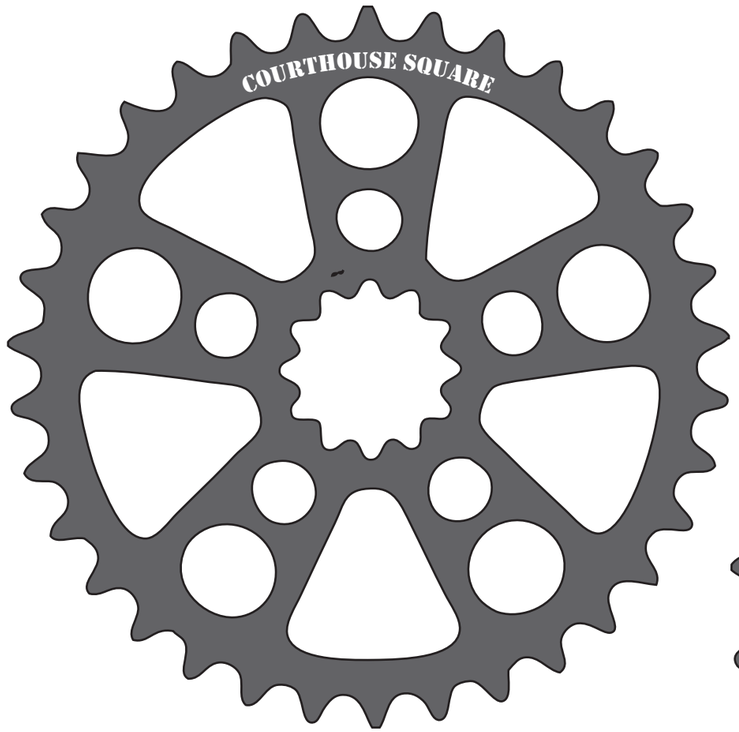
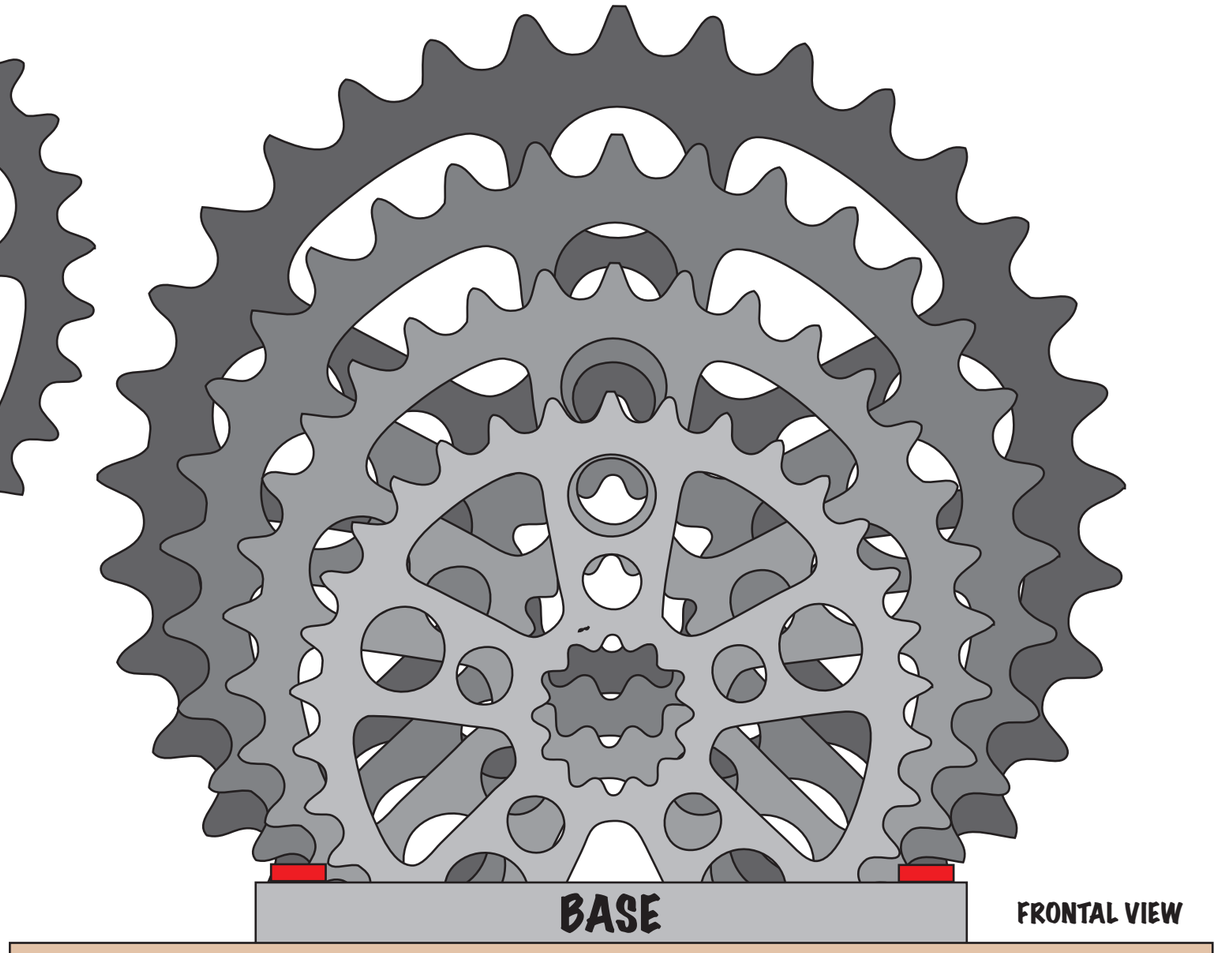
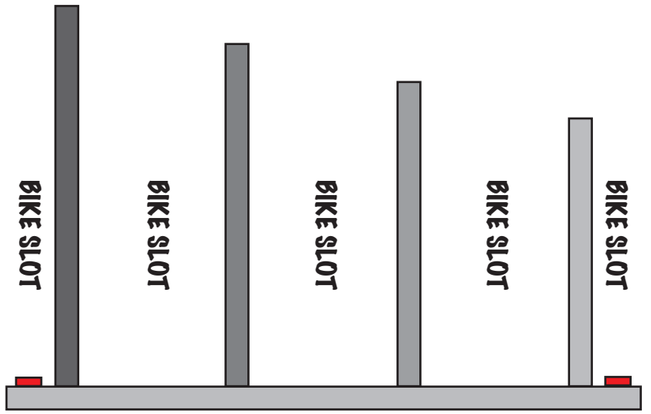
"CHAINRING BIKE RACK"



