opportunity for the soil to absorb moisture. Breaking crosswise of a slope, if possible and practicable, will enable the soil to absorb more of the precipitation than breaking done up and down a slope.

CONSERVING MOISTURE.

As is the case in fallowed land and "stubble" land, moisture is lost from the prairie (1) by being pumped out of the ground by plants; (2) by evaporation in the air; and (3) by drainage through coarse textured soils.

The plants on prairie land are the native grasses and shrubs. These use up moisture in just as large quantities as weeds or domestic crops, and in June they generally make their greatest growth, and therefore, in that month use the most moisture. The sooner, then, this growth can be prevented, the greater the amount of water conserved.

Evaporation, or the passing away of soil moisture into the air, can be lessened by cultivating the surface of the breaking so as to form a loose layer of soil two to four inches deep. The sooner this loose layer can be created after breaking, the more moisture will be conserved.

The loss of moisture by drainage through the soil is not large in climates having a low rainfall. Some water is lost in this way on very gravelly soils, but these constitute a very small percentage of our present cultivated land. To improve the retentive capacity of such soils, organic matter must be added either in the form of manure, green crops ploughed under, or by the use of grasses, the extensive surface roots of which add "fibre" to the soil.

THE SOIL-THE PLANT'S "HOME."

After killing the native plants of the prairie and providing a supply of moisture for the crop, it is important that the soil be left in such condition that the requirements of germination and future growth may be easily and abundantly supplied to the seed and the roots of the crop. If the native vegetation has been killed and a large supply of moisture stored and conserved, there will be sufficient available plant food. But in addition, it is necessary (1) that a "seed bed," a loose layer of soil which functions also as a mulch, be provided; (2) that the furrow slice be firmly in contact with the subsoil so that subsoil moisture may not be prevented from rising quickly to the crop; and (3) that the scil be prepared in such a manner that the moisture will be within two to three inches of the surface so that too deep seeding may not be necessary. Most of these conditions will obtair if the operations previously mentioned have been done timely and well.

SOME DESIRABLE PRACTICES.

1. Break early in dry regions.—Land broken the first week in June in 1911 and backset in August of the same year, produced 24 pounds more flax per acre in the first crop and 5 bushels 56 pounds more wheat per acre in the second crop than adjoining land that was broken the third week in June but otherwise similarly cultivated.