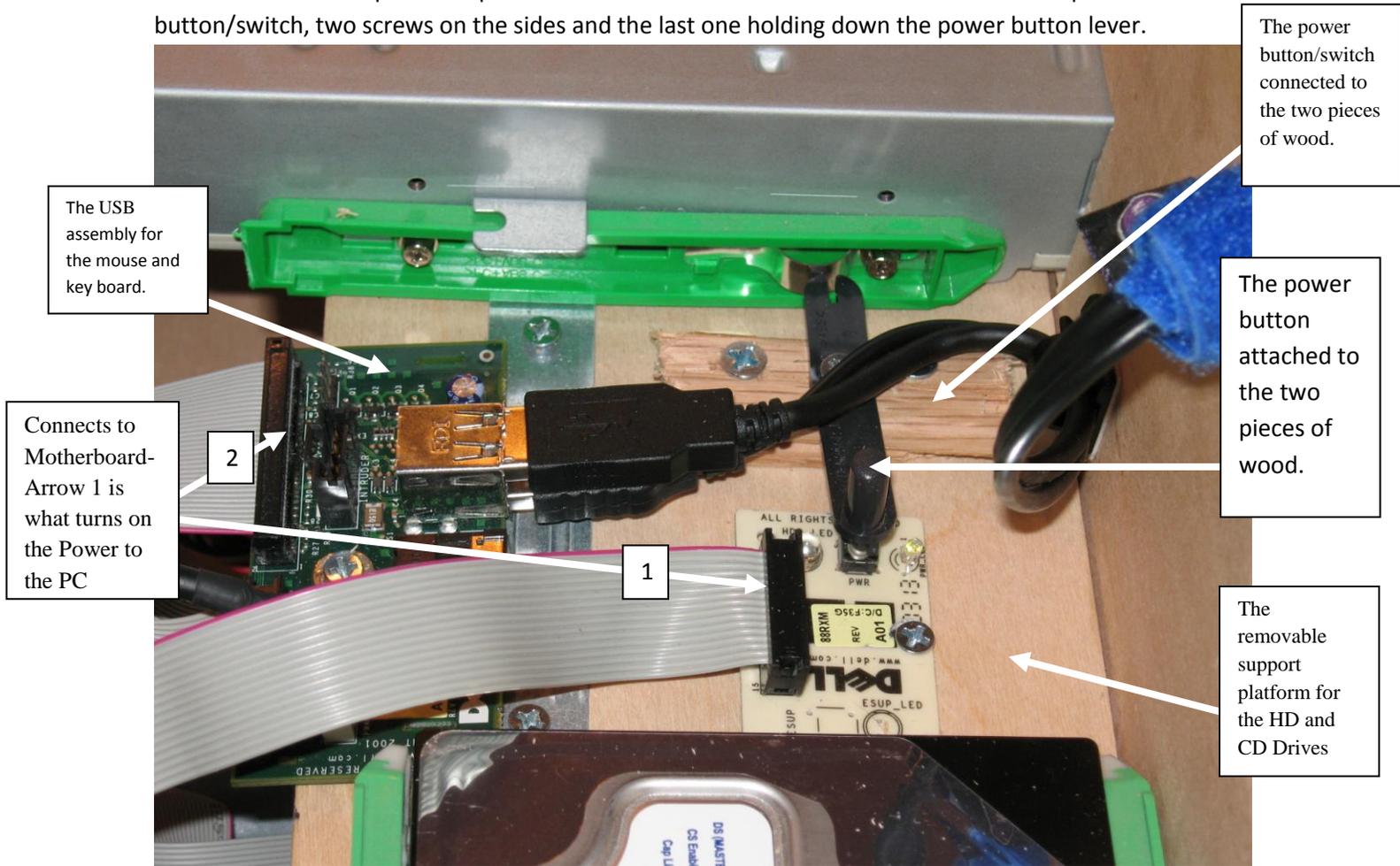We took two small square-like pieces of wood and used three screws to hold down the power button/switch, two screws on the sides and the last one holding down the power button lever.

