Craftsman riding mower. The mower is powered by a gas engine and rides on four caster wheels. I built a frame to support the deck and a hitch system that includes a steel rod that pins onto the side of the tractor. I can remove the add-on mower by pulling three pins.

As far as I know, I'm the only person in the U.S. who builds 1/16 scale toy peanut combines. They look like the real thing and even have a hopper that dump's. I've also built a couple of inverters and a peanut wagon. I even made a larger-scale peanut combine for my 3-year-old daughter that pulls behind a pedal tractor. (Danny Culpepper, 1481 Ephesus Church Road, Sumner, Ga. 31788 ph 912 776-9230)

You can modify an ordinary smoke detector so that it doubles as a water detector to help prevent damage in flooded basements, well pits, laundry rooms, bathrooms, around water softeners, etc. Here's what you do: Solder the ends of two long pieces of insulated copper wires to the electrical contacts on the detector's "test" button. Strip a half inch of insulation off the other end of each wire and lay the ends down wherever you think water might be a problem. The alarm will go off whenever water contacts the bare wires, completing the circuit.

In my basement I run the wires down to the drain so that if the septic pump ever quits the alarm will go off as soon as water starts to come up the trap. I also use it on a well pit. It can prevent a big mess caused by a rusted pipe fitting or a failed joint. It goes off. It can prevent a big mess caused by a rusted pipe fitting or a failed joint. It can prevent a big mess caused by a rusted pipe fitting or a failed joint.

The modification doesn't affect the smoke detector's ability to detect fires at all. (Alfred W. Lilgreen, 6550 S. Crystal Springs Rd., Grand Rapids, Minn. 55744)

I built a 4-WD articulated tractor out of two Allis-Chalmers WC rear axles. I paid $100 for one tractor and was given the other one. I removed the engines from both tractors and used parts of both frames. I turned both frames around and put an articulation joint in the middle where they meet. Power is supplied by a Chevrolet 235 6-cyl. gas engine mounted on front. I also installed a power divider for the transmission and built my own hydraulic system for hydrostatic steering.

We used the frame, wheels and axles, twin-cylinder engine, and elevator off an old Deere pull-type combine to make a 26-ton capacity wood splitter. It uses an 18-in. high splitting wedge that we made from an old grader blade. The front edge starts out like a splitting ax but 3 in. back it tapers into a splitting Maul that can go through even the toughest wood. The wedge is moved back and forth by a 6-in. dia., 42-in. long hydraulic cylinder salvaged from an amusement park ride. The cylinder is powered by a hydraulic pump (salvaged from an old tandem splitter) that's belt-driven off the engine.

The pump is operated by a double bank of flow control valves. One valve operates the splitting cylinder and the other operates the swing arm on a boom truck equipped with log tongs. We use the boom truck to pick up logs and set them onto the beam for splitting. We use a circular saw mounted on the rig to cut small wood. (Howard Mattson, 2137 295th Ave., Luck, Wis. 54853 ph 715 648-5337)

I made modifications to the pickup on our combine that lets us harvest badly wind-blown swaths of canola. The guide wheels and brackets that the pickup came with originally wouldn't allow the edges of the swaths to be picked up without dragging along and plugging the pickup so we removed them and installed homemade swather divider strips.

Five years ago I bought a 1950's Minneapolis-Moline Uniharvester power unit and converted it into a self-propelled forklift. It works great and I use it almost every day to load and unload crates of equipment, such as compact tractors and hay rings, that arrive at our implement dealership. The photos show it lifting a pair of Ford compact tractors that weigh about 3,000 lbs. Apiece. There are up to 20 tractors inside each semi.

The power unit was originally designed to handle several types of attachments such as corn pickers, forage harvesters, and balers. It was already painted green when I bought it. I used only the engine, transmission, rear end, wheels and axles, and steering system. I mounted the boom and forks from a junked Clark forklift on front. I fastened part of the frame off a wrecked semi truck onto the power unit's front axle, then made a bracket for it to attach the forklift.

Two hydraulic cylinders tip the forklift forward and backward and another cylinder raises it up or down. Maximum lift height is 14 ft. It's simple to operate and it sit up high and off to the side so I can always see what I'm doing. It's powered by a 4-cyl. gas engine and has a belt-driven 3-speed transmission. (Dwayne Ross, Ross Equipment, 5640 Glenn Hwy., Cambridge, Ohio 43725 ph 614 432-4556)

For years we've manufactured front hitches for Farmall tractors with narrow front ends. We discovered several years ago that there's no safe place to hook onto the front of these tractor whenever they're stuck or disabled and have to be pulled. Our new front hitch solves the problem. It mounts in two existing holes on the underside of the front cast-iron, independent of the bolster so there's no stress on the tractor's steering components or steering wheel.

The opening in the center of the hitch will accommodate a chain eliminating the need for a clevis pin. However, you can use a clevis pin if desired or use an implement or wagon hitch pin, allowing you to easily back implements or wagons into sheds. Due to the close clearance between the bolster and front casting when the steering wheel is turned sharp, we had to design special thin-headed, hardened studs to mount the hitch. Sells for $32.50. (Vince Price, V. Price Co., Box 3, Brazil, Ind. 47334 ph 814 448-8561)

I'm 13 years old and thought you'd be interested in a "Haysleigh" my friends and I built to haul hay when there's snow on the ground. It consists of a wooden platform with an angle iron tongue. It's fitted with a pair of skis made of 2 by 6's. The skis attach to sides of the platform with hinges so they can be flipped up where there's no snow. The platform then rides on three wheels mounted underneath. When skis are down, the wheels are about 2 1/2-in. off the ground. (Nicholas Lieser, 31115 Co. Rd. 32, Paynesville, Minn. 56362).

I'm a retired mechanical engineer who recently discovered FARM SHOW. I feel you're doing a great service for the agricultural community by distributing all the shared ideas, so many of which are absolutely ingenious. White collar "thinkers" in our country must be envious.

Here's one of my inventions FARM SHOW readers might be interested in. It's a tracked, self-propelled combine head that flips over 360° so the machine never has to turn around - you just keep going forward and back.

I made the tracks out of 7 1/2-in. wide stainless steel conveyor link belt that I found at a scrap yard. They're driven by a 6-cu-in. hydraulic motor powered by a 3 gm hydraul- 455 pump belt driven off the 7 hp engine. The tiller features a head that's infinitely adjustable up and down so I can work my garden, which has considerable slope to it, without pushing soil downhill as conventional rototillers do. I built a single-bottom moldboard for it that I can use to hill potatoes. Handles with hydraulic controls swing around so you walk alongside or at the rear of the machine depending on whether it's operating in forward or reverse. I've got about $650 in it. (Lawrence B. Johnson, 3475 Willowood Ave., Bellingham, Wash. 98225-1143 ph 360 671-1028).