

An Ideal Ear of Seed Corn.

At the Essex Corn Show, at which Prof. Klinck, of Macdonald College, Que., was judge and principal instructor, the topic chosen by him for his lectures and practical demonstrations was "The Ideal Ear of Dent Corn."

Other important phases of the corn question, such as cultivation, soil improvement, drainage, etc., were merely mentioned, and left for other speakers to deal with. But day after day, to crowds whose interests grew, rather than diminished, he discoursed on the one theme—the most desirable type of ear. It will be seen that the statement made by Prof. Klinck, in his first address, that "Corn can be made an attractive object of study," was abundantly justified.

Before getting right down to an examination of the ear itself, Prof. Klinck gave some valuable hints in regard to the selection and care of seed corn. Three things ought to be kept in mind, he said, in selecting ears for seed: the ear, the stalk, and the surroundings. Too often those that were picked out for seed at husking time, though the finest specimens, were not the most valuable. They had, in most cases, had an extra chance, as, for instance, when they had grown on a stalk that stood alone in a hill. A better plan was to select the best ears of those grown under ordinary conditions. The stalk should be of fair height, and strong enough to support the ear. For the latter purpose, it should be strong at the base and taper slightly, rather than carry its thickness all the way up. The ear should not be too high up on the stalk, for then it would be too late in ripening; nor yet too low down, else there would not be yield enough. There is a close relation between height of ear and time of maturity.

It is not prudent to trust to crib corn for seed. Seed corn should at once be put where it will dry. There should be free circulation of air around each ear. If dried, and kept dry, it will not be injured by frost. It sometimes happens, however, that corn which has been dried properly may afterwards gather moisture sufficient to cause it to be injured during zero weather. It is important not only to dry, but to keep dry. An extra supply should always be stored, so that reselection can be made before planting. Another point: grow corn suitable to the locality. The majority of men are inclined to grow corn that is slightly too large and late.

REGULAR ROWS OF KERNELS.

The rows on an ear of corn should be regular. There should not be an extra number at the butt, nor a few rows dropped towards the tip. This is not a fancy point, merely. Regular rows mean more corn. The kernels should be fairly uniform throughout. The kernels towards the tip are always smaller than the others, and show less dent, and those near the butt are also less dented, but are thicker and heavier than the average, but an accentuation of these differences is to be avoided.

SHAPE OF EAR.

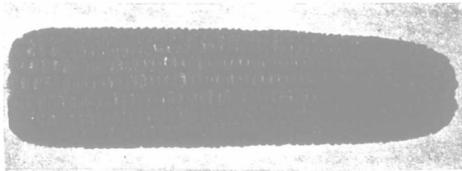
The most important part of the ear is the central portion. That is where most of the grain is found, and it should be full and strong. Shapes to avoid are the cylindrical—those of the same thickness from butt to tip—allowable in flint corn, but not in dent; the too-tapering—in these the yield is diminished—and those with enlarged butts. The ideal ear is strong in the center, tapers slightly towards tip for about three inches, has full, rounded butt, and full tip. Too exclusive attention in selecting seed ears to having butts and tips well covered, without due regard, also, for proper length of ear, will result, has resulted in known cases, in unduly shortening the ear.

LENGTH AND CIRCUMFERENCE.

The best length for an ear of dent corn is from 7½ to 9½ inches, and the circumference, measured at one-third the distance from butt to tip, 5½ to 7½ inches. In dent corn there is a certain ratio between circumference and length which is best; circumference should be three-quarters of length.

INDENTATION.

A fair measure of indentation is desirable. A mere circular dimple indicates too short a kernel, while those that are extra pinched are too late in maturing. Exceptions there are, but the rule is that the date of ripening can be judged fairly accurately from the depth of the dent. The length of the kernel can also be judged from the denting. The deeper the dent, the longer the kernel, as a rule.



