the history and origin of other class mutuals, such as The Lumbermen's Mutual, The Canners Exchange. Study the origin of those great insurance organizations and you will find they were created years ago by the very same conditions that now prevail in the cheese industry. Losses were high, rates were high and nobody wanted the business. Then the trouble was in those industries the same as the trouble is today in this industry, that no individual had enough of that business so that he would take an interest in it.

Who is writing the business today in the cheese industry? There is nobody except the local agents of the old line companies who have a few factories each. There is nobody except the farm mutuals who have a few factories in their localities. There is nobody except the general writing companies who have a few factories each. Nobody in particular is writing your insurance. Nobody has enough volume so that they can spend money in servicing it and preventing fires to bring down your cost. No one cares about it, and when your business burns you get a bad reputation.

Now gentlemen, the only thing that the cheese makers mutual is, is a method. It is a method of accumulating a safe volume of this business into one place so that the management can take an interest in it and can spend money in eliminating hazards and avoiding fires. It is a sound business and a highly specialized business and it will accomplish its purpose just as surely in the cheese industry as it has in the other industries. This mutual has been made possible by the highly organized condition of the industry. It has been given to you by the activity of this year's officers of your association. Give them credit for it. Thank you.

PRESIDENT WHITING: We will have to have ten minutes each for our last three speakers because we must be ready for this parade. The next we have on our program is "The California Cheese Industry. How Makers are Paid" by Prof. C. A. Phillips of the University of California. I take great pleasure in introducing to you Prof. C. A. Phillips.

THE CALIFORNIA CHEESE INDUSTRY. HOW MAKERS ARE PAID

By PROFESSOR C. A. PHILLIPS

Mr. Chairman, Ladies and Gentlemen: My family and I were fortunate enough to obtain a year's leave from our work in California and travel during the summer to the eastern coast, before coming back to Wisconsin to spend several months. We arrived in the northwestern county of the State of Connecticut the day they were having a Farm Bureau picnic. The principal address of the day was given by Governor Ross of that state, formerly a professor of Yale University. He had visited California during the previous summer and in the address compared the parched condition of California lands and the dry streams to the beautiful green hillside...
nnecticut. Not being a native of the State of California I am willing to admit what he said was somewhat true. I got quite a kick out of his speech. Afterwards, I got to meet the Governor and he asked, what are you doing here?

Some of you may wonder the same thing about me now, but, inasmuch as I am in this state and as Professor Sammis asked me to say a few words to you, I shall do so.

In 1933 California ranked fourth among states in the manufacture of cheese, exclusive of cottage cheese, being exceeded by Wisconsin, New York and Indiana in the order named. The state statistical report for that year, a copy of which I have here, gives a figure of about 17 million pounds, which is an increase of about 5½ million pounds over the previous year.

Such an increase would probably not be noticed in a great cheese making state like Wisconsin, but it is interesting, since California has always paid more attention to the manufacture of other products than to cheese.

This 17 million pounds includes quite a number of varieties, roughly as follows:

- Cheddar, 6 millions
- Granular, 1.25 million
- Monterey, 5 millions
- Cream, etc., 1.5 million
- Special varieties, 1.25 million
- Part skim and skim, 2 millions
- Total, 17 millions

The wide variety of types made is the interesting thing about the industry. In addition to those named already, the following are made:

- Romano, Neufchatel
- Romanello, Ricotta
- Canestratta, Mexican white cheese
- Caciocavallo, Feta
- Teleme, Camembert
- Brie, and others

In addition, the students at the Agricultural College also make Brick, Limburger, and the Edam, Roquefort, and Gorgonzola types.

Swiss cheese is not made in the state at present, although a large concern made it formerly.

There are 78 factories in all parts of the state, along the immediate coast, where in some places the temperature is about 65 degrees F. the year around, in the higher altitudes where there is freezing temperature during the winter, in the valleys where in some places they have a maximum temperature of about 120 degrees F. in the summer, and in the cities. You can readily see that the cheese is made under a wide variety of conditions, and the quality varies likewise. It has been necessary in most places in the valleys to pasteurize the milk.

Two of these factories, one of which is probably the largest in the state, closed up about three months ago, and are not expected to reopen. They claimed that they could not make a profit with the present prices of milk and cheese in that locality.
The state imports twenty-two million pounds per year in addition to that made, the San Francisco and Los Angeles markets each bringing in eleven million pounds from other states. That makes a total of 39 million, when divided by the population of six million plus, gives a per capita consumption of 6.3 pounds. This is about two pounds more than the average per capita consumption of the United States as a whole.