The power button/switch connected to the two pieces of wood.

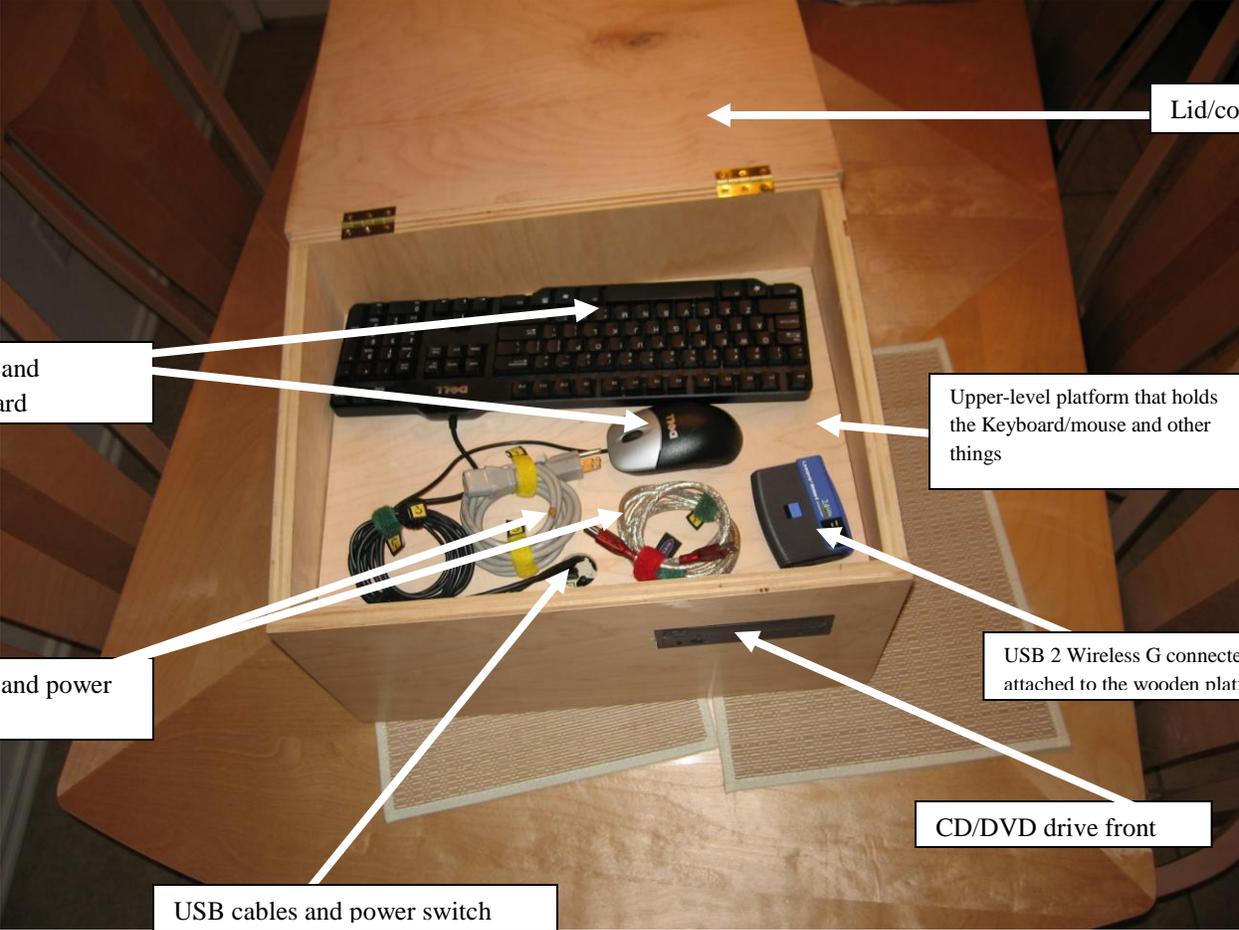The USB assembly for the mouse and key board.

