

Each section of 6 to 8 blades is equipped with two large coil springs.

#### **FEATURES 12 IN. OF BLADE DEFLECTION**

# Spring-Loaded Disk's Virtually Rock Proof

"It's virtually rock proof — the first and only one of its kind on the market," says Harley Brandner of the revolutionary spring-loaded disk he coinvented with Jim Bettenhausen.

The partners, who have been manufacturing standard disks since 1977 at their Wishek Steel Mfg. Co. plant, Wishek, N. Dak., have been issued a patent on their spring-loaded design which provides up to 12 in. of deflection when a blade strikes a rock or other solid object.

Each section, consisting of six to eight blades, is equipped with two large coil springs (6 in. in dia. and 16 in. long) which provide 2200 lbs. per inch of compression. Individual blades automatically spring back into regular position after striking a rock. Individual gangs have three different ground pressure settings (accomplished by a single bolt), allowing for varying types of soil and conditions.

The new-style disk is equipped

with 24 in. dia. notched or plain Ingersoll blades (5/16 in. thick on front gangs; ¼ in. thick on rear gangs). Mounted 10 in. apart on 2 in. dia. gang shaft, they run on heavy-duty, triple sealed regreasable bearings.

Spring-loaded tandem disks are available in seven models ranging from 10 to 34 ft. wide. The 34 ft. model folds to 15 ft. for transport. Spring-loaded offset models are available in six sizes ranging from 12 to 24 ft. wide.

Retail cost of a 24 ft. wide springloaded tandem is right at \$22,750. The same size Wishek disk, without the spring-loaded feature, retails for \$19,200. Weight averages right at 833 lbs. per ft., and approximately 250 lbs. per blade.

For more information, contact: FARM SHOW Followup, Wishek Steel and Mfg. Co., P.O. Box 185, Wishek, N. Dak. 58495 (ph 701 452-2449).



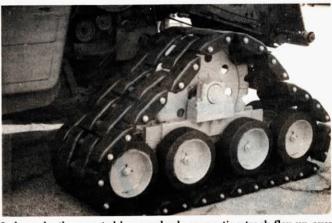
Bale hauler has two spikes on either side and one at rear (not visible in photo).

### 5-Spike Bale Hauler Loads And Unloads Itself

You've never seen a bale hauler like this new 5-spike bale hauler from England that has a loading arm for each bale.

The unit fits any flatbed wagon or wagon gear at least 48 in. wide. It can be extended to handle more bales and can be easily removed from the trailer or wagon gear by simply jacking it up off the trailer using the bale loading arms.

The unique bale hauler has a spike on each of two bale arms on each side and one at the rear. The operator first



Independently-mounted bogey wheels supporting track flex up over obstacles.

#### TRACKS BOLT ON LIKE A SPARE TIRE

## "Go-Anywhere" Traction System

If you've been looking for extra add-on traction for your combine or tractor you'll want to look at Martintraction, a rubber-coated track system that bolts onto tractors, combines and trucks like a spare tire.

FARM SHOW first reported on Martintraction tracks over six years ago soon after they were developed in Canada. After the Canadian firm was disbanded, manufacturing rights were picked up by a Florida firm which has been testing and developing the tracks for the past three years. They've just begun production at their new plant in Albany, Ga., and are shipping tracks to farmers.

Martintraction uses steel-reinforced rubber modules in place of the steel grousers found on most tracks. With adapter plates they'll fit virtually any vehicle, such as combines, tractors, snowblowers, trucks, fertilizer spreaders, and so on. The track assembly simply slips onto the axle and can be removed at any time and the wheel re-installed.

The tracks are driven by a large central gear and supported by eight rubber-coated bogey wheels. "The combination of the rubber track and rubber bogey wheels makes for a super quiet ride with less vibration and more stability," says Hank Ash, president of Martintraction of America, Inc., the manufacturer. He notes that unlike steel tracks, Martin tracks can be driven down the road with a ride as good or better than conventional wheels, traveling at speeds up to 40 mph. "They'll support up to a 20-ton machine and reduce compaction by at least 80%."

Each rubber cleat in the track is 6 in. wide and there are four rows of modules. The track is self-cleaning, with modules staggered to overlap at articulation points. During testing at research centers around the country, including the National Tillage Laboratory in Auburn, Alabama, the tracks have been shown to have better traction then steel tracks under all conditions except in very hard ground, where the ability of steel grousers to dig in seems to help.

"The tracks grip more like a tire, with the gaps between the modules acting like tire tread. They're not so aggressive as grousers, which tend to chew up the ground, particularly in very wet, soft ground," says Ash.

"Ash also points out that the track has a flexible frame that'll flex up over obstacles while leaving the majority of the track on the ground. If you run over a 6-in. dia. rock, for example, the track flexes as the rock passes underneath, while the rest of the track remains on the ground.

Each track assembly weighs 2,600 lbs. and measures 65 in. long and 27 in. wide. Ash says the tracks use standard parts throughout, including the Timken roller bearings and bogey wheels, making it field serviceable with parts available from most farm implement dealers.

A pair of Martintraction tracks sells for \$11,665.

For more information, contact: FARM SHOW Followup, Martintraction of America, Inc., 1701 North Congress St., New Port Richey, Fla. 33552 (ph 813 845-0466).

loads the rear spike by lowering it and backing into a bale. Then he loads the rear spike on either side before loading the front spikes. As each bale is impaled on the spike, the arm is raised by remote hydraulic controls.

Bale spikes can also be used as booms to handle miscellaneous equipment and to haul rolls of drainage tile.

The hauler will handle 5 1,500-lb. bales and sells for \$3,700.

For more information, contact: FARM SHOW Followup, Sales Engineering Co., Drawer 838, Waycross, Ga. 31502 (ph 912 285-1061).