

Comment by the Editor

SCIENCE VERSUS CHANCE

Maize, Indian corn, or just plain corn has been grown on the American continents for centuries. And for these hundreds of years men (and women) have planted the precious kernels and waited hopefully and fearfully for the tiny green shoots to appear. Primitive people generally assumed that the fertility of seed could be determined before planting only by means of magic spells and incantations. Banquo, speaking to the witches in *Macbeth*, based his metaphor on this idea when he said:

If you can look into the seeds of time,
And say which grains will grow and which will not,
Speak then to me, who neither beg nor fear
Your favours nor your hate.

It was not that food crops were unimportant; starvation has always presented a constant threat to large numbers of the people of the world. But, in spite of this, agricultural problems were, for centuries, given little thought. Jonathan Swift represented the king of Brobdingnan as disdainful of books on statecraft, adding: "And he gave it

for his opinion, that whoever could make two ears of corn or two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country than the whole race of politicians put together." But, Swift commented ironically, the "learning of this people is very defective".

It is an interesting sidelight on the working of men's minds on every-day problems, that this passive attitude changed very little until the close of the twentieth century. To be sure, the Iowa farmer did not believe in evil spirits, nor did he feel that the failure of his seed corn to grow was a punishment for his sins; it was fate, bad luck, or bad handling of the ears intended for seed.

Experience taught him that seed corn should mature well and be stored in a cool but not too cold place. During the long winters many a spare room was decorated with rows of ears of corn, to provide seed for the spring sowing. But farmers still ran the chance of planting poor seed.

After long years, experience was supplemented by science in action on the home front. The wonder is that procedure so simple did not occur to farmers long before 1900. Why did not some farmer, laboriously following the rows to replant missing hills of corn, or taking time sadly needed

for other work to replant an entire field, say to himself, "Next year, I shall find out beforehand whether the seed corn is any good".

Perhaps some farmers did have this idea; perhaps some devised methods of testing their seed corn. Farming, in the old days, was, however, a very isolated way of life and knowledge was not always passed on. It took three seasons of a seed-corn special train visiting Iowa towns to popularize the idea that the farmer could know and not merely hope that his corn would grow, to substitute science for chance.

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