The power button attached to the two pieces of wood.

Connects to Motherboard-Arrow 1 is what turns on the Power to the PC

2

1

The removable support platform for the HD and CD Drives

The final steps were putting in the CPU fan that is mounted on one of the corner edges, and on the opposite corner edge is where the power supply is tightly fitted in with at least one mounting screw holding it in place. The USB connecter is where the mouse and keyboard plug into can be some other form of USB device as well; it is mounted with one screw in the center.

The CPU Fan and under is the CPU covered with a Silver heatsink

RAM slots, 1 512 MB stick

Heat sink

AGP and PCI slots, under platform

Headphone jack

Hard drive IDE

From Power supply to ATX motherboard

CMOS battery

The Power supply

IDE cable connects to motherboard to CD/DVD

A cable that connects to the integrated sound card, has a working headphone jack

Circuit board that provides sound, Power, and USB 2 capability

CD/DVD drive

USB connector

Lid/cover

Mouse and
Keyboard

Upper-level platform that holds
the Keyboard/mouse and other
things

USB 2 and power
cables

USB 2 Wireless G connecter,
attached to the wooden platform

CD/DVD drive front

USB cables and power switch

This is one of the sides; this is where the motherboard external I/O devices connect to the PC, and this is also where the CPU fan vent is located. The I/O connections consist of serial connector, parallel port (printer port), mouse and Keyboard PS/2 connectors, four USB 2 connectors, and (line-in, speaker, microphone jacks), VGA monitor and Ethernet RJ45 connector. There are pictures printed in the rectangular colors that separate the various connecters, these pictures represent the devices listed above.
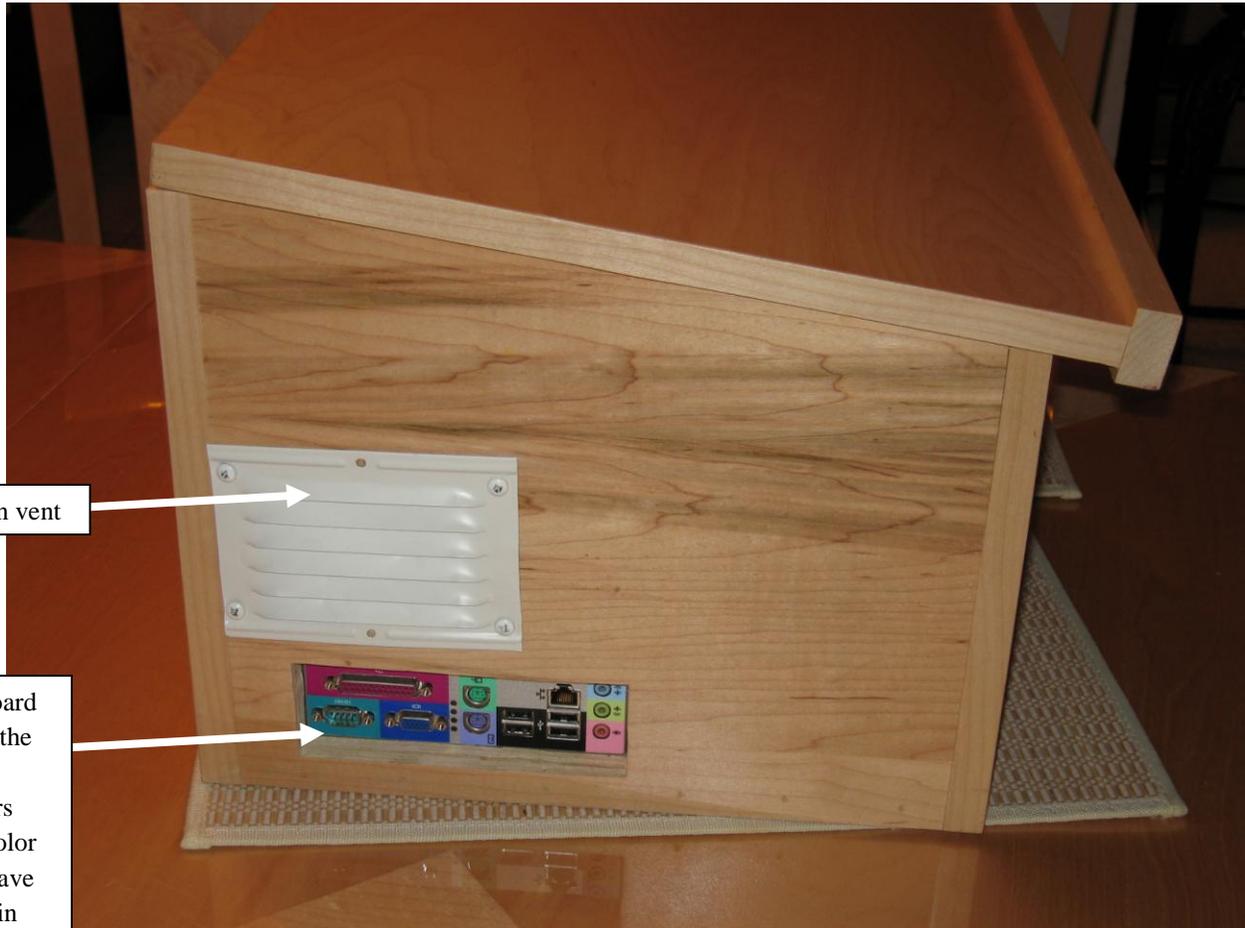
CPU fan vent

