



FIG. 6.—FLAX BREEDING.

A is a plant grown for seed production;
B, for fiber production. Why?

selection of seed. He may select kernels from the best plant of corn in the field, and also from the poorest plant,—having reference not so much to mere incidental size and vigor of the plants that may be due to accidental conditions in the field, as to the apparently constitutional strength and size, number of ears, size of ears, perfectness of ears and kernels, habit of the plant as to suckering, and the like. The seeds may be saved and sown the next year. Every crop can no doubt be very greatly improved by a careful process of selection extending over a series of years. Crops are increased in yield or efficiency in three ways: better general care; enriching the land in which they grow; attention to breeding.

numbers of plants with more or less of the desired qualities; from the best of these, he may again choose; and so on until the race becomes greatly improved (Figs. 5, 6, 7). This process of continuously choosing the most suitable plants is known as **selection**. A somewhat similar process proceeds in wild nature, and it is then known as **natural selection**.

SUGGESTIONS.

—6. Every pupil should undertake at least one simple experiment in se-



FIG. 7.—BREEDING.

A, effect from breeding from smallest grains (after four years), average head; *B*, result from breeding from the plumpest and heaviest grains (after four years), average head.