It is scarcely necessary to justify the inclusion of a leguminous crop in the rotation which we recommend. The strong radicular system of clover, penetrates the soil deeply, but the chief part it plays is the enriehment of the soil through the fixation of nitrogen by its roots.

We would draw attention to the breaking up of the elover which is a delieate operation, for the roots of the leguminous tend to raise the earth and to uroduce what is called a hollow soil. This disadrantage must be avoided by stre ig ad repeated spring rolling.

A large part of the manure buried with the first crop of the rotation will now be transformed into lumus, and if we take account of the quantity of nitrogen fixed by the root nodules, we pereeive that at the completion of the rotation the returuing tobacco will begin to find ready for it an abundanec of nitrogenous material.

Finally, from the tobaceo point of view alone, an alternate system of eulture is preferable, for this method contributes powcrfully to the destruction of insects injurious to tubaceo and especially of cut worms and flies, in fact for many insects no other means of destruction are available.

Ottaiwa, January, 1909.