You might be interested to know where this additional cheese comes from. Oregon and Idaho send down about $\%$ of their entire make, nine and five million pounds respectively, practically all cheddar, with the exception of some processed.

Wisconsin sends four million, a considerable portion of which I understand is Swiss, Brick and Limburger.

Utah, two million, New York one-half million, and the remainder from various other states.

I should like to read a short paragraph from a letter that I have just received from Mr. McCampbell, Associate Marketing Specialist, U. S. D. A., San Francisco. He says: "Due to the fact that the Pacific Coast cheese prices have been considerably higher than Wisconsin prices this year, I anticipate an increase in receipts at San Francisco and Los Angeles from Wisconsin in 1934. Most of the Swiss, Brick and Limburger used here is from Wisconsin and has a very good reputation."

I should now like to mention two or three of the interesting points of the industry of the state. First is the Monterey cheese industry. It originated back in the 90's on a farm in Monterey county. The cheese formerly made on the farms but now made almost entirely in factories. This cheese is uncolored, made of stirred curd, pressed in cloths, leaving a star-shaped effect on the upper side of the cheese in the press. It is usually fresh or mild when marketed, and there is quite a demand for it, as you can see by the five million pounds made.

A very important division of the cheese industry is the cottage cheese manufacture. It is highly developed, both from the standpoint of manufacturing and marketing, and 108 plants are listed as making this product. A total of twelve million pounds is made yearly, equivalent to two pounds per capita. Most of this cheese is of the sweet curd or rennet type, which type has been manufactured quite extensively on the Pacific Coast for the past 15 years.

There is also a new development in the marketing of Swiss Cheese, a report of which you may have noticed in the October 10 issue of the National Butter and Cheese Journal. The cheese is made in the Star Valley country of Western Wyoming, shipped to Los Angeles, cut into blocks, and packaged by searing a thin layer of processed cheese on the surface just underneath the foil. I have not seen this done so cannot give you first-hand information.

The state control authorities are endeavoring to guard the quality of cheese manufactured, and also of that shipped in, especially from the standpoint of proper labeling. The agricultural code of the state requires that the cheese be labeled to indicate the variety, also the
grade, whether whole milk, part skim, or skim, and the factory number if made in California, or the name of the manufacturer or distributor if made outside the state.

The factories in California are practically all privately owned, that is, there are very few cooperatives or very few farmer factories. The owners usually operate the factories, and consequently very few operators are employed.

The cheese makers and assistants, as a rule, are hired by the month, day or hour. As far as I am able to find out, the wages vary from $40 per month, including board and room, to $200 per month, depending upon the experience of the man and the work that he does.

The higher priced men earn their wages, too. I can cite an example. I walked into a good sized factory last June at about four P. M., expecting to see three or four of the boys that the Agricultural College had placed in that particular plant. I found only the head cheese maker. The boys had worked their eight hours according to the N. R. A. and the cheese maker was doing the final clean-up work. He was classed as an executive on a monthly salary. The trouble may have been due however, to poor organization of labor on his part.

In summarizing the cheese industry of California, I would say that a wide variety of cheese is made, in good plants and in poor, in country and city factories, and under a wide variety of weather conditions. The state imports more than they make, the per capita consumption being 8.3 pounds, which includes 2 pounds of cottage. The cottage cheese industry is highly developed.

Working conditions in many factories are poor, salaries not very high, and possibilities for cheese makers are not very good at present.

Due to the high price of milk for other products, I believe that the cheese industry of that state will have to turn, more and more, to the special varieties of cheese, for which they can command a higher price.

I have enjoyed attending your convention and I should like to give you a cordial invitation to visit California in 1938 at the time of the World’s Fair at San Francisco, or before, and especially to visit the Agricultural College at Davis, which is only a short distance from Sacramento, the state capital. I thank you.

CHEESE ADVERTISING BY THE WISCONSIN DEPARTMENT OF AGRICULTURE AND MARKETS

By W. G. CARLSON

I am very glad to be here. I want to express the appreciation of our department for the splendid co-operation we have received from the makers of the state in the distribution of the printed matter we have been able to prepare for increasing the interest in cheese. I want you to know that you have done us a big favor and we certainly appreciate it.

Now I am just going to skim over a few of the things we have done. Whether they have been accomplishments or not you can judge. You