

GOOD FRUIT

A photograph of two Bosc pears hanging from a tree branch. The pears are yellowish-green with some red blush at the bottom. They are surrounded by green leaves. The background is a soft-focus green.

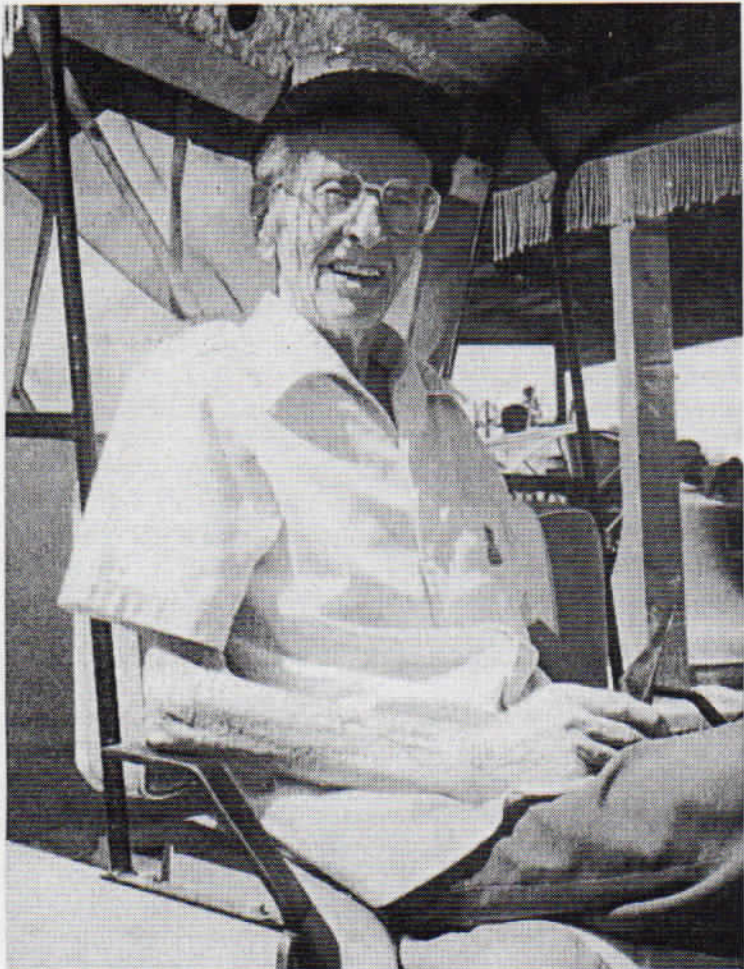
GROWER

OCTOBER 15, 1992

*Bosc,
postharvest*

B·Y S·L S·A·N·G·E·R

Lindeman's 1940 crawler makes **BIG TRACKS** at equipment show



JESSE LINDEMAN



ESSE LINDEMAN'S
LITTLE 1940's
crawler, Yakima-
built and now pretty
much a fond memory
in Washington State

orchards, has become a star of tractor and antique power shows. The 11th annual Washington State Pioneer Power Show presented by the Central Washington Antique Farm Equipment Club at Union Gap, Washington, August 15-16, was no exception, with about 30 Lindeman crawlers on the grounds.

Some were glossy John Deere green and immaculately restored, others looked as if they had put in long, workhorse years in orchards or in other of the many jobs the tractors did, such as row crop farming, wheat farming, logging, earth moving, and handling cargo in the holds of ships.

They were assembled at the Central Washington Agricultural Museum of farm equipment, which was established in 1979 to preserve the agricultural heritage of central Washington.

In a brief appearance, the legendary ag equipment engineer Jesse Lindeman of Yakima, Washington, whose crawler was the featured show attraction, told the crowd: "I'm surprised you're all still interested after all these years. My ego is right up to here."

Dozens of fans, owners, former owners, and tractor collectors crowded around

Lindeman, 92 years old and frail, wanting to shake his hand, get his autograph, or simply tell him how much they admired his crawler tractor. One man, Richard Stultz of Goldendale, Washington, shouted "I wouldn't have got my start in farming without your tractor." Stultz, 42, said he bought a used Lindeman crawler in 1966, when he was 16, and started plowing wheat fields with it.

"It pulled a three-bottom plow. I've still got it, and never any problems."

IT'S THE PAINT

Asked why his tractors are so collectible, Lindeman grinned and credited the John Deere connection. "But, another thing is those paint jobs, so shiny bright green when they restore them. They look better all these years later than when they came off the assembly line. Then, they were kind of flat, only one coat of paint."

More seriously, he said the Lindemans have endured with a fine reputation because they "had a basic good design, they were cheap to operate, and anybody could fix one."

