

The mechanical history of the binder may be summed up briefly as follows:

Seven
Stages
of Growth

1. The primitive sickle.
2. The cradle utilizing a scythe blade.
3. The knife bar in sections with table attached and men behind with rakes, supersedes the cradle.
4. A reel to knock down the grain is added to the cutting-bar and table. Men still rake and bind by hand; the driver rides one horse.
5. Hand rakes and reel are both abolished by the automatic self-rake reaper; the driver now leaves the horse and rides the machine.

6. The reel comes back in the "Marsh" harvester, this time with elevator carriers that bring the grain in contact with the "hand-binder" on a second platform.

7. The hand-binder is replaced by the mechanical knotter; first as an attempt to bind with wire (which proved disastrous to threshing machines and to cattle feeding at the straw stacks); later and finally by twine.

These are the seven ages of the harvester. The last two belong to the 'sixties and the 'seventies, although the use of twine came a decade later.

Even after the invention of the knotter, the binder still required the introduction of the sheaf-carrier by means of which the sheaves, instead of being dropped

The
Sheaf-
Carrier