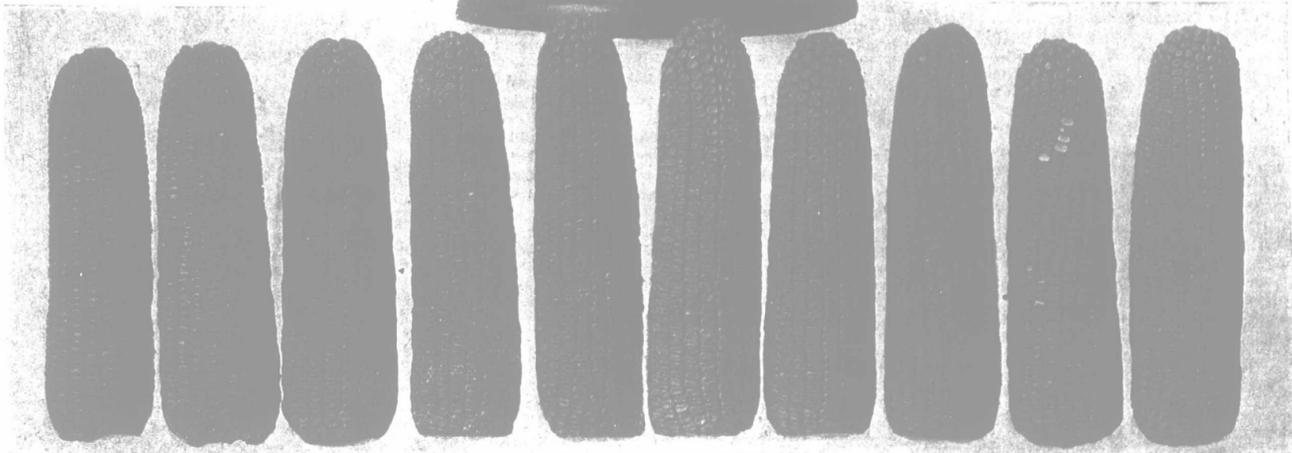
Champion Ear of Dent Corn.

SHAPE OF KERNEL.

Prof. Klinck's words, in describing the best-shaped kernels were that they should be of broadly-rounded, wedge shape. Such were best for either seed or feed. The very wide, with much-rounded edges, were to be avoided, and, on the other hand, those of the shoe-peg type were also undesirable. The sides of the kernels should be slightly rounded, with width carried well up to a square shoulder, the point plump. The germ is towards the point, and is the part of the grain richest in oil. It will usually be found that a kernel which appears pointed when looked at from the side, appears pointed when viewed edgewise, also. Such grain is low in feeding value and weak in germ. The germ should run well up towards the upper end of kernel, and should be thick through.

VITALITY OR SEED CONDITION.

Some corn, on being shelled, shows a black



Champion Ten Ears of Dent Corn, Ontario Corn-growers' Exhibition, Essex, 1910.

spot over the lower end of germ, and some people, said Prof. Klinck, think that such grain has been injured, and will not grow. Such is not the case. All corn has this dark covering over the lower end of the germ, but normally, it is covered with a tip cap, a sort of hull. When the black spot shows, it simply means that the tip cap has adhered to the cob in shelling. This is an objection, however, as it indicates immaturity. When planted in cold, backward seasons, such seed would be more liable to rot, as the tip covering being removed, the moisture would too readily enter the germ, and cause it to swell before growth started. In ordinary seasons, scarcely any difference would be noticed. As anyone may observe, on examination, the germ is on only one side of the kernel; the other side is called the back. Blistered germs, unless caused by rapid drying, and blistered backs, are the strongest evidences of impaired vitality. There are other signs by which impaired vitality may be detected, but the germination test is the only absolutely reliable one. In testing seed corn, always leave it until the upward sprout comes strong. The root sprout, which appears first, may seem to be all right, while the other may be weak or fail to grow. When germination test is made by laying grain on surface of damp sand, to be afterwards covered with a damp cloth, it is well always to lay all kernels with the point towards you, and the germ side up. On removing the cloth, the condition as to germination can then be seen at a glance.

Our illustration of the sweepstakes ear at the Essex Corn Show, and of the sweepstakes ten ears, will probably convey to most readers a clearer conception of Prof. Klinck's ideal dent-corn ear than all the paragraphs that might be written.

Study Local Conditions.

We hear a good deal at present, said the President of the Ontario Corn-growers' Association, in his opening address at the Convention, in Essex, about the great development of Ontario, but by that expression is usually meant commercial development. That is all right; it is necessary. But of far more importance than that is the development of the people, the raising of the standard of intelligence and knowledge generally.

He had heard that in Texas peanuts were grown so that they might be plowed under as a manure for corn. In the State of Connecticut it had long been a practice to manure for corn with fish. We can't grow peanuts, and we have not the fish for manure, but we can learn from these people to study local conditions, and make the best use of what we have.

Essex County suffers from an excess of moisture. We are to have Prof. Day to talk to us on the benefits of underdraining. There is no subject more important to us. Land that is now reckoned the very poorest would be the most valuable if drained. In some cases it would be quadrupled in value. Below the surface soil there is a great reserve of fertility in our rich clays that we have not yet drawn upon.

On February 15th, a month's course in agriculture was started at Collingwood by the agricultural specialist, I. F. Metcalfe. Mr. Brown, the principal, and most of the members of the school board, were present at the opening exercises, and gave addresses that were both interesting and instructive. There was a good attendance of students at the start, which augurs well for the success of the course. More students are still coming in.