KEYNOTE ADDRESS - "WHY SUGAR BEET TECHNOLOGY?"

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It is a privilege to extend to you greetings and good wishes in connection with this Fourth Regional Meeting of the American Society of Sugar Beet Technologists for Eastern United States and Canada. We may say confidently now that the permanency and value of the Society is assured.

It is interesting to note at the outset of this talk that your meeting coincides with three anniversaries:

First, In 1747 - two hundred years ago - Andreas Marggraf, Professor of physics at the Berlin Academy of Science, first produced sugar crystals from beets.

Second, In 1797 - one hundred and fifty years ago - Franz Karl Achard, who had studied under Marggraf, published the results of lengthy studies and experiments proving the commercial possibilities of sugar produced from sugar beets.

Third, In 1937 - just ten years ago your Society was organized.

The significance of these anniversaries to me is the fact that they demonstrate the age and persistence of the idea and realization of sugar from sugar beets. These anniversaries also emphasize the time that passes between an idea initially seen and its full practical realization.

My talk will attempt to demonstrate that continued faith in this industry is justified and also that faith in your contribution to this industry is confirmed by the record.

Let us first consider the matter of faith in the industry.

I wonder how many of you have read Fred Taylor's moving book - "A Saga of Sugar"? I believe it should be compulsory reading for anyone in this industry who becomes discouraged. The reading and rereading of this book will renew the faith of anyone associated with our work.

However, there are very tangible things that give us ground for faith in the industry here in the Eastern Area.

We have, for example, the organization of the Farmers & Manufacturers Beet Sugar Association completed back in 1934, which signaled
the beginning of research work in our industry here and, also established
cooperative efforts between grower and processor as a fundamental principle.
The Association has also done much to maintain mutual goodwill and confidence between farmers and processors. We have seen many evidences in
recent years of the constructive power of this goodwill.

There has been real progress made in the improvement of our product -- sugar from sugar beets. It is not so many years ago that no attention was paid, for example, to such matters as thermophilic and mesophilic

germs. Now, we are prepared to produce sugar that is guaranteed free from these germs and this has opened up the use of our sugar by bottlers, canners, etc. The other many technical tests of our sugar demonstrates beyond question that it is a superior product.

There has been much work done to make the growing of sugar beets more attractive to farmers by speeding up of deliveries of beets in the fall. Large sums have been invested in equipment that enable the plants to receive beets faster and to store vast tonnages on the plant properties.

Then again, there have been large investments made in the improvement of plant properties. If it had not been for this type of work there is little question that the industry would have been unable to process efficiently the tonnages that it is now qualified to handle.

The personnel throughout the industry has been steadily strengthened which in itself is a promise of continued advancement.

I think we can also take encouragement from the extent to which the industry has increased its prestige in its communities, states and in justified recognition in Washington where so much of its destiny is determined.

Moving on now to the industry as a whole, we can point to some very definite evidences of progress.

First of all, I may remind you again that your Society was only formed in 1937. This has proven a boon to stimulating interest in research work.

Following that the Sugar Research Foundation came into existence. The work of this organization is fundamentally to find new uses for sugar; to strengthen its popular acceptance based upon scientific study and to investigate the possibilities of new ideas that will result in more economical and efficient methods of producing our product.

More recently the Sugar Beet Development Foundation has been formed to concentrate at this time on speeding up mechanization of the beet crop.

Again, there has been real progress made in intelligent and active cooperation with the United States Department of Agriculture; the Colleges throughout the country and the various industry and grower associations.

I would emphasize that all of these organizations working together establish for this industry that essential quality of modern industry, namely, research. It is thru research that we may hope for strength and growth in our work.

The foundation of the industry is now deep and solid. You and I, of course, are aware of the uneasiness which always seems to crop up in certain minds when the future of this industry is discussed. Within limits I look upon this as a good thing because it is a preventative of overconfidence. On the other hand, the record of accomplishment does not support the idea of some pessimists that the industry is "on the way out."

Our job, as I see it, is to seek constantly for ways to produce more and more sugar per acre at less and less expense to growers and processors.

Now, let us turn to the other phase of my talk to you today and, that is, the fact that faith in the work of you sugar beet technologists is justified.

Glance at your program for today and tomorrow for a moment. We find such subjects as "Mechanical Thinning Tests in Eastern Area"; "Performance of Mechanical Sugar Beet Seed Planters"; "Cross Blocking Results in Ohio"; "New Herbicides for Weed Control"; "Labor Savings Resulting from Use of Segmented Seed"; "Breeding for Black Root Resistance in Sugar Beets"; "Mechanical Harvester Studies in 1946", and "Controlled Ventilation of Sugar Beet Stockpiles." Do you realize that ten years ago all of these subjects were either in the purely theoretical stage or not even heard of? Surely, that's a tangible evidence of progress.

Let us recount some of the substantial accomplishments to date:

- 1. The development of curley top resistant seed revived a large area in the west that was "on its last legs".
- 2. The development of beet blight resistant seed put an end to a shadow that was falling over the future of the eastern area.
- 3. The full scale production of domestic seed was realized just in time to prevent a catastrophe when World War II became a reality.
- 4. The development of machinery for successfully planting segmented seed signaled the first big step forward in the tangible reduction of hand labor.

In addition to these actual accomplishments there has been encouraging progress in the development of mechanical harvesters; mechanical loaders; better fertilizer practices; and better rotation in crop sequences.

Ahead of us we see such developments as mechanical means of blocking and thinning beets; selective weed control thru the use of chemicals; black root control; preventage of spoilage and sugar losses in piled beets; and more profitable utilization of sugar beet by-products.

Beyond these are all the unknown possibilities that lie in research work. Surely our faith is justified and our hopes are not without substantial foundation.

Every worthwhile job has its difficulties and dangers.

There is always the possibility of over-confidence before results are really proven.

There is always discouragement over imagined lack of progress.

There is always need for the balance of the theoretical vs. the practical.

However, bear in mind the fact that all the companies in the eastern area are in full agreement on the value of, and the need for cooperation in research and the free exchange of ideas.

Let me sum up my message for you.

I have endeavored to prove to you that faith in our industry and faith in your contribution to the industry is justified.

This should leave you free to pursue your day to day activities with courage, confidence, patience and determination.

Let this meeting's deliberations bring renewed confidence in the possibilities of the future and may it mark a high note in the first ten years of your organization. I believe confidently that the progress that will be made by this industry in the next ten years will exceed anything we can now imagine.