Metro Detroit Metalworking Club — JULY '06

Beginning balance	$319.96	President	John Osborne		
2006 dues income	$1.00	VPresident	Emil Cafarelli		
Non-dues income	$0.00	Treasurer	Ken Hunt		
New balance	$359.96	Editor	John Osborne		
Expenses	-$0.00	Publisher	John Lee		
Total on deposit	$359.96	Webmaster	Dan Hittenmark		

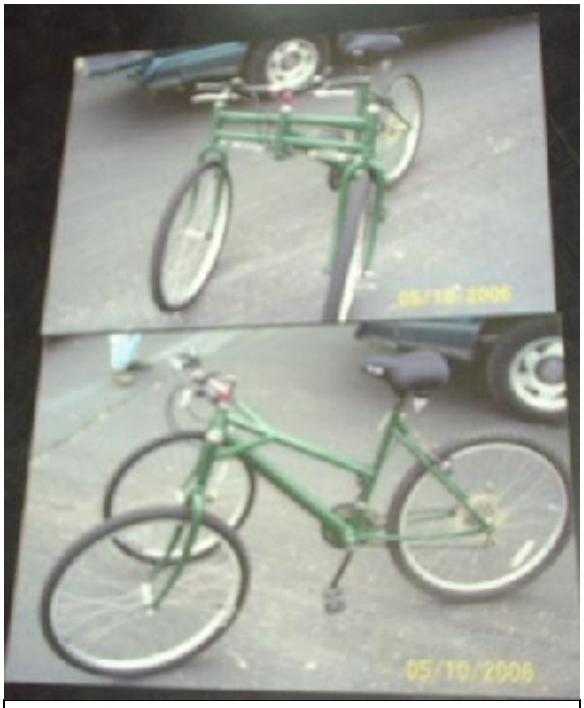
DUES: $10/yr. check to **MDMC** c/o Al Campbell,

Macomb Community College 14500 E 12 Mile Rd, Warren, MI
Room T-120 (parking off Martin Rd East of Bunert Rd
Next meeting: JULY 12, 2006 (2nd Wed of every month)

PRESIDENT'S MESSAGE Last meeting, I brought up Emil's conundrum of how hollow doorknobs are made. The Internet told me, after some searching, the process starts with deep drawing and redrawing to get a tall cylinder. Then a different process is used. The Net told me its a forming process called rubber bulging. It refers to a rubber (or urethane) punch forced into the drawn cylinder that sits in a metal die. The punch deforms and forces the cylinder into the cavity. I got the answer I was looking for, but as always on the Net, search results can be amusing. The keywords "rubber bulging" turned up 391,000 entries. It seems there are lots of things out there that are bulging.

MINUTES There were 17 members present, John O. and Emil C. presiding. There were no guests. There was talk of having a representative from Locktite give a presentation at a future meeting and pass out free samples. I whined about how often my band saw blades broke and that I bought 100 feet of blade stock and was welding up the size I needed. I got much advice (thank you) and can now report I am still using just one of the blades I made. Success! We talked about the metal working class since about 11 us just came from it. I asked that observers of the class not get in the way of the students or take any of the instructor's time. Dick is the most precious resource in the class.

Below are typical students machining, learning, teaching, consulting and concentrating. We have beginners and experts alike making a variety of satisfying metal objects.



Joe Pietsch built his own special tricycle. Its for scouting out shows and expos. It has several unique features: its stable at slow speeds, its easy to get on and off, and high enough to see whats on display. As good as this bike is, I still see room for improvement. What about an umbrella for portable shade and saddle bags for all the catalogs and brochures?