

FIG. 52- TRUE STRESS VS NATURAL STRAIN, TENSILE BARS FROM SPECIMENS C-1A, C-2A AND B-1A

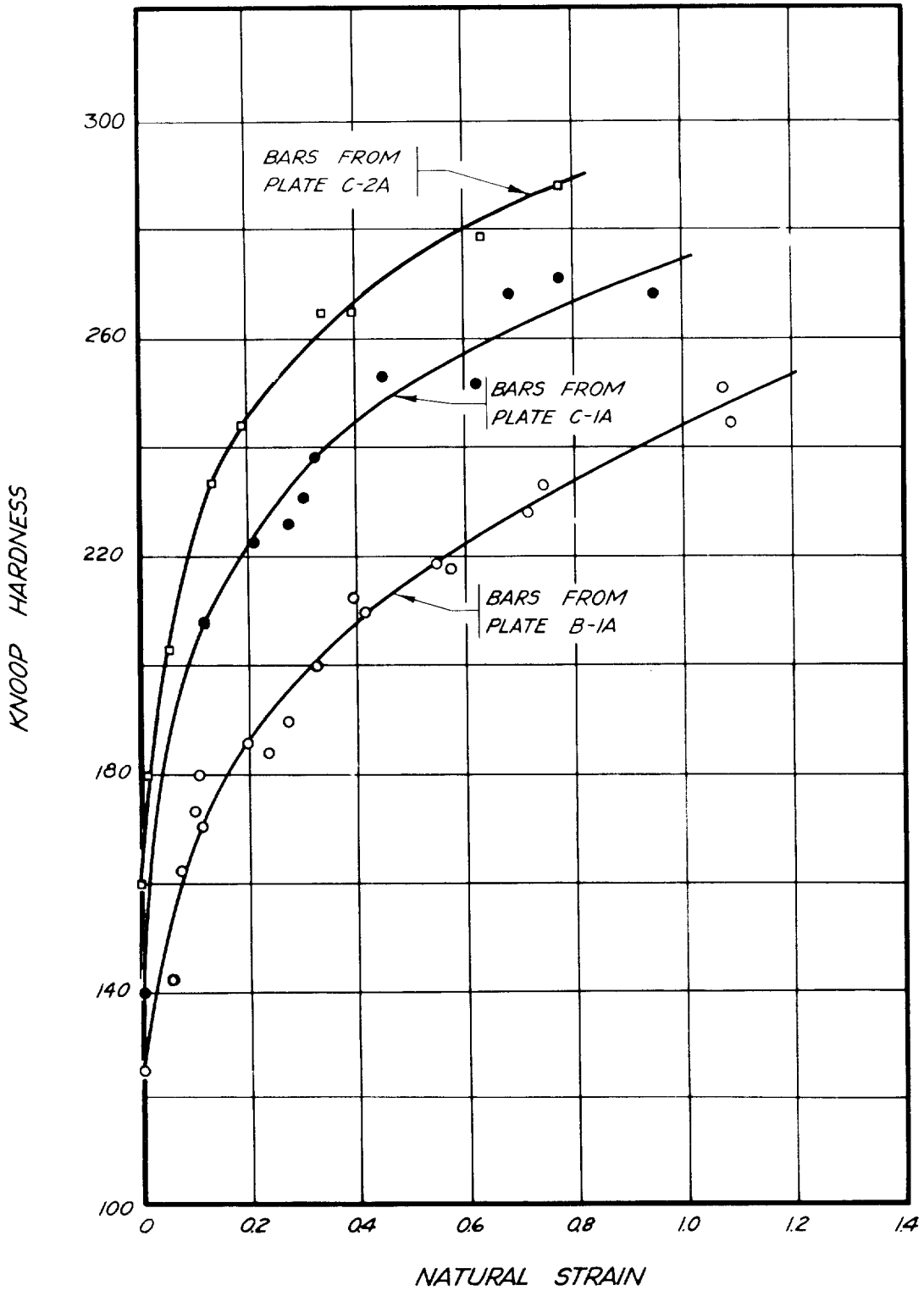


FIG. 53 - KNOOP HARDNESS VS. NATURAL STRAIN, TENSILE BARS FROM SPECIMENS C-1A, C-2A AND B-1A.