The full name is Lindeman-John Deere BO crawler. "B" is the John Deere tractor model designation, and the "O" stands for "orchard." Crawler is added to distinguish the Lindeman steel-tracked creation from the standard four-wheeled BO model.

The Lindeman story is classic American poor boy makes good. Grit, determination, and talent, maybe a little luck. Lindeman came to Yakima from Iowa in 1920, at the age of 21.

A farmer's son, he had an eighth grade country school education. He never had any formal engineering training. He went to work for Rovig Lumber in Yakima, and, two years later, he was selling farm implements. The oldest of four Lindeman brothers, Jesse was joined over the years by the other three, Harry, Ross and Joseph. Eventually, they were in business together. Jesse was the only survivor.

During the short time he spent selling someone else's farm machinery, Jesse realized western agriculture, particularly the fruit-growing industry, needed more versatile equipment.

In 1923, Jesse and Harry decided to invest their meager life savings to start their own retail implement business and small machine shop and forge in Yakima. They called the new business Lindeman Power Equipment Company.

It was at this time that Lindeman became associated with crawler tractors for orchard work by taking over the Caterpillar franchise. But the main income came from an orchard disc harrow, an innovative implement designed and manufactured by Lindeman Equipment.

Later, they manufactured a wide variety of popular orchard machinery, including ditchers, orchard trailers, sprayers, furrowers, brush rakes, and sub-soilers. The company became well-known as a firm which designed and built machinery well-adapted to the conditions of western farming.

They sold the Cletrac crawler but this tractor began



to develop service problems and a subsequent poor reputation because, as Lindeman said, the man who owned Cletrac began "tinkering" with the small tractor's design. Lindeman decided to switch over to John Deere.

KEPT THINKING

Lindeman began selling wheeled tractors made by the big Midwestern farm equipment manufacturer. But he didn't stop thinking about a low-profile, narrow crawler design which would fit better with the needs of orchardists, particularly ones who grew trees on steep hills where awkward wheel tractors were at a disadvantage.

In those days, John Deere built an economical tractor engine that was designed to run on a variety of fuels – gasoline, as well as cheaper ones such as kerosene – a distinct advantage during the Depression of the 1930's.

Lindeman began experimenting during the 1930's with combining crawler tracks with John Deere engines and transmissions. By about 1938, Lindeman Equipment had converted a couple of dozen John Deere Model D's and GP's, but these were not considered an ideal marriage of wheeled design and crawlers.

However, later in the 1930's, John Deere introduced the Model B, and Lindeman converted it to a crawler, using his own final drive, steering clutches, track assemblies,

and power attachments. John Deere shipped engines and transmissions by rail to Yakima and the Lindeman plant did the rest.

"It was a good-looking tractor. It had not been designed as a crawler, but the B worked beautifully as a crawler. Everything just clicked," Lindeman said while being interviewed for a video documentary by Robert Mull of Sepia Productions, Seattle.

The large Lindeman factory employed more than 400 workers at its peak during the war. The 10-acre manufacturing complex was located on South Third Street in Yakima, now the site of Noel Canning Corporation.

The plant built about 1,700 BO crawlers, almost all of them between 1941 and the end of 1946. Lindeman produced tractors during the war, even though John Deere's plants in Iowa and Illinois were devoted to building battlefield tanks. The crawlers were considered a priority item because of their role in food production for the war effort.

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clearance nine inches, and weight was 4,420 pounds. Everything on top was streamlined to prevent damage to low branches. The speed in fourth gear was four miles an hour. Basic price was \$1,000, but it ran up to about \$1,450 with extras.

Linderman's crawler now has a new dash and a collection, usually anywhere from \$1,200 to \$2,650. A restored Linderman of the 1947 vintage will be about \$5,000, says Paul Cook of Yakima, a leading collector. The rare ones, pre-1941, m



"There was so much traction in a small package," Lindeman said. When asked why the design worked so well, he replied, "Well, we would say, let's build this part or that part up a little bit, we wanted it to be hell for stout."

The Lindeman crawler had a belt horsepower of 18.53. The engine was the typical big-bore, two cylinder, low rpm John Deere power plant of the period. Length was 86 inches, height at the radiator cap was 50.5 inches, ground clearance nine inches, and weight was 4,420 pounds.

Everything on top was streamlined to prevent damage to low branches. Top speed in fourth gear was four miles an hour.

Basic price was about \$1,000, but it ran up to about \$1,450 with extras.

Old Lindeman crawlers nowadays, in restorable condition, sell usually for anywhere from \$1,250 to \$2,650. A restored Lindeman of the 1941-47 vintage will bring about \$5,000, said Paul Cook of Yakima, a leading collector. The rare ones, pre-1941, may

fetch as much as \$40,000, he said.

