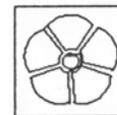


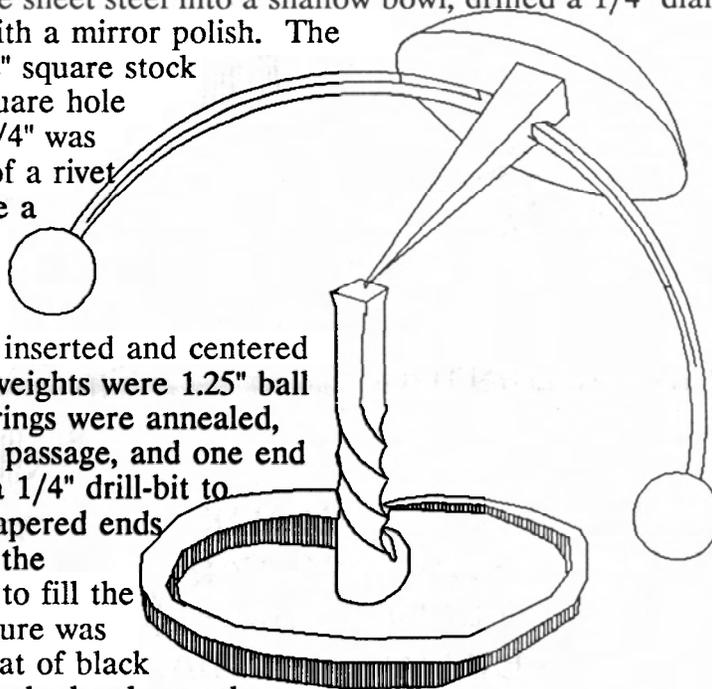
A Balancing Toy

Steve Bloom



A typical early American toy was a wooden figure holding a balancing pole. The toy appears to be about to topple but is actually extremely stable. The trick is to weight the ends of the pole and position those weights such that the center of gravity of the toy is below the "bottom" of the figure. The concept lends itself to a quick blacksmithing project that will also use up some tag ends of stock that you happen to have lying around.

I dished a 3" circle of 16-gauge sheet steel into a shallow bowl, drilled a 1/4" diameter hole in the center and finished with a mirror polish. The "body" of the figure was 3" of 1/2" square stock tapered to a point with a 1/8" square hole punched near the top. The last 1/4" was ground down to form the shank of a rivet (1/4" diameter). The "arms" were a single piece of 1/8" square stock (14" long). The ends of the arms were ground to cylindrical cross-sections for 1.5". The arms were inserted and centered through the punched hole. The weights were 1.25" ball bearings (apprx. 4 oz.). The bearings were annealed, drilled to make a 3/16" diameter passage, and one end of the passage was reamed with a 1/4" drill-bit to form a counter-sunk area. The tapered ends of the arms were passed through the weights and the end riveted over to fill the counter-sunk depressions. The figure was then wire-brushed and given a coat of black lacquer. The last step was to slip the bowl over the top of the figure, rivet it into place and to bend the arms appropriately.



The base was from 12" of 1/2" square stock. One end was upset and a slight depression was created in that end using a ball pein. A taper started 6" from that end and the stock was drawn out to 18" long overall. A twist was made just below the upset and the taper was reflected through 90 degree angle and coiled into a base. The base was wire-brushed and given a coat of black lacquer.

The real potential of this project is not the object I made but the spring-board it represents for you. There's a lot of potential here to fool around with decorative motifs in iron while generating an "active" object.

