

## MEMORANDUM

Subject: Hempseed Conference March 10, 1942 -  
Remarks by Mr. Scott, The Ludlow Company

### Processes

1. Hemp requires four distinct processes, as follows:

- (a) Planting
- (b) Harvesting
- (c) Retting
- (d) Scutching

### Planting

2. In the Kentucky area three pecks of hempseed per acre are required for fiber planting purposes and the plant grows to a height of from seven to ten feet with a thick stalk, whereas, in Wisconsin, five pecks of hempseed per acre are required and the plant grows to a height of from five to eight feet and the stalk is thin. The Kentucky fiber is rather rough and "bold" while the Wisconsin fiber is finer and more workable for higher type products.

3. In Kentucky, the planting season begins around April 15 and in Wisconsin, about May 1. Planting was formerly accomplished by hand broadcast but is now for the most part effected by a tractor drawn driller.

### Harvesting

4. Harvesting begins approximately three months after seeding, which is from August 1 to August 15 in the case of Kentucky and about September 1 in the case of Wisconsin.

The harvesting method in Kentucky is to cut the plants with no effort made to achieve careful spreading and after a period of from 24 to 48 hours for wilting, the stalks are hand gathered, shocked, and left standing on the field until the retting time, about November 1. At such time the shocks are broken and spread by hand and this method causes shocking tangles which render the hemp unfit for machine handling. Further, it is not possible to remove the hemp from the fields with the use of machines due to the fact that the harvesting season is at a time when the fields are very muddy. Hand spreading in Kentucky causes an uneven ret in the hemp and the mixed handling reduces the line content to approximately 30 percent.

Harvesting in Wisconsin is done by means of a tractor drawn cutter, which also spreads the hemp flat. The retting period varies, depending on weather conditions, from six days to six weeks and averages from four to



five weeks. About two weeks after the beginning of the retting, the hemp is turned over with a long pole. At the end of the retting period, a gather-binder is used to bind the shocks, after which they are removed to a scutching mill yard for storing in weatherproof stacks.

In the case of Wisconsin, the hemp has a slate gray, glossy condition when ready for the mill and this indicates a strong fiber. Dull hemp is usually less strong than glossy hemp. The line content in Wisconsin will approximate 60 percent and consequently the crop is more valuable as the price for line hemp is frequently double that of tow hemp.

#### 5. Waste

The visible waste consists mainly of the hurds which are removed in Wisconsin but are not entirely removed in Kentucky. The invisible waste consists of dust, dried up bark, and pith, which, in the case of Wisconsin, are removed by scutching.

Kentucky fiber yields 70 percent so-called "line". However, when this is "double-dressed", eliminating the tow and waste of 20 percent, a net yield of 50 to 60 percent line results. Wisconsin fiber, being machine processed, does not require "double-dressing" but yields the 50-60 percent line on first processing. Since the so-called Kentucky "line" (the initial 90 percent) contains much tow and waste, it sells at a much lower price, i.e. when Wisconsin line sells for 22 cents, Kentucky "line" sells for 18 cents.

#### 6. Scutching

Kentucky hemp is scutched by means of a hand break which is extremely difficult to construct and consists of five triangular (ash or oak) pieces of wood. This causes 20 percent more waste in Kentucky in the hurd than in Wisconsin. The Wisconsin hemp which is processed at the scutching mill requires a thorough drying at not to exceed 150 degrees before breaking. This drying is done in steam heated kilns and the hurds are utilized for fuel in such mills.

Wisconsin hemp is graded high, medium, and low and so identified by means of colored tickets, blue, white, and red, respectively. Kentucky hemp is not graded and is sold "as is", defined as "Kentucky Rough".

#### 7. Production

Mr. Boot expressed the opinion that Kentucky planting has already reached the saturation point and it is doubtful that more than 5,000 acres can be harvested in Kentucky. In 1941, Kentucky production was estimated at 16,000 bushels of hemp seed of which 3,000 bushels were reserved for 1942. Wisconsin has purchased approximately 4,850 bushels of hemp seed for 1942 plantings and needs about 4,250 bushels more. In 1941, 6,500 bushels were planted in Wisconsin and 2,700 bushels were planted in Kentucky, and it was suggested that 1942 plantings should be increased 40 percent in



Wisconsin and 50 percent in Kentucky, and that any excess Kentucky seed should be furnished to Wisconsin.

Wisconsin hemp could be grown successfully in the Dakotas, Iowa, and Northern Illinois.

### 8. Hemp Mills

It is estimated that a hemp mill with an average production of 5,000 pounds of line per 20 hour day would cost approximately \$250,000 (with related harvesting equipment) and would have a capacity to handle 2,000 acres of hemp.

In the event that 400,000 acres of hemp are planted in 1943, which in turn should produce 400,000,000 pounds of hemp, it would be necessary to have from 150 to 160 mills to handle such a crop. Such acreage would require considerable education for the producers of hemp as well as for the millers, and according to Mr. Boot, all mechanical mills should be located in the State of Wisconsin.

Mr. Boot believes that Mr. Moksnes is not only the best miller in the United States but has the most modern and efficient mill, located at Versailles, Kentucky.