the press with J. Dean Barnett and H. Tracy Hall as inventors. The McCartney Manufacturing Company is licensed to use all these inventions.

2. General Dimensions of the Press -

a. Perpendicular distance from center of tetrahedral press to inside of tie bar - 15 in.

b. Distance from center of press to back of ram base - 22-3/4 in.

c. Piston diameter - 8 in.

d. Cylinder, outside diameter - 10 in. (Note that the high pressure oil is confined within the recessed portion of the ram base where the cylinder serves primarily as a "liner" and the ram base provides radial support to the liner.)

e. Cylinder height (above face of ram base, including top-plate)- 8 in.

f. Piston rod diameter - 4 in.

g. Piston travel - 1-3/4 in.

h. Tie bar diameter - ~~3.1 in (3.25 thread diam.)~~ 4 in.

i. Tie bar length - ~~38~~ 37 in; ~~threaded each end for 12 in. length.~~

j. Bottom of ram base to apex formed by tie bar axes - 5-3/4 in.

k. Ram base 19 in. diam x ~~X~~ 8 in. thick.

3. Hydraulics - The press generates a maximum thrust of 300 tons with an oil pressure of 12,000 psi. The hydraulic fluid is oil. The high pressure oil fittings and valves are Autoclave Slimline (15,000 psi) used with 9/16 in O.D. by 5/16 in I.D. stainless steel pressure tubing. High pressure oil is simultaneously supplied to all rams by a Sprague, air driven pump. Rapid advance of the rams is provided by air pressure