In these articles I have debated whether I should use the work "kernel" or "seed" for the threshing machines output. I was afraid that a lot of younger readers would rightly claim that a kernel is a computer program that manages input/output requests from software and translates them into data processing instructions for the central processing unit and other electronic components of the computer. I haven't heard anything from them so I guess we can still claim that a kernel can be threshing machine output as well as the computer program that manages the data output requests.

I also must have grown up with older people that still had quite a bit more of the Norwegian brogue. I always thought we had a swatter and a trashing machine. I found out later that it was a swather and that the combines had replaced the threshing machine.

Some people have wondered how the name "combine" came about. I'll try to list a few of the things it combines. The first step in harvesting was done with a scythe for many years and is usually called cutting. Later cradles were added to gather the grain behind the scythe and put it into windrows or swaths. Once the cutting process gathered the crop, it was usually called reaping. The crop would then be bound into sheaves. The early sheaves would be a bundle of wheat that could be easily carried and it would be tied with another stalk of wheat. Twine was used much later. These sheaves were then put into shocks. One definition is a spring wheat shock was made of 12 sheaves whereas a winter wheat shock contained 18 sheaves. I doubt if it was ever that precise.

The invention of the reaper is usually attributed to Cyrus McCormick. He acknowledges borrowing many ideas from friends, neighbors and many farmers who were tinkering with different versions of it on their farms. The most important invention that made the reaper workable was the reciprocating sickle bar that would go back and forth between guards spaced several inches apart and cut the grain. The first reapers had a man walking alongside that would rake the cut grain from the platform and into swaths. Later a reel was invented to help move the cut grain to the platform and a rotating canvas on the platform was invented to move the grain to one side.

The binder was invented very shortly after the reaper. It was a mechanical process that moved the grain to one side and formed it into a shock. Later versions of the binder would tie the twine around the shock.

After the shocks dried a few days they were put into a wagon and taken to the threshing machine. The old threshing machine was a sort of combine by itself because it would thresh, winnow and clean the grain. Anyway today's combine will combine the operations of cutting, reaping, gathering, shocking, binding, threshing, winnowing and cleaning.