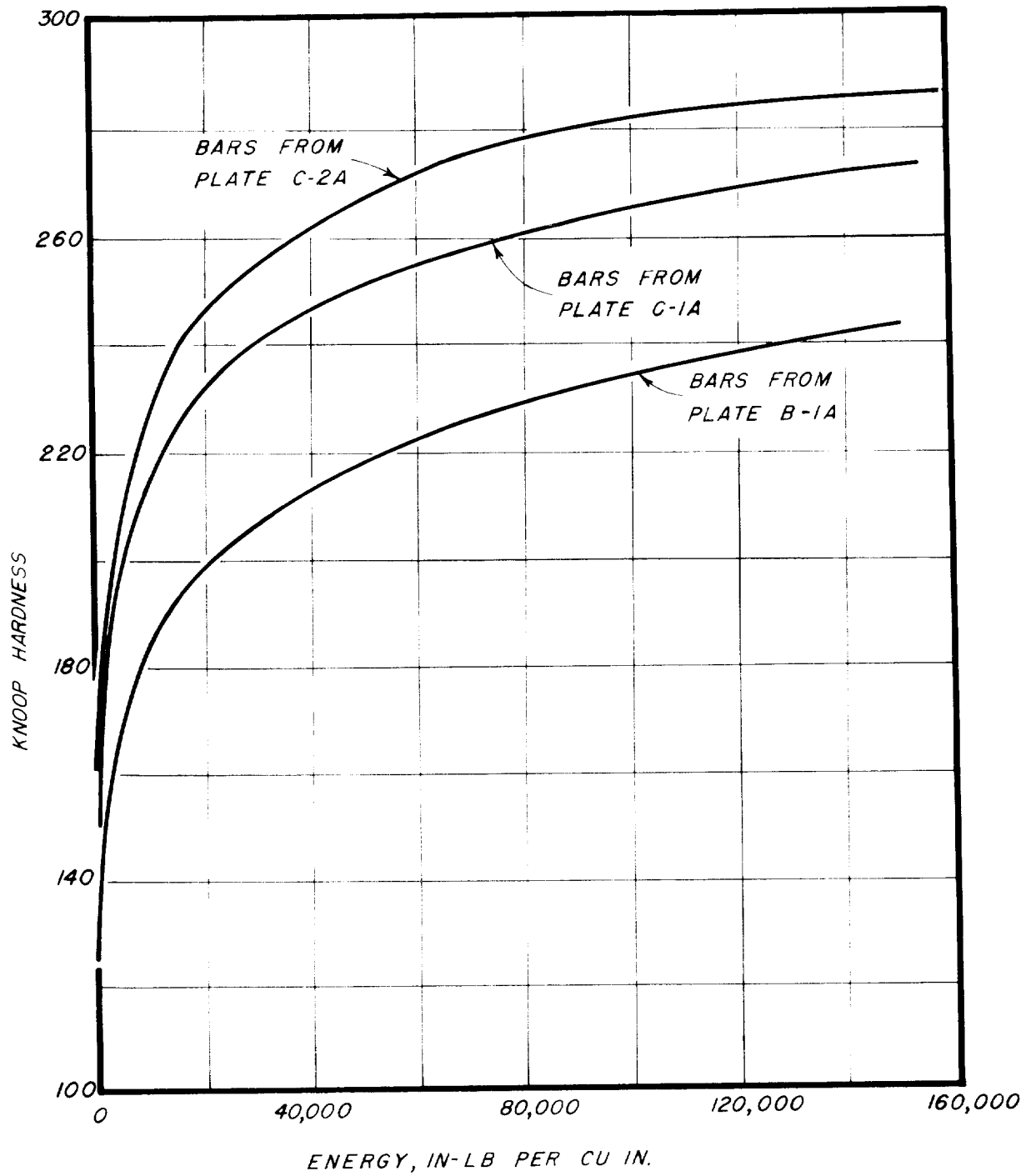


FIG.54- KNOOP HARDNESS VS ENERGY ABSORBED DURING STRAINING, TENSILE BARS FROM SPECIMEN C-1A, C-2A AND B 1A.

