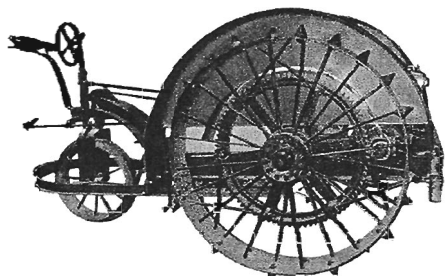


# Friends of the Lester F. Larsen Tractor Test and Power Museum



Judy L. Ray – Editor    Newsletter #23    October 2005

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*To collect, preserve, research, and interpret the traditions and technologies of agriculture.*

## A Letter From Fred Chase

*Editor's note: Fred is 99 and the son of L.W. Chase. He lives in Florida. The design of the tiller here was picked up by the Noble Plow Co. and it is still used in wheat country in the U.S. and Canada.*

"A conversation with Bill Splinter and the July Newsletter brought up some memories of events about 70 years ago. It was the end of the depression with low corn and wheat prices and a hangover from the dry years of 1934 and 1936. (Ed note: Actually advertised as "New for '41"). The dust was still blowing. Practically all of the Chase Plow Company's cash flow came from the sale of repair parts for an obsolete line of row crop tools.

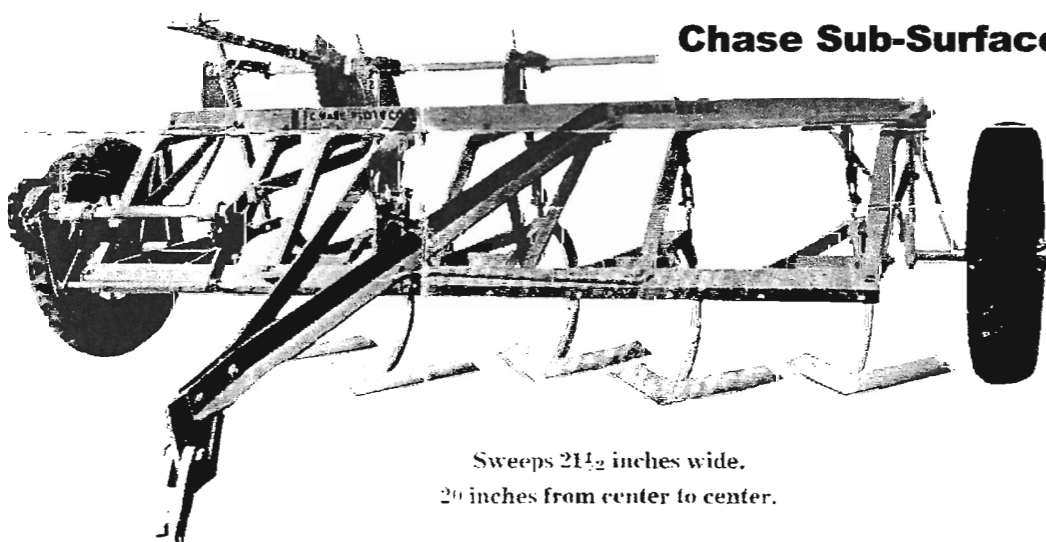
Bindweed (Russian Morning Glory) was taking over the Central Plains States as it could survive the drouth with its long tap root. We had built and were trying to sell a machine which we called a bind weed exterminator. It was basically a field cultivator with a special blade. It was probably in 1937 or 1938. I was in the back office and Father (L.W. Chase) in the outer office when Drs. Duley and Russell came in. As they knew Father they visited with him. One of them said that they were looking for a

tillage tool that would operate under the soil surface and not disturb the top soil or the crop residue.

Father considered the problem and replied by offering a spade and a trip to China and (suggested) digging up. I heard all of this and got into the discussion. I suggested that we might have what they wanted in our bindweed exterminator.

We made a few changes in the sweep design and the machine became the Chase Sub-Surface Tiller. It apparently was what they were looking for as they and the Soil Conservation Service adopted it as a new tillage practice for the Great Plains.

However, our financial condition was such that we could not properly introduce the modern NO Tillage farming. Uncle Sam caught up with me in 1942 and by the time I got out of the Army in 1946 the field had been taken over by other machines that were heavier but did not do job as well. One problem was that farmers liked to see the dirt move."



**Chase Sub-Surface Tiller**

Sweeps 21½ inches wide.  
20 inches from center to center.

