

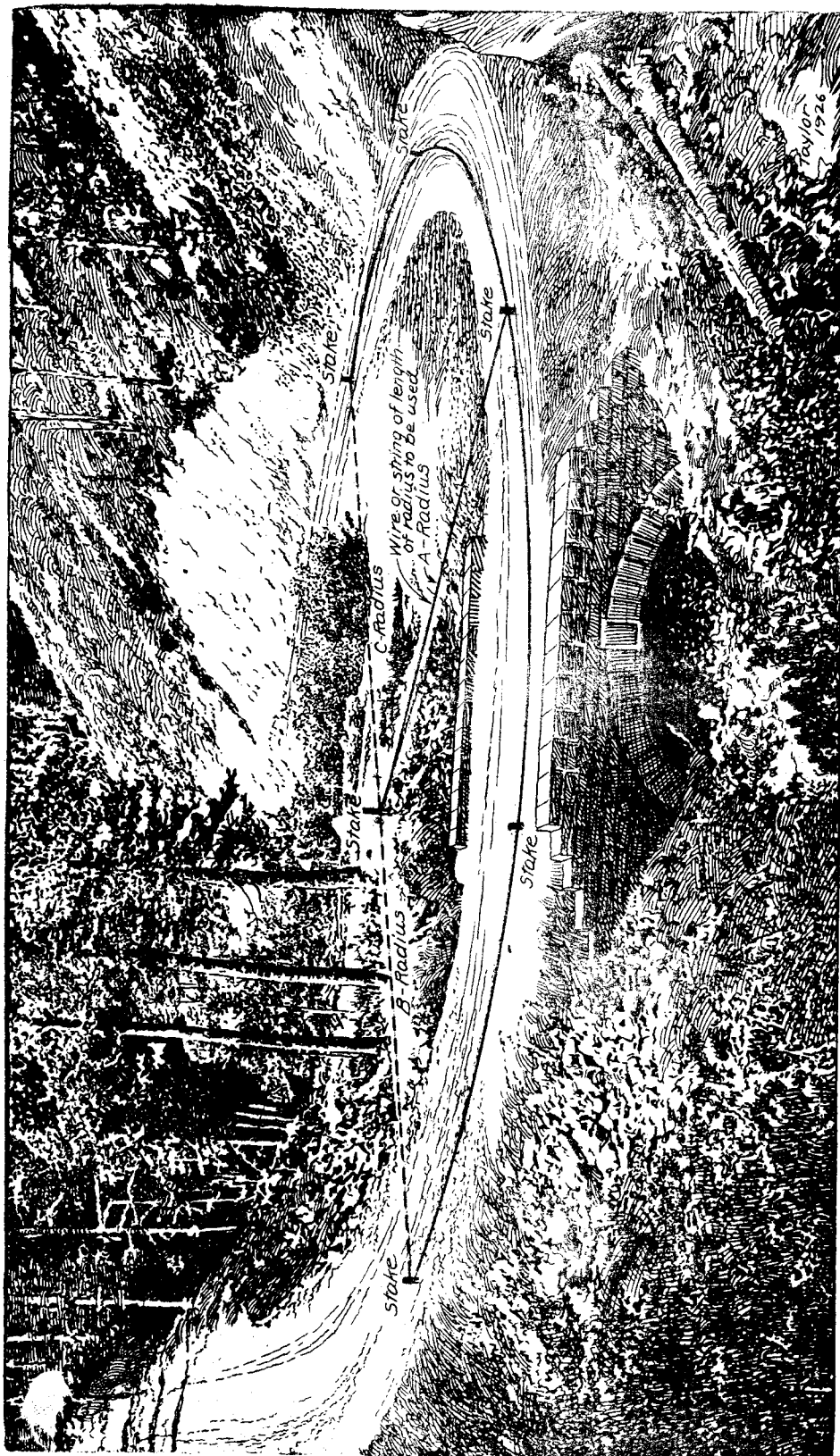
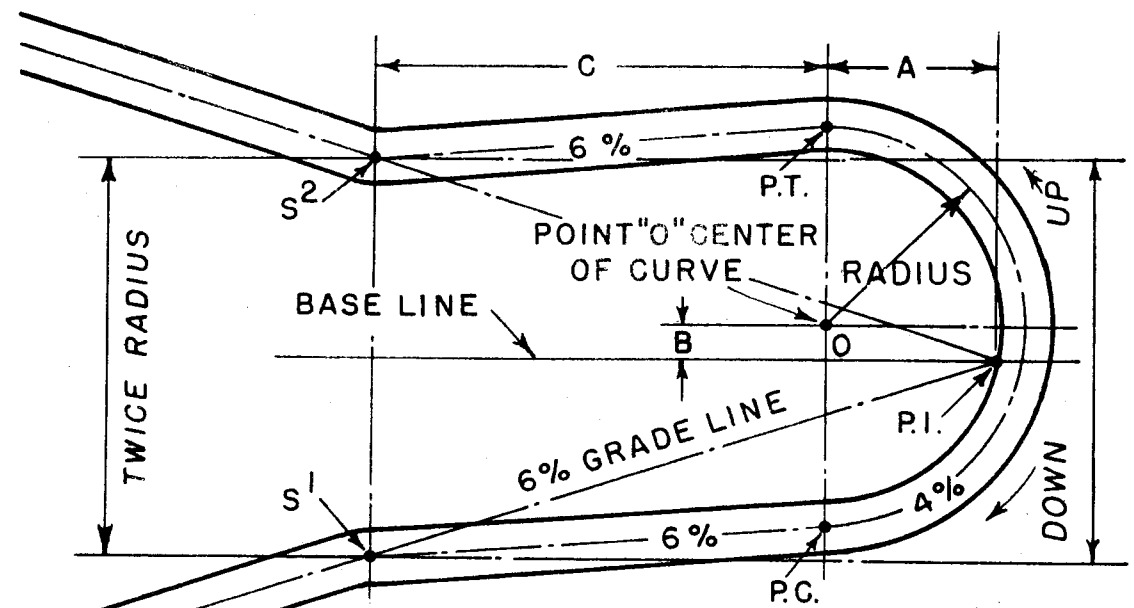


