HARVESTING SWEET CLOVER SEED WITH A CORN BINDER

HARVESTING seed of the large, late strains of white sweet clover has always been difficult. However, both because they yield more and especially because they furnish pasture some weeks later in the summer, when pastures are short, these large late strains are much more valuable for pasture than ordinary commercial white sweet clover which has come to be largely of the Grundy County type. Repeated attempts at Ohio State University and on other farms to harvest this seed by direct combining have failed. The seed crop does not ripen at one time, and shatters soon after it ripens. While the plant is green, the combine clogs with green material, and much of the seed saved is green and requires careful drying. When the stalks are dry enough for combining, much, or often all, of the seed has shattered.

Doctor J. B. Park of the Department of Agronomy of the Ohio Agricultural Experiment Station introduced in 1935 a valuable large late strain of sweet clover under the name Evergreen. Despite its value, harvesting the seed crop had failed to the extent that only a small amount of seed of the strain was available in 1940. In order to increase this strain as rapidly and surely as possible, it was sown with a hand garden seeder in rows marked out with a corn planter and cultivated throughout the first season. The next year this sweet clover averaged 7 feet tall and harvesting promised to be a serious problem.

Since this sweet clover was in 40-inch rows, we tried using a corn binder to harvest it, cutting it in the morning before the dew was off. The result was an extremely satisfactory sweet clover seed harvest. The coarse, heavy, material was tied in neat, tight, bundles which later threshed an exceptional yield of seed.

The standard corn binder cannot be used to harvest broadcast sweet clover because the grain wheel extends into the uncut sweet clover, riding it down and tangling the wheel. In order to make corn binder harvesting of sweet clover more feasible, the senior author suggested that the right hand gathering point of the binder be extended forward and out to cut a sufficiently wide swath to clear the land wheel of the binder. Doing this would also make for more rapid cutting since a wider swath would be taken.

The junior author designed and made the attachment shown in Fig. 1. It consisted of strap iron and extended the gathering point of the binder about 2 feet forward and 8 inches to the right. The iron was braced to the main frame at several points and finally carried around the grain wheel. This device was made in about 2 hours. It cut a broadcast field of Evergreen sweet clover very satisfactorily in 1942.

Another plan to make it possible to use the corn binder for harvesting sweet clover seed was tried in 1942. Sweet clover was sown in wheat with the grass seed attachment on a grain drill, sowing sweet clover from every fourth spout of the drill. Red clover was sown from the other three spouts. Although, due to seeding conditions,