Motherboard rear with the I/O connectors and the color squares have a picture in them that represent the devices listed above.

The other side that has the mounted power supply.
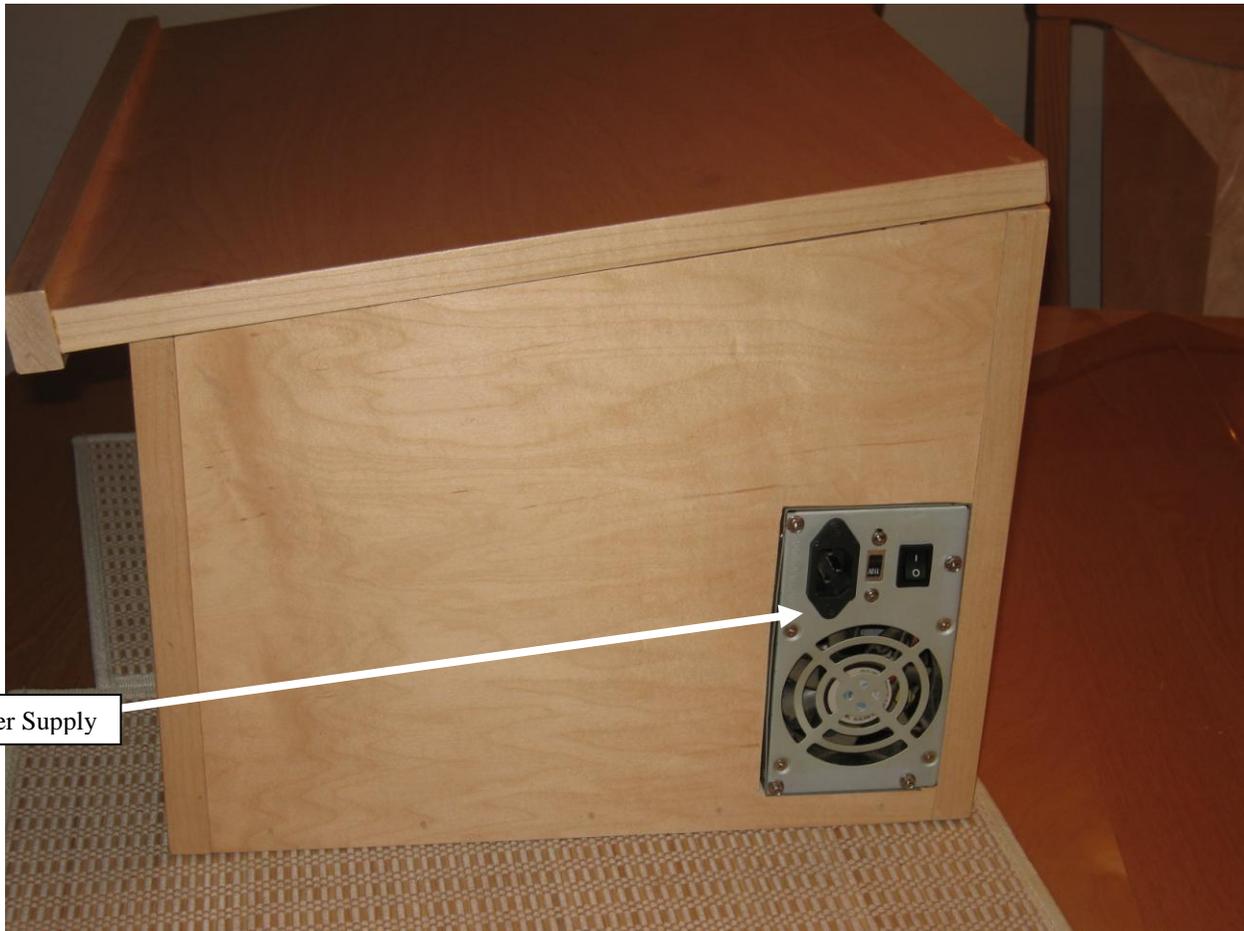
Power Supply