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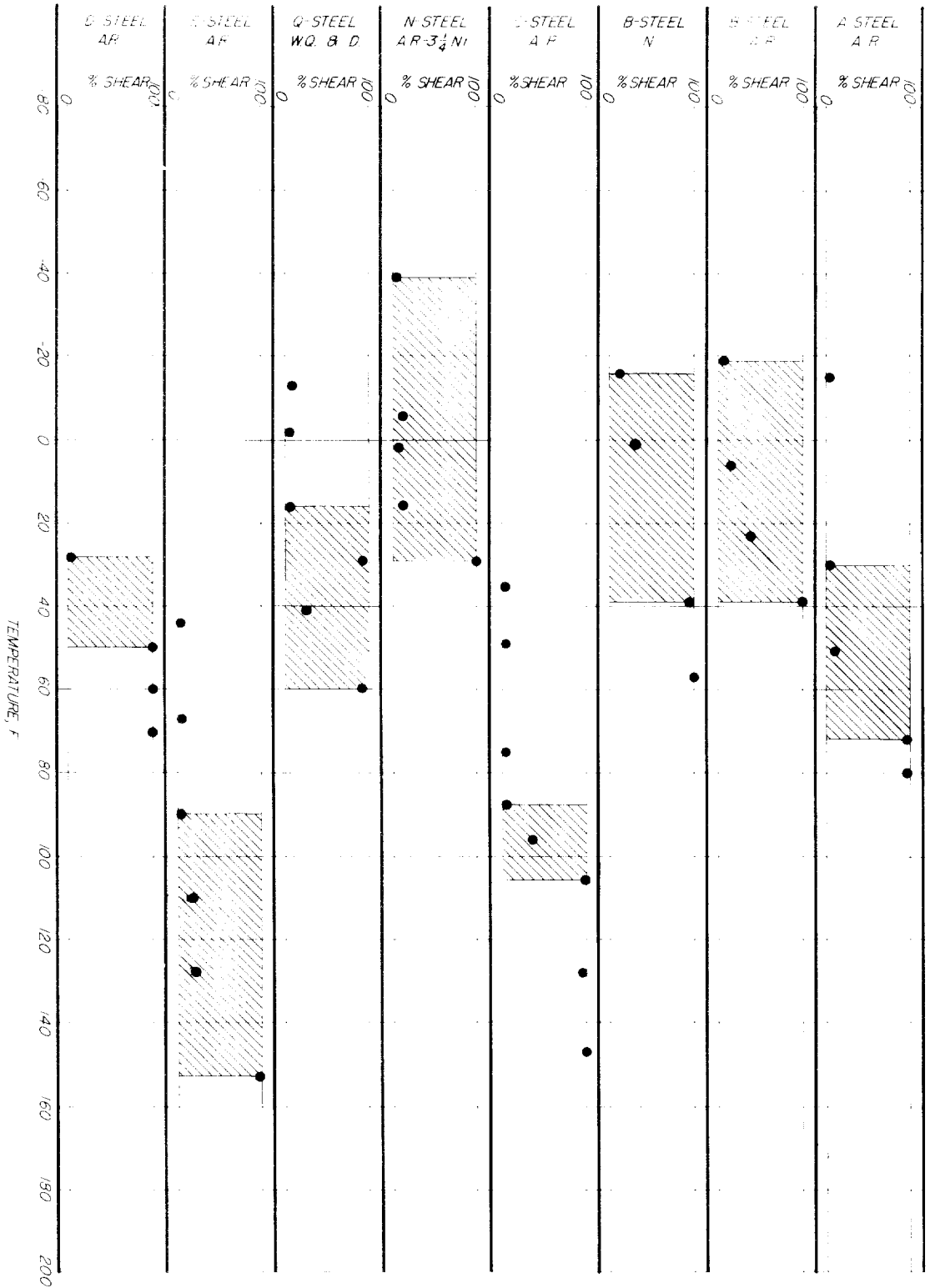


