

# Articulated Combine Is "Design Of The Future"

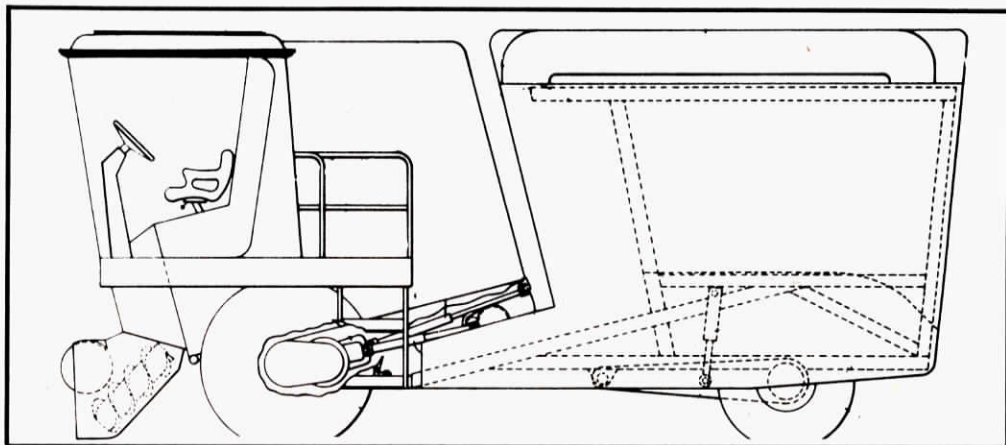
By Mark Newhall  
Managing Editor

It's not on the market or even close to it but Deere & Co. now owns the patent to what is probably the first articulated combine ever — a long, low machine that will let combines increase their size and capacity without becoming so large they're impossible to handle or transport down country roads.

The revolutionary combine, invented and patented by Franz W. Riedinger, Einod, West Germany, pivots in the center and has two wheels front and back. The header, rotary separators, engine and cab are mounted up front, and the grain cleaners and grain tank at the rear. The combine steers by pivoting on the vertical axis between the two units and is self-leveling on slopes.

According to patent documents, the inventor feels the articulated concept, which is similar to that of several big new tractors brought on the market the past few years, will allow combine to continue to expand in size while being able to transport them down roads without dismantling.

The articulated design will allow them to be long and low, as opposed to conventional combines which —



Deere & Co. bought the patent for this new articulated combine, which is designed to allow combines to get bigger without getting higher and wider.

with cleaning mechanisms located in the lower part of the machine, and the cab, engine and grain tank on top — tend to be top heavy.

Another limitation of current combines, the inventor points out, is size of the grain tank. For example, even among the highest capacity machines currently on the market, a 200 bu. grain tank is considered large. Yet, when the combine is operating in high yielding crops, such as 200 bu. corn, the machine must be stopped at

frequent intervals to unload the grain tank. Another limitation with conventional combines has been their sensitivity to slopes.

Documents say the new articulated design solves the limited-size grain tank problem, and that the new-style machine will ride better because the rear unit flexes independent of the forward unit so that all four wheels maintain good ground contact even in rough terrain. In addition, the rear unit of the articulated

combine self-levels while the front unit follows contour of the ground so that the cleaning mechanism, mounted at the rear, isn't adversely affected by sidehill slope.

Another key feature of "the combine of the future" is the means for transferring separated grain from the front unit across the pivot axis to the rear unit.

We'll keep you posted in future issues of FARM SHOW on any new developments.

## 108 FT. WIDE WITH THE ROW MARKER DOWN

# New "24-Row Wide" Is, World's Largest Planter

"Your readers would hate to miss this," says Richard Rupiper, White dealer and FARM SHOW subscriber in Henry, Ill., who arranged to build what's being called "the world's largest planter" for a customer, Bachman Enterprises of Putnam, Ill.

