a belt tensioner. We welded rod around one side of the drive wheel to keep the belt from slipping off. (Joel Rosenau, 114 W. 10th St., Lemmon, S. Dak. 57638; ph 605 374-5444).

Anybody who's ever worked on the engine of an older Case tractor like my 1977 1370 knows what a pain that can be. In order to take the hood off, you have to remove the



muffler which is no easy chore. Even mechanics cringe when they see these tractors come in the door.

I solved the problem with a simple modification. I split the hood in half lengthwise with my Makita cut-off saw. I bolted three sections of 1 by 1-in. angle iron to each edge of the hood. These form a lip which allows me to bolt the hood sections back in place.

Now, by removing just seven bolts I'm able to take the hood off the tractor in 5 minutes or less, a fraction of the time it used to take. (*Curtis D. Gerner, Rt. 1, Box 89, Custer City, Ok. 73639; ph 405 593-2310).*

FARM SHOW readers might be interested in this mower I built back in 1966 and still use today to cut most of my lawn. It operates on the same principle as Grasshoppers, which didn't come out until years later.



The mower is powered by a twin cylinder 18 hp Wisconsin engine. It drives through a 3-speed transmission out of a 1941 Chrysler car to a countershaft with a rubber reverse roller off a Minneapolis-Moline combine. Steering levers connect to a pulley and reverse drum. When levers are pushed ahead, drive belts tighten for forward and when levers are pulled back, the drum pushes against the combine roller for reverse. By varying forward pressure with the levers, you can slip the drive belts to provide variable speed drive. Roller chains drive the 15-in. front wheels which are off a 1951 Pontiac car. It has an 8-in, rear caster wheel that allows the mower to turn around and come out of any spot wide enough for the deck to fit through.

The deck "floats" on four 6-in. dia. caster wheels and has three 21-in. in-line blades, which are timed and driven with a roller chain. The in-line blade and roller chain drive design provides a very compact deck considering it has a 60-in. cut.

What I like most about the mower is its exceptional maneuverability. It also cuts much heavier grass and weeds than any commercial mower I've ever seen. This is its 31st year and it should provide many more years of trouble-free service. By the way, that's my 1-year-old grandson, Tommy, posing with me on my mower. (Ron Roesch, Rt. 2, Box 162, Ada, Minn. 56510; ph 218 784-4734).

We've been building the Amy portable disc roller for more than 30 years and were even featured in FARM SHOW once almost 20 years ago (Vol. 2, No. 4). Since then we've made some improvements to the machine, which remains the only tool of its kind on the market.



For example, we replaced the gear reduction motor and chain drive with a 15:1 worm box and belt drive, which helped lower the unit to just 2 ft. so it'll slide under most any implement. We also now offer an electric model with a 2 hp 110 or 220-volt single phase motor as well as our gas-powered model with a 5 hp Tecumseh motor.

What's unique about our disc roller is that it sharpens by cold rolling and increases the diameter of the disk as it sharpens. It forms the blade to the correct concavity, sharpens the blade edge, increases the size which in turn adds to the life and increases the temper for longer wear - all without dismantling the tillage tool. Our gas-powered model sells for \$2,300; electric-powered for \$2,500. (Lewis Machine & Mig., P.O. Box 455 - W Hwy 96, Dighton, Kan. 67839-0455; ph 800 536-5896 or 316 397-5896).

Here's a tractor I built from the ground up 20 years ago. I call it "Junior" because it's designed to look like an old IH Model M or H - only a lot smaller. It's just 54 in. wide.

I used a Continental 20 hp engine out of an old IH pull-type combine to power the tractor which I use to push snow and load things into and out of my shop. The hood and grille also came off the IH combine. Rear end, front axle and steering unit are out of an old airplane tug. The front axle is fitted with heavyduty boat tires and cast iron rims. Rear 24in. wheels are off an old New Idea manure spreader. I used the mast cylinder out of a 1964 Ford car for brakes, with one pedal on



each side just like on old M's or H's. I installed two transmissions out of old Model A cars, which offer 9 forward and 3 reverse gears. Transmissions hook to the clutch with a bicycle chain. I used the knuckle of one transmission to adapt it to the input shaft of the other. Behind that, I used another knuckle from the transmission to the rear end.

I made 8-ft. loader arms out of 2-in. dia. pipe and a 54-in. wide bucket frame out of 12-in. channel iron and fitted it with a floor. A double spool hydraulic valve controls both the bucket and loader arms. Last winter, I mounted a 3 pt. hitch on back for the 5-ft. wide 1940's vintage Fordson blade I use. From blade to bucket, the tractor measure 12 ft. long.

It works great for clearing snow from sidewalks because it's so narrow. (Francis A Kneifl, P.O. Box 218, Newcastle, Neb. 68757; ph 402 355-2219 or 2333).

I built a front-mounted blade for my 1940 Allis Chalmers C tractor and I also built a cab for it.

The 6 1/2-ft. blade is made out of 3/16in. steel and fitted with a grader edge on bottom. I built loader arms out of 2 1/2-in. dia. pipe. The trick was arching the arms properly to clear the tractor's wide front axle. A 1 1/8-in. hydraulic cylinder raises and lowers a chain that supports the blade and is connected to the arms in the center of the tractor, which is equipped with a 5,000-lb. pump.