FIG. 55 - TRANSITION TEMPERATURE RANGE 3-INCH WIDE NOTCHED SPECIMENS
 3/4-INCH THICK, "C" STEEL

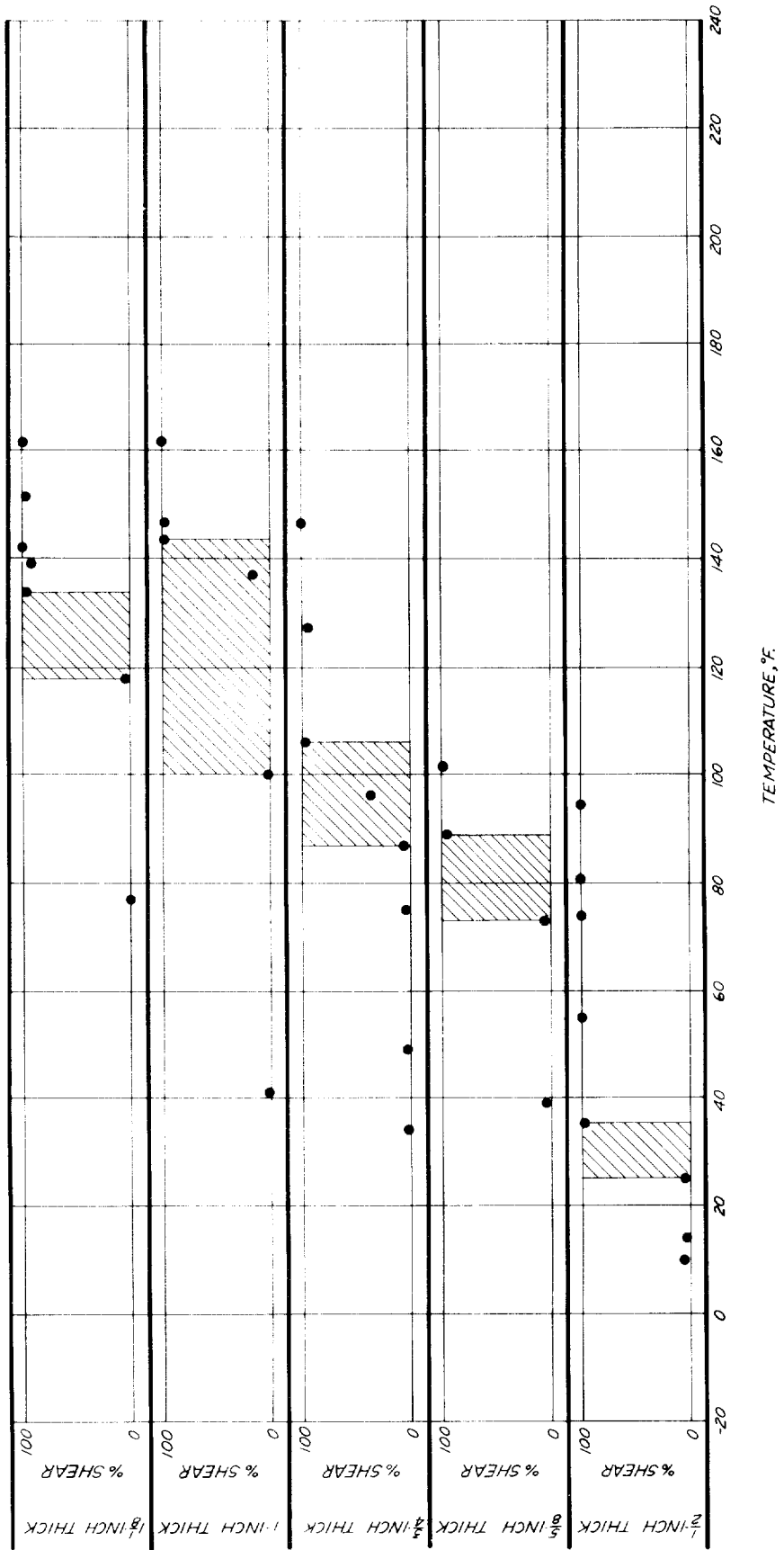
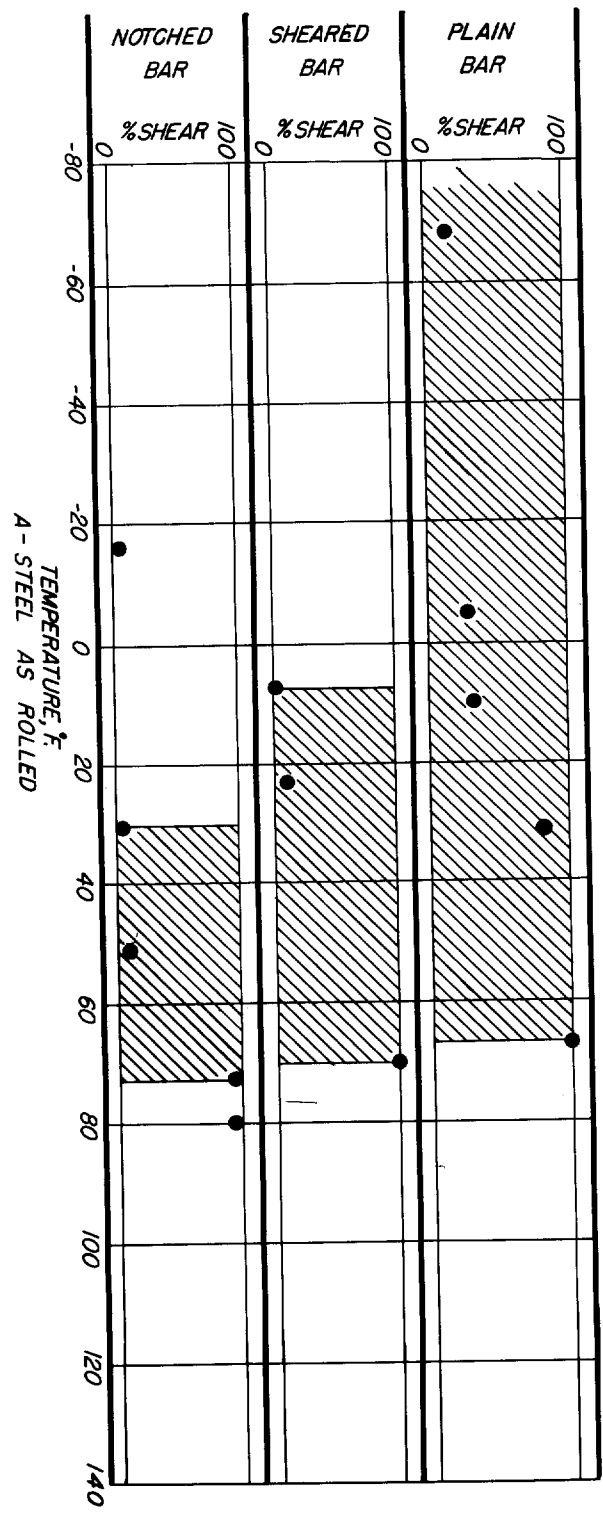
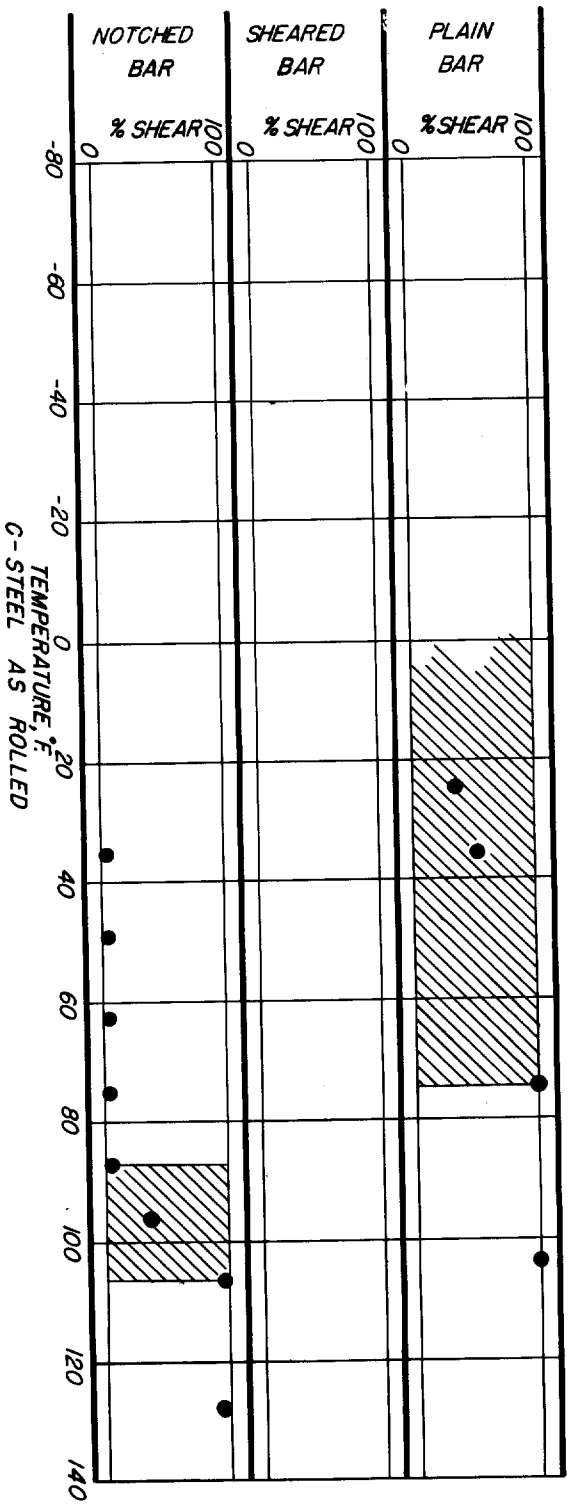