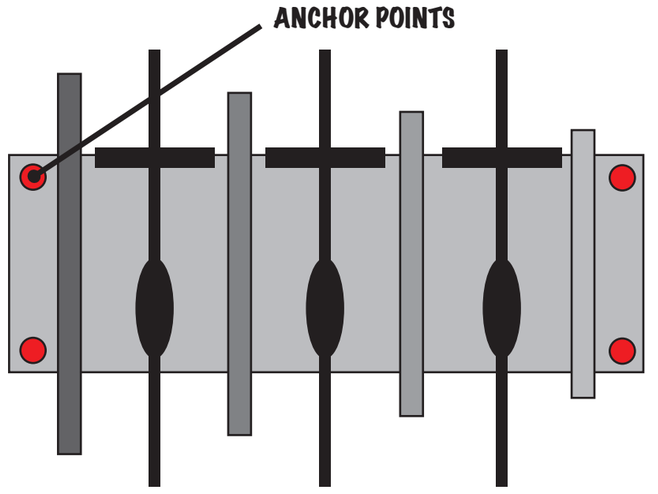
OPTIONAL LOCATIONAL LETTERING SHOWN
(ALTERNATIVIE FONT STYLE CAN BE USED)



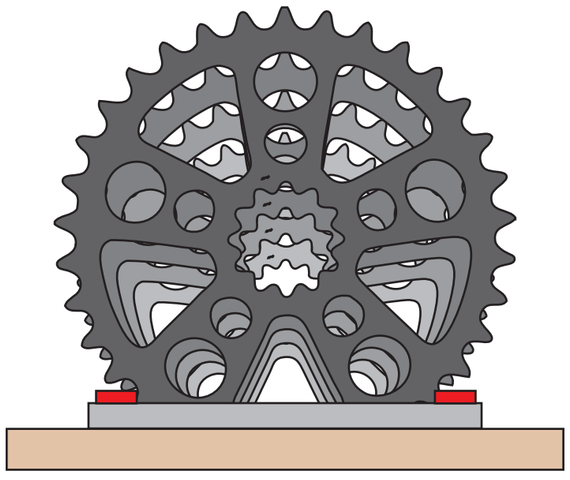
FRONTAL VIEW



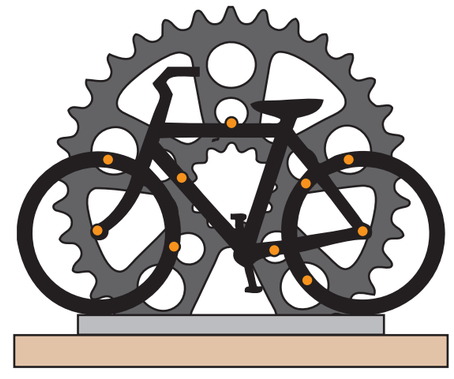
SIDE VIEW



TOP VIEW



REAR VIEW



MULTIPLE POTENTIAL LOCKING POINTS

DIMENSIONS:

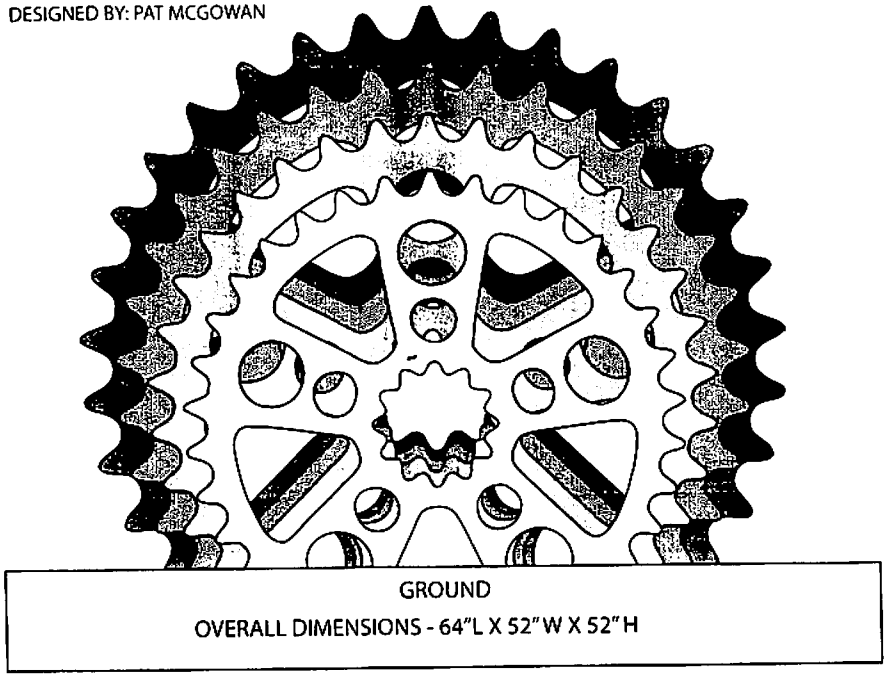
THE DEMENSIONS ARE VARYING IN SIZE AND CAN NOT BE COMPLETELY DECIDED FOR AESTHETIC REASONS UNTIL THE CHAINRINGS ARE CUT FROM A PLATE OF STEEL. THE LARGEST GEAR SHOULD BE ROUGHLY 65" IN DIAMETER. THE CHAINRINGS SHOULD DECREASE IN SIZE ABOUT 5" FROM ONE TO THE NEXT. THE BASE PLATE SHOULD BE 72" LONG AND THE WIDTH IS DETERMINED BY THE BOTTOM CUT OF THE LARGEST GEAR. THE BOTTOM OF THE CHAINRINGS NEED TO BE CUT OFF ACCORDINGLY SO THAT THEY ARE ONCE AGAIN AESTHETICLY PLEASING. FOR EXAPLE THE LAST TOOTH OF THE GEAR MUST SIT FLUSH WITH THE BASE OF THE DESIGN SO THAT THERE IS NOT A MINUSCULE SPACE UNERNEATH. THERE SHOULD BE A 20" SPACE IN BETWEEN EACH SLOT WITH A MINIMUM OF A 4" LIP ON EACH END. THE BASE PLATE SHOULD BE MADE OUT OF 1" THICK STEEL PLATE. THE CHAINRINGS SHOULD BE A MINIMUM OF 1/2" THICK UP TO 1" THICK.ANY ISSUES WILL BE RESOVLED BETWEEN THE ARTIST AND THE FABRICATOR DURING CONSTRUCTION.