**Lester F. Larsen**  
**Tractor Test & Power Museum**  
**UNL East Campus, 35<sup>th</sup> & Fair St.**  
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## Message From W.E. Splinter, Director

We have several projects underway which keep all of us busy. Larry Bitney and Phil Dinges are renovating the 1917 Moline tractor. It will be interesting indeed to hear it run.

Curt McConnell is determining the footprint of all of our tractors so that we can better lay out the most efficient way to show our tractors. We are hoping, with the completion of the garage area, to move enough exhibits to that area to free up the Northeast bay, allowing tractors to be shown there and hopeful freeing up enough space to add the old Test Car to our exhibit. I am currently looking into utilizing heat pumps for HVAC.

Batteries and tires seem to be the consistent operating cost for the Museum. Jerry Kohl continues to keep things running and Mark is doing an excellent job in handling visitors. We would indeed be unable to operate without their input. I am very sad to report that one of Board Member Ervin Rolofson's grandsons was killed in a road accident. Certainly he has our understanding and sympathy.

## From the Desk of Lou Leviticus

This time we have a new wrinkle. Is there anyone who has heard of a "Nebraska Engineering Scale"? I thought not. Well, there is one and it appears to be a legitimate scale. We have one in our museum. It was manufactured by K&E Co (Keuffell and Esser), a well known and respected name for its many types of slide rules and other measuring equipment. This company was also well known for its accuracy, because slide rules and surveying equipment has to be very accurate and precisely made. Ours is in the form of a triangular ruler, to be used to lay out and read different scales on maps.

And herein lies the rub! There is a regular scale in inches, alongside a 1:2 metric scale. This means that the metric scale should run to 608 mm for a length of 12 inches. But someone messed up when making this ruler (maybe that's why we got it!) and the 12 inches equal EXACTLY 600 mm. That is an error of over one percent – a very unusual error for this company and one which might cause some problems when laying out maps, or, in WWII, determining where to bomb or lay an artillery barrage.

**The latest addition to the Ruler Saga:** Larry Ehlers explained that this is an Architect's Ruler. The scale with the 600 units, which are NOT millimeters is just a scale to be used by the architects. Thus this scale is 600 divisions for 12 inches, or 50 divisions per inch. So that mystery is solved. However, if this is an architect's scale why call it "NEBRASKA ENGINEERS SCALE". What did K&E think about Nebraska, its engineers and architects?

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## MUSEUM HOURS

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**MON-FRI 9AM-4 PM**  
**SATURDAY 10AM-2 PM**  
**SUNDAY NOON-4 PM**  
**CLOSED NOON HOUR**

**\* A bumble bee is considerably faster than a John Deere tractor.**  
**\* Life is simpler when you plow around the stump.**

## Spotlight on the Board

Jerry Kohl is well known around the Larsen Museum as the volunteer who knows each tractor intimately. Jerry is a dedicated volunteer as well as a member of the Larsen Museum Friends Board. Here are a few things that you may not know about Jerry.



Jerry became interested in the Tractor Museum when Director Bill Splinter offered him a home for his Cletrac. He came to visit his tractor often and one thing led to another. Jerry volunteers a number of times a week depending on what he and his wife Kay have going on at home. He was born in Nora, NE near Superior, NE and spent most of his growing years in Hardy, NE.

Jerry grew up a gear head all the way. His dad ran a garage and had the only full service garage in the community during WW II. Jerry learned his mechanic skills from his dad who was a good teacher. When he was 15 years old, he was in the pit working on a car and the car dropped locking him in the pit. He did not get hurt. There he sat until the guys came back from lunch and of course, he was given a hard time because he did not put blocks under the car. When he was very young, about a year and a half old, he took off from home on his own one day. He wandered down to where his dad was working in a garage two blocks away and fell into a drain pan full of oil. He has been kidded ever since about being baptized in oil. He joined the Navy at the onset of the Korean War and learned diesel mechanics in the Navy. He worked on a repair ship.

Jerry decided to become a teacher and he began in 1958 as pre engineering major. He went to Fairbury Jr. College. A professor saw his gift for teaching and guided him towards industrial arts. He went to Kearney State and received his degree in Vocational Education, Machine Shop and Automotive Technology. He taught at Omaha South High School as his first teaching experience where he built the vocational program up from scratch. Jerry says his philosophy of being a successful teacher is to know what you are doing. Don't try to snow the kids because they can see right through it. Don't show fear even if the world is falling apart. Of all the student teachers he has had, the one thing he always tells them is no matter how scared you are just hang in there. Be sure to always know what you are doing. As far as the difference between students today and when he started Jerry has found that students are the same now as they were back in the fifties... they just get away with a lot more.