"When you want one, you don't worry about what it will cost, you worry if the owner will sell it," Cook said. He has donated one of his nine BO Lindemans to the Yakima Valley Museum, where it is to become part of a planned orchard exhibit.

One estimate says only some 300 restorable Lindemans are left. Many in past years were sold for scrap or cannibalized for parts.

MILLION PLUS

John Deere bought Lindeman's crawler operation in 1946 for more than \$1 million and built the new John Deere MC crawler, which replaced the BO Lindeman, in Yakima until 1954, when the plant was closed and Deere took its crawler manufacturing back to Iowa.

By the time he sold the crawler factory, Lindeman was manufacturing in Yakima various implements and power hitch systems, including the Thys hop picker and a plow for the Ford-Ferguson tractor.

Lindeman continued his non-crawler work, building fruit handling and packing machinery, as well as a rotary tiller under a new company name, Northwest Power Equipment.

In subsequent years, the firm also built plant transplanters, loaders and planters for sugar beets, and potato harvesters. The Lindeman





engineering and manufacturing tradition continues in Yakima today through Lindex Inc., a firm that makes three-point hitches and power take-offs for Caterpillar crawler tractors.

Del Bice of Yakima, a retired John Deere implement dealer, was at the Union Gap show and talked about Lindeman and his work. Bice, who is working on a Lindeman biography, called him "one of the smartest agricultural engineers in the business."

During the 1940's, Bice was a salesman for his father-in-law's John Deere dealership, Webb Tractor & Equipment, which sold some 500 Lindeman crawlers in central Washington.

"It seemed like every small grower had one in those days," he said. There was very little competition, since Caterpillars tended to be too big and expensive for small orchardists, and other brands, such as Cletrac and Oliver, simply weren't as well designed or reliable, Bice said.

Bice, president of Yakima Valley Museum, said besides the crawler, Lindeman was important because of his original contributions to hydraulic hitches and tool carriers, which allowed great versatility of

tractor use, cutting costs and greatly enlarging a tractor's usefulness.

By the end of the 1940's, the supremacy of the crawlers was about played out. "Tractors on rubber tires ended the small crawlers. No one in their right mind would spend 10 hours a day on a hard-

riding tracked tractor, bouncing over rough ground and ditches. You ruined your kidneys doing that," Bice said.

This workaday reality doesn't slow down collectors. "It is really a fantastic tractor. If you take care of it, you can't

kill one," said Roy Phelps of Selah, Washington.

Another Lindeman lover, John Corbin of Tacoma, Washington, asked for his opinion, replied: "Lindeman crawlers? They're tougher than tough." ■■■

EDITOR'S NOTE

JESSE G. LINDEMAN, age 92, of Yakima, Washington, passed away on September 10, 1992, while this feature was in preparation.

He was born October 12, 1899, on a small farm in Cass County, Iowa, to Joseph and Elizabeth (Boseck) Lindeman. He attended county schools there through the eighth grade.

In the fall of 1918, during WWI, he joined the Air Service of the U.S. Army. In 1919, he returned to civilian life and moved to Yakima, where he was employed by Rovig Lumber Company. In 1922, he and two brothers, Harry and Ross, purchased the implement parts of that business and formed their own company, Lindeman Power Equipment Company.

In 1924, Jesse G. Lindeman married Jane Omega Tufts in Yakima.

In 1925, the brothers acquired dealerships for Cletrac, Mack Truck, Holt Tractors, and a spray pump. This business was relocated to Walnut and First Street.

In 1929, the company moved again, to South Third Street, into a plant built especially for this type of business, where another brother, Joe, joined them a few years later.

The business was greatly expanded over the next few years for the manufacturing of tractors and implements, and

the company employed 428 people.

The company manufactured several different parts for the United States Navy during WWII.

In 1947, the business was sold to John Deere & Company, and operated as John Deere Yakima Works until 1954.

Later, Jesse and Joe started Northwest Equipment Company, which became a major builder of rotary tillers and special equipment for fruit handling. It operated from 1954 to 1982, when the business was sold.

In 1985, a smaller factory, Lindex Company, Inc., located on South First Street, was formed for the manufacturing of three-point hitches and power take off units for crawler tractors. This company is still in operation today.

He was preceded in death by his father in 1959, and his mother in 1962; his brother Harry in 1930; his brother Ross in 1948; his brother Joe in 1982; and his beloved wife Jane in 1987.

He is survived by his sons, Bruce Lindeman of Yakima, Bill Lindeman of Port Townsend, Washington, and daughter, Betsy Lindeman Gammell, of Alameda, California; and a sister Alice Downs of San Diego, California; seven grandchildren; one great grandchild, and several nieces and nephews. ■■■

