

## "BETTER MOUSETRAPS"

# Newly-Patented Inventions

A collection of just-patented, eye-catching new inventions from U.S. Patent Office records. Some of these products are already on the market. Others are still just ideas on

### Automatic Pet

#### Food Dispenser

New automatic pet food dispenser feeds pets for up to several weeks when you're away, or simply takes care of the chore day to day. All you have to do is fill a bulk bin in the top of the feeder, and keep the water supply full. Timed auger, and water valves, feed into bowls positioned alongside feeder. Contact: FARM SHOW Followup, Robert Pitchford, Jr., 1418 W. 134th St., Compton, Calif. 90222.

### Heat Recirculator

#### For Drying Bins

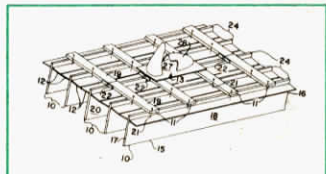
"It saves 50% of the cost of bin drying," says Max Good about his "Retriever" heat recirculating system that recycles drying heat in grain bins that would otherwise be lost. Good's retriever mounts at the top of bins. Heated air that exits the



bin runs up through 750 12-ft. long aluminum tubes. Ductwork pulls fresh air in around these tubes, capturing heat from the tubes and re-entering the bin through the dryer fan. The new system's being evaluated by ag engineers at the University of Illinois. Contact: FARM SHOW Followup, Max Good, 5633 N. 17th St., Phoenix, Ariz. 86016 (ph 602 274-8054).

### Water "Shoes"

"They're about 2 ft. across and let you walk across any body of water," says inventor Henry Braun, Calgary, Alberta. His prototypes were made primarily out of plywood. He says they



fold up to make them easy to carry on land. A deal with a manufacturer "is in the works", he says. Contact: FARM SHOW Followup, Henry D. Braun, 2421 84 Ave. S.E., Calgary, Alberta, Canada (ph 403 279-4343).

### Powered Crescent Wrench

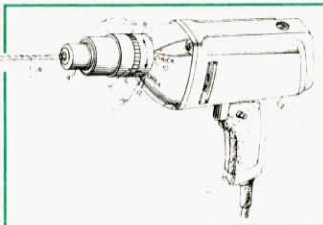
A small electric motor opens and closes the jaws of this electric powered wrench. A thumb lever controls it. Contact: FARM SHOW Followup, John A. Picone, 195 Quebec Rd., Island Park, N.Y. 11558.

### Anti-Thumb Sucker

"Thumb-sucking is a much more serious problem than many people realize. If it goes on too long, kids can cause permanent damage to their mouths, shifting their teeth out of position. I've seen other kids who've scraped the skin on their thumbs right down to the bone," says Charles Leverette, Woodstock, Ga. He says he's got the only device guaranteed to put an end to the childhood practice. His hard-plastic, adjustable thumb "splint" fits tightly over the thumb, fastening in such a way as to make it impossible for the child to remove. Leverette plans to put the device on the market as soon as he obtains FDA approval. Contact: FARM SHOW Followup, Charles R. Leverette, 130 Misty Hollow Way, Woodstock, Ga. 30188 (ph 404 928-0275).

### Keyless Drill Chuck

"You can change six drill bits with my drill in the time it takes to change one bit with an old-style drill," says Wayne Hartley, who invented a new keyless tool chuck that self-tightens on bits. To open and close the chuck for bit, you simply turn a special ring to "Chuck" and run the drill in



forward or reverse to put a bit in or take it out. To drill, you turn the ring to "Drill" and the bit will be locked in place. The keyless chuck works only on a reversible drill. Hartley is negotiating with Makita and also with Milwaukee Tools for manufacturing rights. Contact: FARM SHOW Followup, Wayne Hartley, 1429 Mosstree Rd., North Charleston, S. C. 29406 (ph 803 554-7949).

### Boot Generates

#### It's Own Heat

Every time you take a step, this new boot generates a little bit of electricity. "There's a small, 1/4-in. thick 'pancake' generator inside the heel. It makes enough electricity to heat the boot as well as the pants and jacket, if they're wired for heat," says inventor Nikola Lakic, Palm Desert, Calif. Lakic got the idea from using heated socks and boots that require batteries for power. He says batteries are always at their weakest when it's cold and they're needed the most. The generator inside his boot lasts up to 2,000 hrs. can be replaced for \$5 or \$6. He's looking for a manufacturer. Contact: FARM SHOW Followup, Nikola Lakic, 73-355 Guadalupe Ave. #M, Palm Desert, Calif. 92260 (ph 619 346-5129).

