of unproductive and eroded land previously abandoned on this farm. The rows were cultivated for the first year to reduce the competition from weeds. On the better soils in the garden and orchard, the grass completely filled the space between the rows by the end of the second year. The spread was less rapid on the depleted soils of the abandoned fields. In the garden and orchard, the grass appears to compete on fairly even terms with quack grass, but it has not encroached upon a heavy bluegrass sod which borders one side of the garden.

About 2 acres of the grass established in 1937 were plowed in the spring of 1940. The soil was disked and harrowed during the summer and in August no evidence of live plants could be found. Whether or not the grass has been destroyed by cultivation can be ascertained only at a later date. The grass is utilized for pasture and appears to be quite palatable if grazed at early stages of growth. Close grazing, however, seems to be harmful if not destructive, and greatly retards its spread.

*C. epigeios* is also grown in a collector's garden at Menomonie, Wisconsin. Here it has been successfully eradicated by treatment with sodium chlorate. Four plants established in a gully in Green County in 1937 have spread from an area of 4 square feet to an area of approximately 400 square feet in the past 3 years.

Seed secured from four sources in Wisconsin has failed to germinate. Whether this failure of germination is due to dormancy, defective embryos, or other factors has not been ascertained. *C. epigeios* may have possibilities for erosion control and for pasturage. However, with its aggressive habits, further research is necessary to determine if its persistence is such as to make it undesirable.—F. V. Burcalow, Department of Agronomy, University of Wisconsin, Madison, Wis.

AN INEXPENSIVE, PRACTICAL NURSERY HARVESTER1

A NEW type of nursery harvester which one man can pull and at the same time actuate the sickle with a hand lever was designed and used successfully at the Southern Great Plains Field Station, Woodward, Oklahoma. With a crew of three men harvesting is accomplished as rapidly as with five men cutting by hand. The machine was constructed in the station shop from available material but could be built elsewhere at an approximate total cost of $16.

The harvesting operation is most efficient when a three-man crew is used. One man walks backward, straddling a row, while pulling the machine with the left hand and operating the sickle lever with the right hand. The sickle is actuated by lateral reciprocal movement of the lever handle in 6-inch to 10-inch strokes. A second man walking beside the machine pushes the uncut grain so that the stalks fall into the cradle or carrier when cut. At the end of the row he picks up the bunch of grain and ties it with twine while holding the bundle between his knees. A third man alternating with the second repeats the operation on the next row. In this manner only 30 to 45 seconds are required to cut and tie a 16-foot row, compared with 2 to

1Contribution from Division of Cereal Crops and Diseases and Division of Dry Land Agriculture, Bureau of Plant Industry, U. S. Dept. of Agriculture.