(NOTE: DESIGN NOT TO SCALE.)

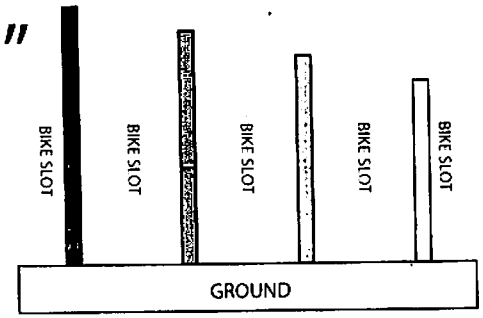
(NOTE: PLEASE CONTACT ARTISTS FOR ANY CLARIFICATIONS ON THE DESIGN)

"CHAINRING BIKE RACK V.2"

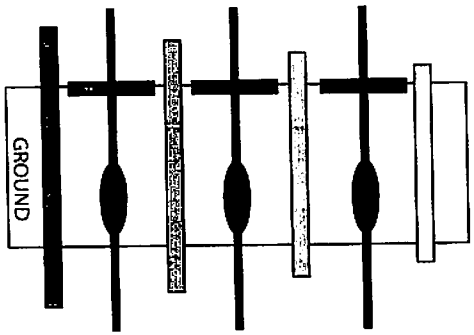
DESIGNED BY: PAT MCGOWAN



FRONT VIEW



SIDE VIEW



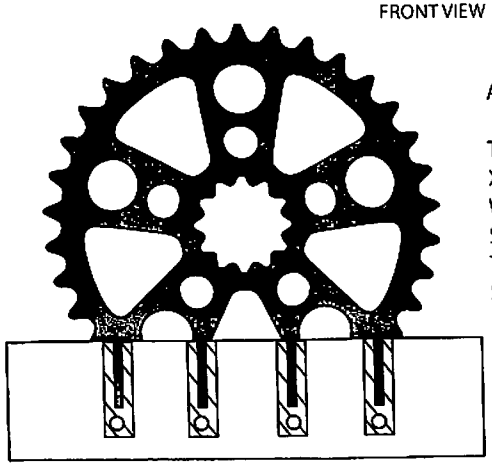
TOP VIEW

SAFETY & STRUCTURAL:

IN TERMS OF SAFETY AND DURABILITY ISSUSE ASSOCIATED WITH ANY PUBLIC DESIGN THE FOLLOWING FEATURES HAVE BEEN INCORPORATED. ALL EDGES ARE SOFTENED AND POINTS ROUNDED OVER TO PREVENT INJURY OR DAMAGE TO THE BICYCLIST OR THE BIKE. THE BIKE RACK WILL RECEIVE A POWER COATED FINISH THAT IS HIGHLY DURABLE AND LONG LASTING. THE COLOR CHOSEN IS A FIRE ENGINE RED BUT THIS CAN BE CHANGED AT THE PANELS' DISCRETION TO ALMOST ANY COLOR VARIANCE. THE BIKE RACK IS GUARANTEED TO MEET THE MINIMUM SERVICE REQUIREMENT OF 10 YEARS AND IN ALL LIKELIHOOD WILL LAST MANY TIMES THAT REQUIREMENT.

MATERIALS:

THE MATERIAL OF CHOICE FOR THE ENTIRE BIKE RACK EXCLUDING THE ANCHOR SUPPORTS IS 1" PLATE STEEL. THE STEEL IS THE OPTIMAL BUILDING MATERIAL FOR A SCULPTURE LIKE THIS. IT IS INCREDIBLY DURABLE AND WILL RESIST ANY SORT OF DAMAGE, VANDALISM OR THEFT.



