CARE OF THE SEEDLINGS.

Watering.—The beds should always be kept nicely moist after being seeded, unless the damping-off fungus appears. When the seeds are sprouting they are very easily killed by drying, and often on sunny days it will be necessary to water the bed two or three times. To permit the bed to become very dry at any time before the seedlings have covered it with their leaves is exceedingly dangerous. The beds should never be flooded but should be watered with a finely spraying nozzle. Too much water tends to give the plants an unthrifty appearance and makes conditions more favourable for the development of diseases. It is beneficial to have the chill removed from the water in sprinkling the beds.

Sprinkling the glass lightly with whitewash will serve to diffuse the sun's rays and aid in preventing the beds drying out too rapidly when the plants are very small. After the plants have covered the bed this whitewash should be removed, as the shading will have a tendency to make them too tender.

Ventilation.—A change of air is absolutely necessary for the proper development of the plants and as a means of holding diseases in check; therefore, the beds should be ventilated slightly every sunny day, and if the fair days come at too long intervals they should be ventilated a short while about noon on cloudy days. The amount of ventilation should be increased as the plants increase in size and as the weather gets warmer. However, since the temperature most suitable for the development of the plants is from 80 to 90 degrees F., except during the period of germination when it should be kept as close to 80 degrees as possible, the ventilation should be so regulated as to avoid lowering the temperature of the beds much below this for any length of time. On very close, hot days, if there is an insufficiency of ventilation there is danger of all the plants being killed by scalding.

Forcing the plants.—If the young plants have an unthrifty, pale-yellow appearance, or if it is desired to hasten their growth, they may be sprinkled with a solution of nitrate of soda, in the proportion of 2½ pounds of nitrate of soda to 47 gallons of water at the rate of one gallon per eighteen square feet of bed, with good results. However, nitrate of soda should not be used too freely or growth will be forced too rapidly, resulting in weak, spindling, watery plants which will not stand the shock of transplanting well. Generally, when the soil of the bed is fairly fertile, two or three applications at intervals of three days are sufficient. Care must be taken to sprinkle the plants with pure water immediately after applying the nitrate of soda or the sun will cause the latter to burn the plants seriously.

On fairly fertile soil no other fertilizer than the nitrate of soda is required: the potash and phosphoric acid in fertilizers are generally too slow in their action to benefit the plants appreciably.

Keeping the beds well watered is also helpful in forcing the plants.

Hardening.—About a week before transplanting, the seedlings should be hardened off to enable them to stand transplanting satisfactorily. This is accomplished by diminishing the amount of water applied and letting the beds dry out somewhat, removing the glass or canvas during the day, and even leaving it off over night if there is no danger of frost. Care must be exercised not to harden the plants too much or they will become too woody to start rapid growth in the field.

The plant bed should be well watered both before and after drawing the plants.

PREPARATION OF THE SOIL.

Practically no crop gives larger returns for labour expended in properly preparing the seed bed than does tobacco. The land for tobacco should be ploughed as early in the spring as possible and then worked up with the disc and harrows into a finely pulverized condition. After this, the soil should be harrowed after rains in order to