules into atoms. Later they divided them to ions; still later into the electrons. Not being over scientific, I do not know the latest divisions. I believe that the more nearly science has approached the ultimate, the better understanding they have had of things physical, so in that case the little things have been of extreme importance.

When it came to food products, they used to think entirely in terms of fats, carbohydrates, proteins; etc., and more recently they have come to an understanding of vitamins and have given more attention to the mineral elements of magnesium and calcium, etc. These are little things, but it seems that they are the important things.

If my understanding is correct, they are now beginning to study the sources of the vitamin and they are reaching the conclusion that the vitamins are stored-up sunshine. Having determined that it is stored-up sunshine, the study of the various rays of sunshine, like ultra-violet rays, infra-red rays, the X and invisible rays, was intensified. Thus I conclude that the more attention given to the little things, the more nearly do we approach a proper understanding.

In the early days, in the study of disease, great attention was given to effect and much experimenting was done to find a cure or those things that would assist nature in the cure. In the medical science there then followed a search for causes and they found that yellow fever and malaria were carried by mosquitoes and then they determined which mosquito was the carrier. Now the mosquito is a small thing and its stinger is still smaller and what goes through the stinger is still smaller, and a germ—then that is still smaller, but that has caused havoc in the world, and when they get down to the little thinngs, they begin to find real causes, and then we are able to scientifically search out the proper treatment.

I guess that you are beginning to wonder what all this has to do with the subject of "Local Use of Citrus Fruit Juices in Citrus Advertising. Whenever the subject of advertising comes up, many begin to think in terms of newspapers, spreads, and magazine pages; in terms of billboards and in terms of books and booklets, window displays and "what have you." They begin to think of the big things and possibly discount the value of little things. We seem to live in an age where people believe that the economic problems can be solved by political measures. We seem to be in an era where people look to government to correct the inefficiencies and the misfortunes, particularly of those engaged in agriculture and horticulture. This is the follow-