In New York State, the law requires that ballots have tear-off stubs with printed consecutive numbers (see NYS 2006 Election Law Section 7-106, Paper ballots; form of). These stubs are used for several purposes, one of them is to defeat "chain voting", a type of attack commonly used in the old days of party bosses and powerful political machines. Indeed, one of the reasons why lever machines were employed decades ago was to prevent this type of fraud with paper ballots. But over time, methods have been developed to defeat chain voting attacks on paper ballot systems. I describe how the tear off stubs defeats chain voting schemes below.

As is the case with any voting technology protecting against various forms of vote fraud requires well defined and well executed voting procedures. This is equally true of DREs, paper ballot systems, and lever machines. And that requires poll workers who are well trained in those procedures. But if you compare the procedures required to secure the use of paper ballots at a polling place to the comparable procedures needed to secure the use of SmartCards and DREs most poll workers are going to have any easier time enforcing the procedures for the paper-based systems.

**Chain voting**
A type of vote fraud known as "chain voting" was once prevalent with paper-based voting systems. Under a chain voting scheme, the "boss man" buys blank ballots from corrupted voters either with cash, or in some instances, with alcoholic beverages. In this scheme, the first corrupted voter is paid to go into the polling place and obtain a blank ballot. But instead of marking and casting that ballot, this voter sneaks that blank ballot out of the polling place and gives it to the boss man in exchange for payment. After that voter has departed the scene, the boss man then marks the blank ballot to his liking, and gives it to the next corrupted voter. That corrupted voter is instructed to go into the polling place, obtain a blank ballot, but hide it in his/her pocket. That voter then deposits into the ballot box the ballot that was pre-marked by the boss man. That voter then sneaks his/her blank ballot out of the polling place, gives it to the boss man, and receives his/her payment. From that point on, the cycle continues with as many corrupted voters as the boss man can entice. In some jurisdictions where such frauds were rampant, the boss man operated out of a large truck loaded with bottles of booze which was parked down the street from the polling place. This was particularly effective during prohibition.

**How Chain Voting Can be Prevented Using Ballot Stubs**
Chain voting can be easily defeated by using the serial numbers on the tear-off stubs. (Note: to preserve ballot secrecy the serial number is printed only on the removable stub, not on the ballot itself, and the stub is always removed before the ballot is cast or spoiled.) After the voter signs in the poll book the poll worker hands the voter a paper ballot and records in the poll book the serial number from the ballot stub. After the voter marks his or her ballot the ballot is handed back to the poll worker inside a privacy envelope or sleeve. The ballot stub with the serial number sticks out of the top of the privacy sleeve. The poll worker checks that the serial number on the ballot stub matches the serial number recorded in the poll book for that voter. If the serial numbers match the poll worker tears off the stub, hands the stub back to the voter, and deposits the ballot into the ballot box (or the scanner).

If the voter turns back in a ballot with a serial number different than the one that they were issued then the poll worker knows that a chain voting scheme is afoot and the bogus ballot (the one marked by the boss man) is marked as spoiled and put into the spoiled ballot pile. Depending on the jurisdiction, that voter is either arrested or admonished, given a blank ballot, and then watched carefully to make sure that they don't try to sneak out with it unmarked and un-cast. If they do, then one can follow them to the truck full of booze and bust the "boss man".

In jurisdictions where such procedures are enforced, it is important to make sure that poll workers properly update the serial numbers recorded in the poll book when a voter accidentally spoils a ballot and is issued a replacement ballot.