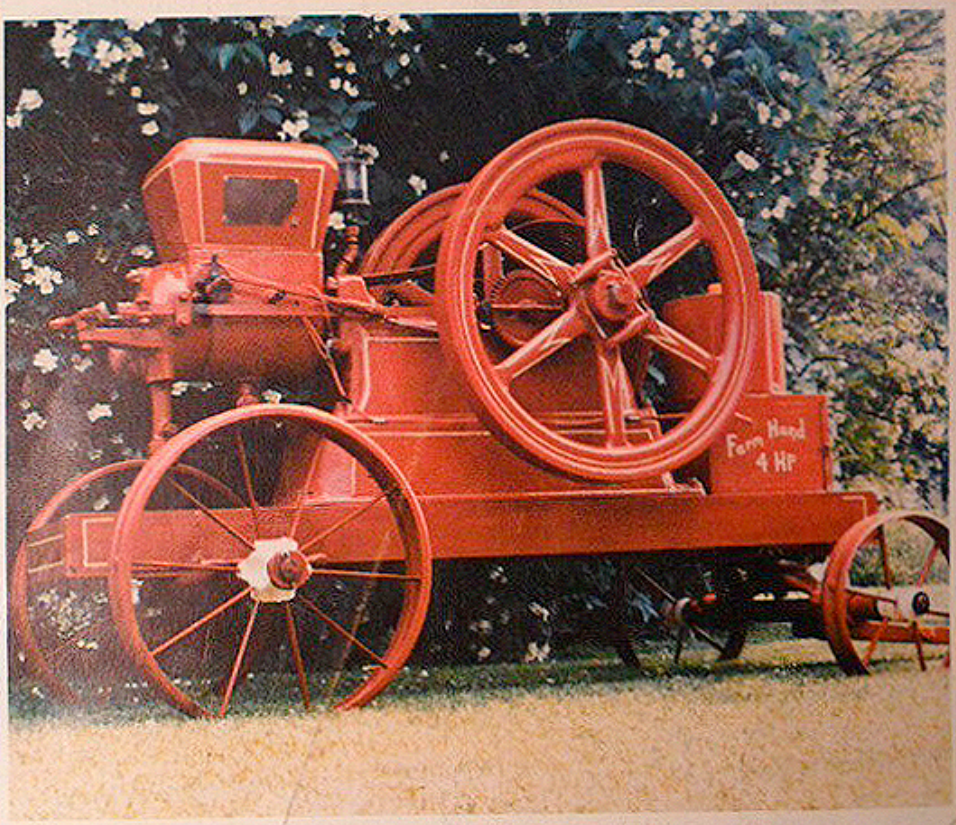
Volume 20 August 1985 No. 6

GAS ENGINE MAGAZINE

$2.50 PER COPY



Dave Marshall, 233 Metzger Avenue, Butler, Pennsylvania sent this picture of his 4 HP Associated. Patent date is 1911, serial number 402403. 5 inch bore and 10 inch stroke.

Reminiscing with Jesse Lindeman
The Lindeman J. Deere Crawler
By Gene Brady

1460 Colchester Drive East Port Orchard, Washington 98366
Norma Brady and Jesse Lindeman

Norma Brady and Jesse Lindeman, taken at Yakima, Washington in the fall of 1984.

As the proud owners of two Lindeman-John Deere "BO" crawlers, my wife, Norma, and I journeyed to Yakima, Washington to meet with the inventor/producer of the well known unique orchard tractor. We had done our homework before meeting Jesse Lindeman and knew that he was 85 years young, an Air Service veteran of World War I and co-founder/president of the Lindeman Power Equipment Company (founded September 1922, Yakima, Washington). When the sale of this Company to John Deere was finalized in January 1947, Jesse Lindeman entered the J.D. work force as chief engineer and later became involved in product development.