FIG. 56 - TRANSITION TEMPERATURE RANGE, 3-INCH WIDE EDGE NOTCHED SPECIMENS, C-STEEL, FROM PLATES OF VARIOUS THICKNESSES

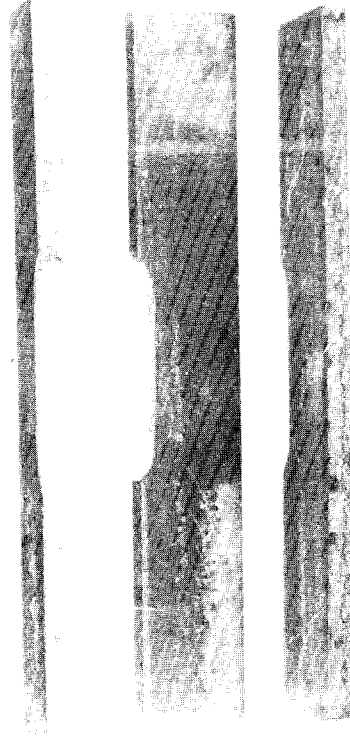
FIG. 57 - TRANSITION TEMPERATURE RANGE, 3-INCH WIDE TENSILE SPECIMENS





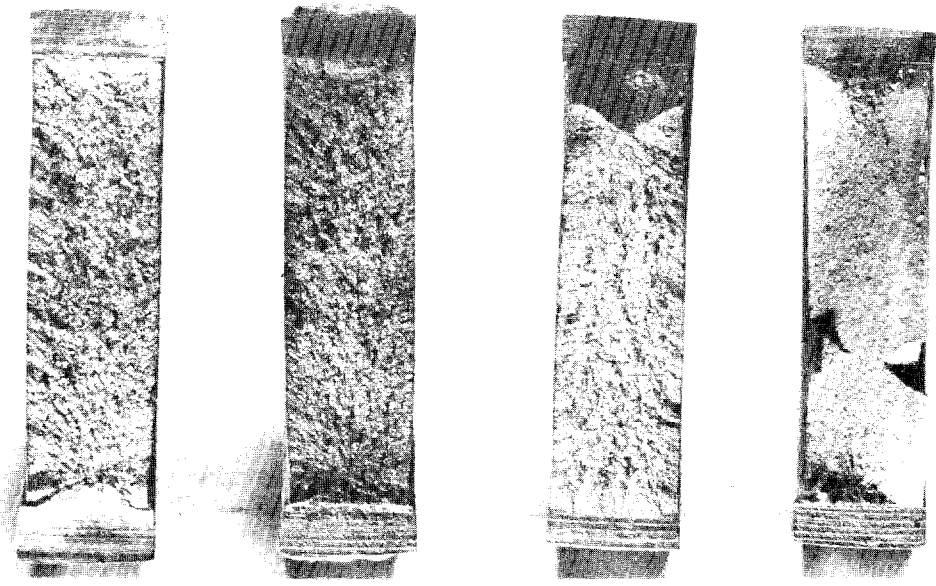
PLAIN BAR

EDGE NOTCHED BAR



SHEARED EDGE BAR

FIG 58 EDGE NOTCHED SPECIMENS, 3-INCH WIDE, SHOWING THE THREE TYPES OF BARS USED IN TESTS



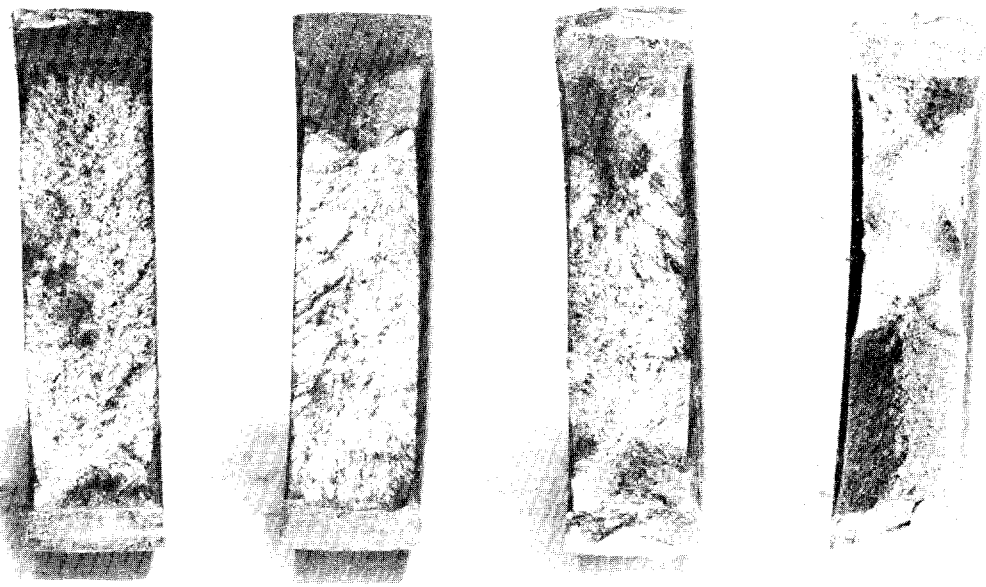
TEMPERATURE, °F -15°
% SHEAR 3%

30°
2%

51°
10%

72°