The rear of the podium is solid wood and this is the side that would face an audience. The top can be used for presentation notes or other useful information and/or materials. The top can be used to place the keyboard and mouse on top of and use it, however the mouse and the keyboard on the top would make a tight fit and this scenario is not very practical, but it is possible to accomplish.

This is the front of the podium where the presenter will work from.

Top/work area

CD/DVD front
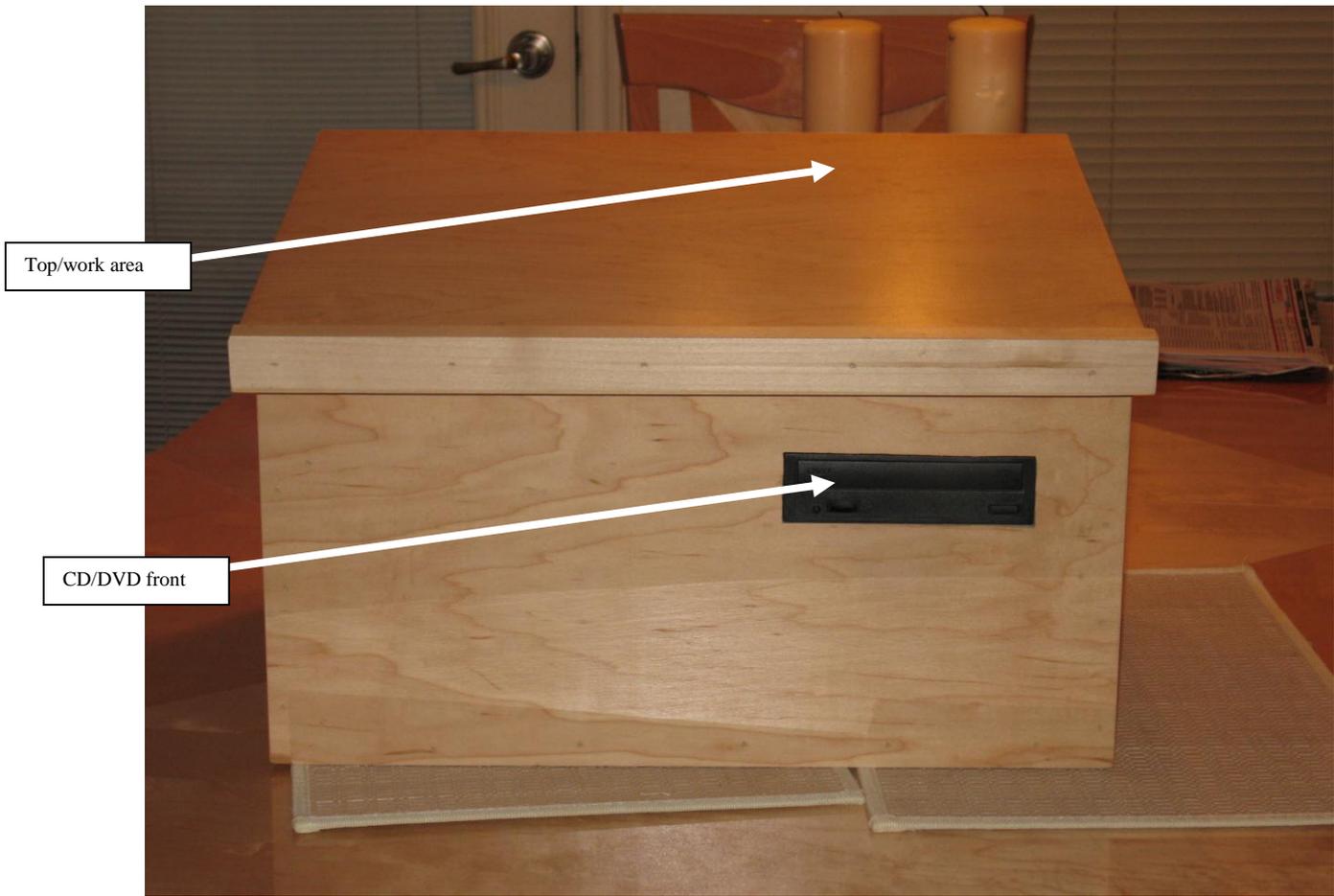
Future improvements are to cut out slits for the PCI and AGP connectors so that more internal hardware can be later upgraded, have a better cable management system, not have exposed circuit boards that are prone to static electricity (have some kind of container to protect it better), and finally have the capability to add additional hard drives and CD/DVD drives.

Problem one and our solution: The operating system that was on there was not really accessible so we put Windows XP Pro SP 2 and it is activated and fully updated with all of the correct drivers installed for all of the hardware. The drivers for the hardware devices were obtained from Dell.com. We also put Office 2000 SP3, two fish screen savers, Irfanview (a picture viewer), we put an external working USB2 wireless G LAN card inside of the podium, Firefox, QuickTime, a codec pack, and Norton antivirus from the OU IT store all fully updated as well. We also partitioned the 20GB HD into about 10GB for XP Pro and the rest we left un-partitioned for the next part of our project, for a possible dual boot a second OS if we need to. There is a little more than 3 GB of space remaining on the hard drive.

Problem two and our solution: We had a seek sector error and the hard drive could not be found and the original operating system could not or would not load initially. So we tinkered with the BIOS to disable the floppy drive and move the hard drive to the top of the boot order and the CD/DVD second in the boot order option. The Bios was not initially picking up the hard drive at all so we turned off and on the IDE controller settings until we found the one that contained the hard drive. There are still two options for the second IDE devices that are turned off on each of the two IDE controllers. We believe that this is a motherboard problem. The devices on the controller in the BIOS said unknown device until we tinkered with the IDE controller settings and we now apparently have a functional system, but after the POST it still lists two Seek sector errors and does not seem to interfere with the hard drive and the CD/DVD drives at this point or the booting to the operating system.