The cab is 40 in. wide by 42 in. long by 50 in. high. The skin is sheet metal, bottom front panels are Plexiglas, side windows, which open and close, tempered glass and back window is tinted glass. It provides excellent visibility forward, backward and sideways. It stays warm in winter, heated by the transmission. It detaches easily for summer operation by removing just four bolts from the tractor's fenders. I lift it on and off the tractor with a skid steer loader and chain attached to a bracket I mounted on top. (Ron Lansink, 306 5th St., Danbury, Iowa 51019; ph 712 883-2437 or 2394).

Thanks, FARM SHOW, for featuring our oldfashioned cast iron dinner bell in your last issue. In less than a month after publication, we'd received 12 orders from FARM SHOW readers all over North America. That confirmed what we'd suspected: a lot of people want dinner bells but didn't know where to find them before.

In addition to our cast iron farm bells, we also handle old-fashioned cast aluminum bells, weather vanes, mail box toppers, weenie dog foot scrapers, and horse head hitches.

Thanks again for the write-up on our bells. (Shereen and Robert Hirning, Country Decor, 16515 Steinhagen, Cypress, Texas 77429; ph 800 888-2196 or 713 255-6767; fax 351-1174).

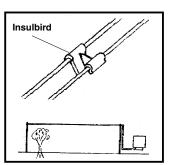
Thanks for the story on my add-on basketball 'return net' (Vol. 20, No. 4). I've had a lot of calls and letters regarding it. Unfortunately the shipping and handling charge was not included in the story. It's \$3.95. (Jack Meyer, 163 S. Drive, Geneva, Ind. 46740 ph 219 368-9498)

In your new "Best Farm Shops & Shop Ideas" book that I recently received after renewing my subscription, you quote David Dowling, Lohrville, Iowa: "When repacking wheel bearings, I drill and tap a hole in the hub for a grease zerk. After that, I can grease the bearings whenever needed".

As a mechanic I'd like to offer a word of caution regarding this idea. Over the years I've had to replace a lot more bearings on greaseable hubs than on non-greaseable hubs. I often screw the zerk out and weld the hole shut to solve the problem. The trouble with a greaseable hub is that every time you grease the zerk you're pushing dirty grease back into the bearing, and it has no place to go. Abrasive metal fillings accumulate in the grease and cause a lot of wear on the bearing. (Dean Herbst, 40021 268th St., Dimock, S. Dak. 57331 ph 605 928-3612)

About a year ago you published a story about a new way to chase pest birds away using a product made in Australia called "Insulbirds" (Vol. 19, No. 5). We recently became the U.S. distributor for the product.

The idea is to run pairs of ordinary electric fence wires - one "hot" and one grounded - up over fruit trees, buildings and crops that you want to protect from birds. The wires are so close together - less than an inch apart - that when a bird lands, its feet hit both wires and they get zapped and fly away. If you just run a single "hot wire", the birds won't feel a thing because they won't be grounded. What we sell are plastic connec-



tors that snap onto both wires every 3 to 6 ft., holding them close together but not touching. One or two shocked birds are often enough to keep a whole community of birds away from the danger area. They communicate with each other. We recommend using 12 1/2-ga. high tensile wire. Insulbirds sell for 18 cents apiece. (John and Laura Gund, Walnut Grove Farm, 48 Cartland Rd., Lee, N.H. 03824 ph 603 659-2044).

No tractor-mounted lift crane in the world matches the features and versatility of this lift, which I designed for use on our kibbutz. I wanted something we could use for all kinds of chores - pulling engines, lifting farm equipment, making building repairs, construction projects, and so on. It had to be maneuverable and it needed a lot of lifting capacity, which meant it had to be mounted in such a way that the load would be counter-balanced.



We obtained a 360° crane off a service truck and mounted it on a Manitu telescopic loader, which has plenty of weight to counterbalance the load, lots of hydraulic capacity, and is extremely maneuverable. I built mounting brackets that anchor the 2 1/2-ton crane directly to the frame of the tractor. In addition, a pair of hydraulic legs lower to the ground for extra support.

The lift crane will lift a 1-ton load up to 18 ft. out in front of the tractor and will work out to either side of the tractor as well. It takes less than 5 min. to hitch and unhitch. It's now one of the most valuable pieces of equipment we own. We use it all the time for all types of jobs. (Doron Yoffe, Ramat-Yohnan, 30035, Israel ph 011 972 4 845 9617)

I'd like to introduce FARM SHOW readers to the best pond aerator ever built. This new invention is called the "Algae Mill". Unlike all other aerators, which circulate water in a vertical pattern and therefore can only keep a relatively small area of a pond free from



algae, the Algae Mill works on the surface of the pond, sweeping the entire surface with wavelets that keep algae from blooming. One unit will keep up to an acre of pond free from algae.

The secret to the Algae Mill is that it's designed to duplicate natural flowing water. The moving water picks up cooler waters from lower down and mixes them with surface waters. The result is cooler surface temperatures, which prevents algae blooms from forming. Call or write for complete information on this revolutionary new product. (Basil J. Leonard, Environ Mills International, Inc., Rt. 4, Sunderland, Ont. Canada LOC 1H0 ph 705 357-2406; fax 705 357-1482)