As a board member, Jerry feels the most important aspect of the Larsen Tractor Friends Organization is preservation of the tractors, the history, and the science of farming. The thing he likes best about the Museum is that unlike many other museums the artifacts are not packed away behind glass. You can touch the exhibits, even sit on them and see them running. Kids really like to be able to do that. The importance of this is that it gives the visitor a base or background for where agriculture has been. If a person knows a little about the history of agriculture, they are more likely going to want to learn more about it and the Larsen Museum is a great place to learn.

## Judy's Corner

Things continue to move forward here at Tractorville. We would like to thank Jeremy Steele for taking over the very active job of running our State Fair exhibit and to Donna Martin, our recent Museum Development Associate who continued to give her help. Thanks to all of you who volunteered your time and energy, not to just the State Fair, but in all the outings and projects we have been doing this summer: Platte Valley Antique Machinery Assoc. show in Ayr, NE. Camp Creek Thresher Show in Waverly. Old Trusty In Clay Center, NE. Husker Harvest Days in Grand Island.

Each person who works with us leaves their mark on the museum in a good way. Donna did a great job with signage, organizing volunteers, out-reach, publicity, inventory, and displays just to name a few things.

Jeremy Steele has also been filling in on Museum Development. He is a very enthusiastic person and we have a hard time keeping up with him. He was instrumental in getting the garage area dry-walled and is making many helpful contacts.

On September 9<sup>th</sup> Jeremy invited 3 brothers: Gerald Johansen, Dennis Johansen, and Robert Johansen, all from Osceola, NE, to record their memories of growing up with and farming the land of Wilmot Crozier "the Father of Tractor Testing".

We have volunteers working on a few of our tractors, and we can always use donations to buy parts. We do not operate on a large budget and I am still doing my begging, borrowing, repairing, sales and coupons.

Please consider a tax-deductible donation to the museum this year. We promise not to use the money on wild parties!

-Judy L Ray

## More on Luebben Baler



In the last newsletter, we gave a brief description of the Luebben Baler. Eric Luebben, the great-grandson of Melchior Luebben, and Gary Branch visited the Museum in early spring. After reading the article, Don Edwards, Larsen Museum Friends President, pointed out a valuable reference to the evolution of the round baler in one of the many books in the Museum Library. The following information is from Allis-Chalmers Farm Equipment 1914-1985 by Norm Swinford:

"The rolled-bale bailing press was invented by Ummo F. Luebben of Lincoln, Nebraska, and he was granted Patent No. 972,884 on October 18, 1910. Henry Merritt was instrumental in acquiring rights to the Luebben patent in 1940.

Work on the A-C round baler began in December of that year, with the first unit built in 1941. In 1943, a pilot run of 25 balers was built, most of which were placed with farmers and custom operators in seven Midwestern states. This extensive test program produced the proven Roto-Baler.

**Friends of the Lester F. Larsen  
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ADDRESS CORRECTION REQUESTED

Farmers were accustomed to seeing hay baled in relatively large, usually heavy, rectangular packages held together by two or three wires, although the new-fangled twine-tie balers were getting started. Now here was a bale that wasn't rectangular, wasn't very heavy, and was wrapped not tied, with binder twine. Can't be! Won't work!

But that strange-looking machine, which certainly didn't look like a baler, had a lot going for it. At only \$985 (1947), a farmer could afford to own one and avoid the custom baler who didn't always come to bale before the next rain which was sure to come. But who wants a round bale?

So the A-C sales crew had to learn all about "Roll-Up Compression" and how it formed the bale without mangling the hay. They had to learn how to convince farmers that this was a better bale. They talked some of their first customers in to leaving some bales in the field all winter, so they could open them in the spring and show the non-believers the bright green dry hay. Even the cattle became part of the selling team—they liked the rolled hay better because there were no sharp ends to jab their mouths.

The Roto-Baler remained in production from 1947 through 1964. Due to popular demand, there were three small production runs of 800 each in 1971, 1973 and 1974. Altogether 77,200 standard and fast-wrap Roto-Balers were built. Not bad for something that didn't even look like a baler."

**FYI** January 1 began a new membership year. Please continue your membership and send your annual \$10 made to the "Friends" of the Larsen Tractor Museum to the address on this newsletter. Donations can be made to Larsen Tractor Museum or via University of NE Foundation. Please let us know if you do not wish to receive the newsletter.