97%

A-STEEL



TEMPERATURE, °F -19°
% SHEAR 6%

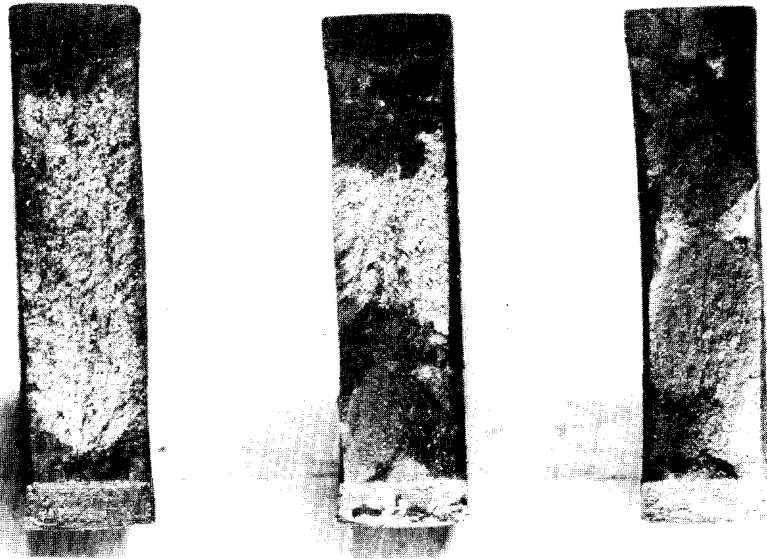
6°
16%

22°
39%

39°
100%

Bar-STEEL

FIG.59 EDGE NOTCHED SPECIMENS, 3-INCH WIDE, $\frac{3}{4}$ -INCH THICK, SHOWING EFFECT OF TEMPERATURE ON TYPE OF FRACTURE



TEMPERATURE, °F	-16°	-1°	40°
% SHEAR	13%	31%	94%

Bn-STEEL



TEMPERATURE, °F	34°	49°	75°	87°	96°	106°
% SHEAR	2%	3%	4%	6%	36%	98%

C-STEEL

FIG. 60 EDGE NOTCHED SPECIMENS, 3-INCH WIDE, $\frac{3}{4}$ -INCH THICK
 SHOWING EFFECT OF TEMPERATURE ON TYPE OF
 FRACTURE