### Guitar Playing Device

If you've ever tried to play guitar, you know how frustrating it can be to get your fingers to find the right chords. An inventor who had the same problem has come up with an automatic chord playing device that fits the neck of any guitar and



plays chords by pushing just one button. "I always wanted to play the guitar. This made it possible," says Marv Glemming, noting that the chording device plays eight different chords covering "80 to 85% of music available". His device sells for \$39.95. Contact: FARM SHOW Followup, Glemming Enterprises, 4900 Yorktown Lane, Plymouth, Minn. 55442 (ph 612-559-2157).



Patent applications have been submitted for more than 40 components of the all-new Case/IH 7100 Series 2-WD tractors.

## "FIRST TOTALLY NEW TRACTOR IN 30 YEARS"

# New Case/IH Tractor Is "Ready To Roll"

"It's the first completely new tractor in nearly 30 years," says Glenn Kahle, Case/IH vice president of engineering about the company's "new from the ground up" 2-WD Magnum tractor that'll start showing up on dealer show floors in November.

The Magnum tractors, which range from 130 to 195 hp., are the first to be designed by the company since the merger between Case and International Harvester 2 1/2 years ago. They're fitted with an all new engine, transmission, electronic 3-pt. hitch, and cab. "Over 95% of the 3,000 parts in this tractor are totally new. We've applied for patents on more than 40 of the components," Kahle told FARM SHOW.

The Magnum line includes the 7110 (130 hp.), the 7120 (150 hp.), the 7130 (170 hp.), and the 7140 (195 hp.). A mechanical front-wheel drive option is available on all models. Key features include:

**Engine** - The new 505 cu. in. turbo-charged engine, developed by Case-IH in a joint venture with Cummins, uses 24% few parts than comparable engines. It also features a "Poly-Vee" belt drive that does the work of several belts on a standard engine and an automatic belt tensioner. The engine is totally enclosed in an engine compartment with a controlled air-flow system. Built-in piston oil cooling and an in-block water pump are designed to extend engine life.

**Transmission** - The 18-speed full powershift transmission, together with an optional 6-speed "creeper" package, gives the new tractor more power shifts than any other tractor on the market. The single lever, on-the-go shift control provides no-clutch shifting from forward to reverse, and start-up capability in any gear. The slow creeper speeds, from .5 to 2.1 mph., enable to tractor to operate equipment at a slow pace using full power.

**Cab** - All-new cab has more than 47 sq. ft. of glass with no horizontal crossbars. Even the muffler is mounted off to the side of the new tractor for unobstructed front vision. The swivel seat turns right or left and easily moves back and forth. It's positioned so that the operator can reach all controls on the right side control panel with natural arm movements. A computerized instrumenta-

tion panel can be set to monitor engine rpm, wheel slip, ground speed, total acreage, and many other types of information, depending on the field operation in progress. It also contains a service indicator that lets you know when to perform routine maintenance.

**Electronic 3-pt. Hitch** - Lift capacity, ranging from 7,700 lbs. on the 7110 to 10,200 lbs. on the 7140, surpasses all other similar size tractors. Requires only 3 sec. to raise a full load. A raise/lower switch automatically raises and lowers hitch to a preset working depth when making headland turns. Load and travel controls keep implements on track under changing soil conditions. Hitch response speed and drop speed can be adjusted from the cab.

**Dual Pto** - Features both a 1000 and 540 pto. Readout in cab tells operator pto speed and which pto is in use.

**Warranty** - All parts except tires on the Magnum tractors are covered by a 2-year warranty with no hour limit, making it the best warranty in the industry. The second year there is a \$200 deductible per work order.

**Lighting** - First-of-its-kind "wrap-around" front headlights provide bright side lighting. All lights, front and back, can be easily adjusted by hand to fit different viewing needs.

Case/IH placed prototype tractors with farmers earlier this year to get their reaction. Gary Prochaska, who farms 3,000 acres near Caledonia, Wis., tested a 130 hp. 7110 for one month. "With the closely spaced speeds on this new transmission, I can pick a speed halfway between and finish an extra 5 or 10 acres a day," says Prochaska, adding that the closely spaced speeds also provide extremely smooth shifting.

Prochaska also liked tractor's new 3-pt. "I can lift an implement at the touch of a button and return it to a preset working depth as soon as I'm ready without having to reset any levers. I also like being able to control the drop rate for implements."

Prices range from \$50,000 to \$72,000. For more information, contact: FARM SHOW Followup, Case/IH, 700 State Street, Racine, Wis. 53404 (ph 414 636-6011).