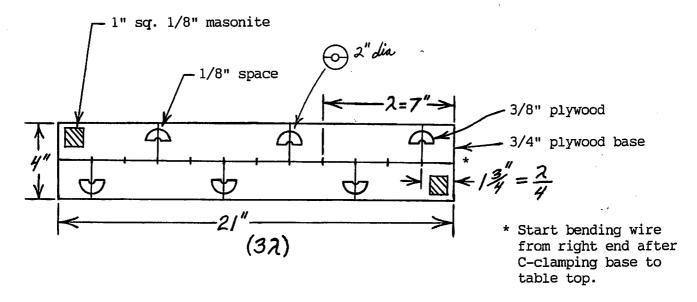
John B. Johnston, The Faraday Center, 103 Creamery Rd., Livingston Manor, NY 12758 (845) 439 - 4706 Wire Waves II - a teaching model (and the necessary jig). You need two wire waves.



Materials for jig:

3/8" plywood, 3/4" plywood, $2\frac{1}{4}$ " hole saw and drill press, Elmer's glue, 12 #18 x 1" wire brads, aluminum ground wire (RadioShack #15-035) - $33\frac{1}{2}$ " straight, wire cutters, hammer, meter stick (English scale), pencil, kleenex, sandpaper, 2 1" x 1" pieces of 1/8" masonite for corners to be clamped, 2 C-clamps (3"?)

Plan for jig:



Uses: (a) not laser light - not coherent (phasing)

- (b) double slit diffraction and interference (the pattern), with two wire waves
- (c) monaural vs stereophonic phonograph records, with 42 and 32 wire waves
- (d) interference II constructive and destructive (phasing)

<u>or</u>

beats - tracings on the chalkboard (e.g. 400 and 300 Hz)