

Both depth and width of the new-style plow are adjustable "on the go".

**"FIRST NEW CONCEPT IN GROUND PREPARATION SINCE STEEL PLOW"**

## Erosion Control Plow First Of Its Kind

You've never seen anything like it — a revolutionary Erosion Control Plow from M & W Gear, Gibson City, Ill., that, according to Elmo Meiners, chairman of the board, is "the first completely new concept in ground preparation since the invention of the steel plow."

It can best be described as a coverboard plow with every other bottom removed and a subsoil shank added behind each of the remaining bottoms," Meiners told FARM SHOW. "The modified coverboards are designed to turn over just enough soil to cover unplowed ground between the bottoms. Subsoil shanks then break up the soil under each of the shallow furrows."

Both depth and width are adjustable "on the go". On hillsides, for example, the operator can set depth lower, and furrow width narrower, for more runoff prevention. In low land, he can set the depth shallower and the furrow wider to trap less moisture. "The unplowed portions of the ground will hold your soil in place while the deep trenches of shattered subsoil channel moisture to root level. We think its erosion control features alone will make this plow a valuable investment," says Meiners.

Two prototypes have been developed by M & W Gear: One is a 3-shank model, which is equivalent to a 5-bottom plow with 2 of the bottoms removed, and the other a 5-shank model, equivalent to a 7-bottom plow with 3 of the bottoms removed. Both prototypes have been used extensively on Illinois farms this fall and will be further tested in the field next spring, both by farmers and University of Illinois researchers, according to Meiners.

M & W Gear has applied for a patent on the new Erosion Control Plow which is designed to do three jobs: (1)

Control soil erosion by wind and water; (2) thoroughly mix fertilizers with the soil; and (3) improve herbicide effectiveness, thereby reducing the amount needed per acre.

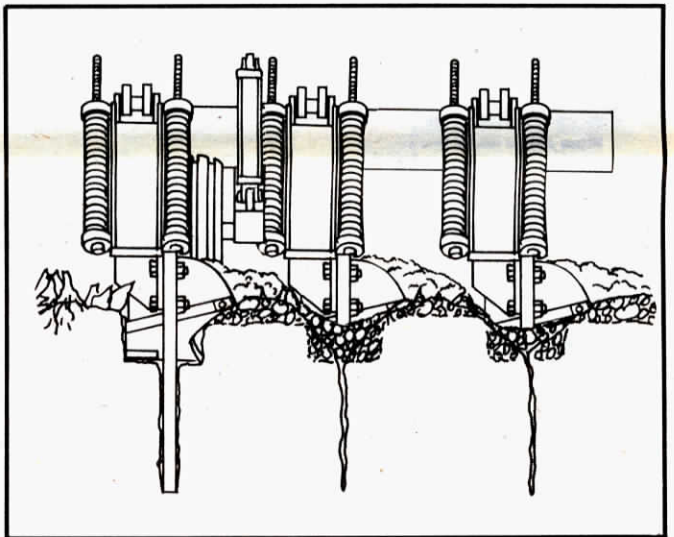
Here, according to Meiners, is how the plow accomplishes each job:

**1. Erosion control** — "It controls water erosion by leaving a trench to catch and hold the water until it can seep deep into the ground where subsoil shanks have loosened the soil. The crop starts out with a deep reserve of moisture. Wind erosion is controlled because, although cornstalks are covered to promote decomposition, the stalks remain near the surface to hold soil in place. An ordinary moldboard plow, on the other hand, leaves much of the dirt unanchored and free to blow away. And, an ordinary chisel plow, or subsoil plow, prevents wind erosion but leaves many stalks uncovered — natural fertilizer available in the stalks is not used to the fullest."

**2. Fertilizer effectiveness** — "As water drains into ground broken up by the subsoil shanks, fertilizer is carried 16 to 18 in. deep to root level where it is needed most during drier summer months."

**3. Herbicide effectiveness** — "The new plow mixes herbicides with the soil to improve their effectiveness. Normally, herbicides are absorbed by cornstalks left on top of the ground, preventing herbicides from contacting the soil. Our new plow completely covers the stalks and digs deep into the subsoil. Herbicides are thoroughly worked into the soil where weeds take root. Also, because all of the herbicide is used effectively, less herbicide is needed to do the job," Meiners points out.

For more details, contact: FARM SHOW Followup, M & W Gear, Route 47 South, Gibson City Ill. 60936 (ph 217 784-4261).



Compared to a conventional moldboard plow, every other bottom has been removed and a subsoil shank added behind each remaining bottom. Modified coverboards turn over just enough soil to cover the unplowed ground between the bottoms. Subsoil shanks then break up the soil under each of the shallow furrows.