The big machine is a 24-row, with 36 in. spacing between rows. It's outfitted with White 5100 Seed boss planter units on a bar custom-built by Shoup Manufacturing Co., of Bonfield, Ill. In planting position, with one marker down, the machine is right at 108 ft. wide. Fully equipped with liquid starter, insecticide, and no-till coulters, the entire unit weighs about 34,000 lbs.

"Other than a couple oil leaks, we had no problems at all with the planter last spring. We pulled it through the field at 6.1 mph under both minimum till and no-till conditions," says Rupiper. "Depth control and spacing of the seed was excellent and the crop looked great this fall. And, for such a large piece of equipment, the machine handled very nimbly."

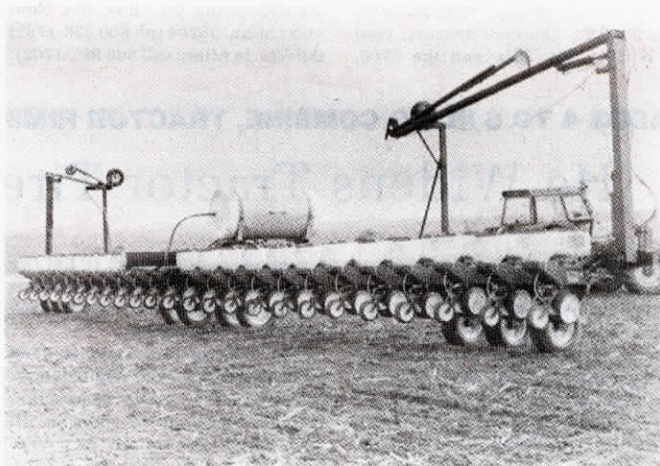
Rupiper says Bachman, the farmer he had the planter built for, had used

a 12-row wide planter in the past. Since he couldn't go to an 18-row wide planter because of his 12-row cultivators and other field equipment, he decided to go for 24 rows.

"We approached several manufacturers before we found one willing to build this for us," recalls Rupiper. "There have been other 24-row narrow planters but, to our knowledge, this is the first 24-row unit with 36 in. spacing."

The planter's tongue is 8 by 12 in. double-walled tubing and the wings 7 in. square tubing, Rupiper says the White row units were ideal for the planter because the company's no-till coulters fasten right to the frame, rather than to the planter units themselves, so that the weight of the frame is applied directly to coulters slicing through trash. At 6.1 mph, the 72 ft. wide planter covers 40 to 50 acres per hour.

Rupiper, who is also a Deutz dealer, says a 140 hp. Deutz 4-wheel drive was used to pull the planter. "One of the most amazing things for observers was that the DX140 handled it so well. Many people said we'd need at least 250 hp., primarily



One-of-a-kind 72-ft. wide planter, outfitted with no-till coulters travels at 6.1 mph planting through sod.

because of the heavy 10,000 lb. tongue weight of the planter. However, the Deutz has the capacity to handle up to 14,000 lbs. It's built in Europe where they use a lot of heavy 3 pt. equipment."

The planter transports at just 13 ft., 2 in. wide and unfolds for planting in just two minutes.

Rupiper says he's ready to supply the king-size planter to other farmers but that he doesn't anticipate many orders. List price for the complete planter is right at \$70,000.

For more information, contact: FARM SHOW Followup, Rupiper

Equipment, Hwy. 29 South, Henry, Ill. 61573 (ph 309 364-2359).

(EDITOR'S NOTE: In its very first issue (Jan./Feb. 1976) FARM SHOW featured a 36 row planter (20 in. spacing) with a rear-folding toolbar and equipped with Deere Max-Emerge Units. The toolbar, built by Kinze Mfg., of Williamsburg, Iowa, was purchased by Lawrence Hamilton, of Hampton, Iowa. It folded to 14 ft. for transport. Hamilton equipped it with 36 planter units for soybeans (20 in. spacing) and 24 units (30 in. spacing) for corn.)