It didn't take long for two tractor enthusiasts to find a common ground; consequently the reminiscing flowed as fast as a mountain stream! At this point Jesse Lindeman concurred in my request to tape record the conversation. Here are some highlights that may interest other tractor collectors:

The idea of a John Deere tracked machine got its impetus from the Portland, Oregon J. D. branch manager who needed a tractor to compete with Caterpillar. The Portland manager, a cousin of Colonel Wiman who was president of John Deere, said he could get one of the new four-wheeled orchard tractors, the BO model. It then took Jesse Lindeman nearly a year to complete the design, casting and production of a prototype. The first

tractor was field tested on a local Yakima orchard... unfortunately this orchard had all level ground. The absence of hilly terrain very common to many western orchards allowed an initial design weakness to survive the field test program. When the first production units got their real test on hilly terrain, the problem surfaced in short order.

The first ten units produced used metal-to-metal clutch plates which operated in oil. As you know, the Lindeman-J. D. crawler uses steering levers which first release the clutch plates before engaging the brake band. Everything worked fine until two crawlers were sold to a McMinnville, Oregon orchardist who had all sidehill fields. The near-constant use of the uphill brake to maintain a contour line brought the major problem to the fore. Since the clutch housing held only two quarts of oil, the plates got hot, dry and shed steel particles. Ultimately the gap between the plates filled and the clutch wouldn't release. The Lindeman-J. D. crawler almost met its Waterloo then and there as later reports indicated that six of the ten crawlers were experiencing the same problem!

The clutch dilemma was solved within two weeks by using Chevrolet dry thermoid clutch plates riveted on the existing steel plates, revising the clutch housing and the release system. As soon Jesse Lindeman finished a modification package, his younger brother, Joe, would do the refit at the farm site. Fortunately, the ten crawlers were only spread from Vancouver Island, B. C. to Oregon so overnight trips got the job done in a hurry with minimal loss of tractor time.

During the World War II years, a J. D. "BO" tractor production line was retained intact as a special concession to supply farm tractor needs vital to fruit and food production. When the Lindeman plant required more "BO" units, a War Production Board approval would be obtained for allocation of critical war material and the John Deere production line would come to life for a short time. The "BO" chassis, costing about $500 each, were shipped by rail from the Midwest to Yakima. The retail price of the Lindeman-J. D. crawler was about $1450 through the J. D. sales system.

Many tractor collectors are aware that the Lindeman foundry/factory modified 27 GP tractors, many of which are still around the Northwest in restored condition. Even more interesting, however, is that three J. D. "D"

model tractors were also equipped with the Lindeman tracked system. Mr. Lindeman remembers that these machines were demonstrated on a cold, blustery winter day in the Yakima Valley. Maybe the weather was a portend of things to come; the "D" production line was soon to be permanently shut down. These three model "D" crawlers were reportedly shipped to the Dubuque plant when the entire John Deere operation in Yakima was closed.

Another specialized Lindeman-J. D. crawler project involved 10 units equipped with small rubber-padded tracks. The metal plates were manufactured at the Yakima plant and then sent to Portland, Oregon for bonding a Chevron (" V ") cleat. These rubber-tracked units were to fill a need for a small tracked machine to lower into a ship's hold for moving bulky cargo and grain. Mr. Bob Lindeman, a nephew of Jesse Lindeman who also currently resides in Yakima, has a set of these tracks to be used in the family restoration project involving-what else-four Lindeman-J. D. crawlers!

A color booklet Lindeman Power Equipment Company: A Review and a Prospectus, printed about 1947/1948 was made available to me by Mr. Barney Young of Port Townsend, Washington, a former Lindeman engineer. This 32-page publication tells the story of the Company from 1923 onward as it designed and produced specialized machinery in addition to the well known J. D. crawler. Some of these products are: mobile sprayers, extension disc harrows, land rollers, hydraulic tool bars, beet loaders, potato harvesters, 2-way plow for the Ford-Ferguson tractor and the manufacture only of the THYS Hop picker; these represent only a portion of this Company's illustrious product line-up.

To meet and chat with an inventive genius such as Jesse G. Lindeman was an added bonus to our always pleasant visit to the Yakima Valley.