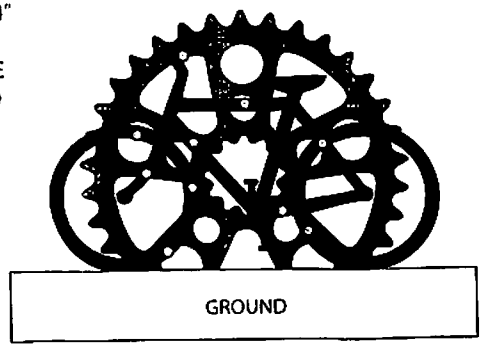
FRONT VIEW

ANCHOR POINTS:

THE SCULPTURE IS HELD IN PLACE BY 4, 3/4" X 16" STAINLESS STEEL ROUNDSTOCK WHICH IS WELDED TO THE BOTTOM OF THE SCULPTURE THAT IS THEN CEMENTED INTO THE GROUND PROVIDING A STRONG AND SECURE ANCHORING SYSTEM.

○ CONRCETE SONO TUBES MIN. 4 FT. DEPTH

(NOTE: DESIGN NOT TO SCALE)



○ MULTIPLE POTENTIAL LOCKING POINTS

OPTIONAL LOCATIONAL LETTERING SHOWN

(ALTERNATIVIE FONT STYLE CAN BE USED)

Pat McGowan
1212 Woodlawn St
Scranton, Pa. 18509

(570) 575- 1073

mickg53@yahoo.com

This contest was introduced to me through email.

Approximate cost: $1500.00 – $2000.00

" Chainrings"

Wanting to create a more dynamic and analogous design, I looked toward bikes themselves for a solution. The unmistakable chainring gear on a bike, when realized was an iconic solution that is sure to be a success. Grouped in the "comb" style, the chainring design is one that all bicycle enthusiasts are sure to recognize immediately. One major point of versatility in this design is the size variations of the rack. The "comb style rack" allows for a more orderly storing of bikes. The chainrings move in decreasing order from large to small creating a sort of hybrid gear cassette that is commonly found on mountain bikes but constructed out of chainrings. In so doing it will fit large sized mountain bikes, medium sized BMX, and youth bikes, as well as children's sized bikes in the inner and outer spaces between the chainrings. By creating a bike rack that is more user friendly it can increase the accessibility of a family or group of bikers to a particular area, thus increasing interest, for example, in a park or city area.

The geared portion itself is relatively easy to reproduce. The majority of the sculpture will be manufactured from hot rolled plate steel with a minimum thickness of 1/2inch or a more optimal thickness of 1 inch ,depending on budgetary allowances. It can effortlessly be cut out on any computer numerically controlled machine. Very little fabrication in fact is involved. Once the chainring gear is cut out it needs only to be welded to its supporting structure. The design can easily be altered to accommodate different installation methods as well, for example a grassy area where no concrete pad or hard surface is available. Concrete anchors can simply be welded to the bottom of the structure and cemented in to the ground, or vice versa.

Another minor but interesting feature of bike rack is its ability to have the street, park, intersection, or location name featured on it to further enhance its user friendly elements. This provides the user with the name of the location where they have docked their

bike. This would help locate the bike more readily incase they are unfamiliar with the area or become lost after docking their bike.

This design is highly sustainable and will require little to no maintenance, depending on how it is finished. The first option in terms of finishing is actually achieved by substituting out the original plate steel for Cor-ten plate steel. Cor-ten Steel is a type of metal that is extensively used in out-door sculptures; for example the works of Richard Serra. It is also used in structures like the UPMC, University of Pittsburgh Medical Center in Pittsburgh Pennsylvania. This metal forms a type of surface rust on it that unlike traditional rust, which would deteriorate the metal, it actually ends up sealing it and protecting it. It will never need maintenance and will last for many generations to come. While the initial cost may be somewhat greater, it is made up in the long run due to its longevity and its maintenance free features. The second option for finishing on regular plate steel are varying and numerous. The two best suggestions to be offered are plasticizing, or powder coating. Each type of finish is durable, and is offered in varying colors. Plasticizing offers a more user-friendly finish that rubbery and soft to the touch, while powered coating offers a harder more durable surface.

In terms of safety and security there is an almost a zero probability that thieves or vandals could destroy, damage, or steal the bike rack it self due to the shear weight and the strength of the metal. In almost all instances the bike chain, or U-lock, would be broken or destroyed before the bike rack could take on any serious damage. The bike rack will not only fully support the bicycle, but offers multiple connection points for all standard bicycle locking devices.

This simple yet highly effective, easily reproducible design can be enjoyed for many years to come. The universal image of the “Chainring” will not only be appreciated by bicyclists, but public art enthusiasts, and pedestrians as well. The design is a safe and reliable one that will beautify the metropolitan and recreational areas of our county.