LE ROY PENNYSAVER & NEWS - MAY 15, 2016 **Tile Drain**

by Lynne Belluscio

The little pink flags in the field east of my house indicated where the ditcher would be digging trenches for the perforated plastic drain tile. When completed, the field would drain west toward a ditch. The exact location and pitch of the tile is critical in order to completely drain the field. It should alleviate the sitting water in the spring and make it easier to get into the field in soggy weather.

After the tile is put in the trench, everything is covered up and the field can be plowed and planted. The importance of proper drainage is understood by farmers, but most people haven't a clue about drain tiles.

Many years ago, when I was researching the history of agricultural fairs for developing the Ag Fair at Genesee Country Museum, I came across the story of drain tiles and John Johnson of Geneva and I met a most remarkable man. Marion "Mike" Weaver.

In 1964 Mike wrote a book: the "History of Drain Tile" and luckily I have a copy. Mike also had a large collection of drain tiles. I remember asking Mike to bring some of his tiles for an exhibit during one of the early ag fairs at Genesee Country. He pulled up in a an old station wagon, that was filled with heavy tiles, and the springs were about flattened out. There were few people who appreciated what they saw that year and several years later Mike donated his entire collection to the Geneva Historical Society.

The collection is now part of the John Johnson Farm adjacent to historic Rose Hill Mansion. This is where, in 1838, the first fields were trenched and tiled in the United States. John Johnson was from Scotland where tiles were used to drain fields. On his farm in Geneva, he dug 72 miles of drainage ditches and laid clay tile on 320 acres. According to his records he was able to increase his wheat vield from 12 bushels an acre to 60 bushels. John Johnson



Figure 85 M. M. Weaver Tile Collection

is known as the "father of tile were shipped in from Europe. drainage in America."

Farmers knew the importance of drawing water away from fields. Both Cato in 200 BC and Pliny in the first century AD, described drainage systems. Sometimes the trenches were filled with rocks and covered with larger rocks. There were all different shapes of drain tiles. The important story in Western New York is tied in with the Erie Canal.

Pottery and potters, such as nearby Morganville, were manufacturing redware pottery because that was the type of clay that could be found locally. Redware glazes were filled with lead and redware was fired at a low temperature and was soft. Once the Erie Canal opened, potters were able to ship clay in from the Midwest and could fire grey stoneware which was harder and not as porous. This put the redware potters out of business, but with the introduction of drain tiles, many redware potters switched to drain tile production. (It is believed that the pottery in Morganville made drain tile.) Special tile making machines



At the 1862 meeting of the New York State Agricultural Society there was a lot of discussion about tile drainage. Mr. Brooks of Wyoming County didn't have much good to say about drainage tiles. He said that the investment per acre could never be justified. He declared that draining was the "stupid burying of crockery." However, Mr. Peters of Genesee County stated that he believed that a system of drainage would increase state production by a third. He noted that water stood in post holes up to mid summer. He also noted that in undrained fields. it seemed that the frost would kill crops earlier in the fall.

L.H.Bailey, Dean of Agriculture at Cornell University wrote a poem:

Tile Drain Far under the ground As men pass by Unseen and alone I silently lie When the plow team tramps On the full crunching earth I feel the hard thrust Of the first harvest birth: But the plow man thinks not That I lie down below And tireless prepare For the harvest to grow. Calm and content I secretly lie And carry my work As men pass by,