FIG. 300. METHOD OF LAYING OUT A CURVE WITH A TAPE OR STRING



PLAN OF SWITCHBACK
TANGENT 6% AND CURVE 4% GRADES
CUT BANKS $\frac{3}{4}:1$ FILL SLOPE $1\frac{1}{2}:1$

FIG. 308. METHOD AND TABLE FOR STAKING OUT SWITCHBACKS WITH 10% MORE CUT THAN FILL

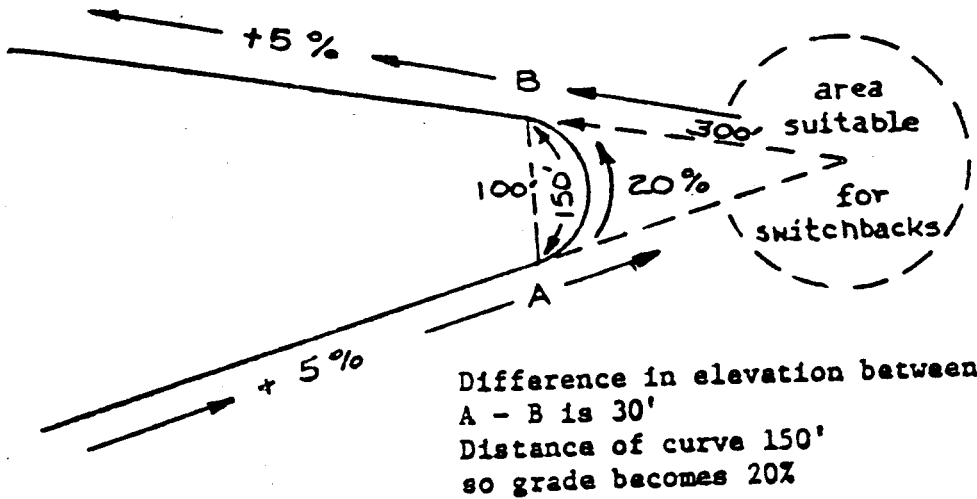
40-foot Radius Curve				
Ground slope	A	B	C	
%				
10	28.4	2.0	25.0	
15	33.1	3.0	58.3	
20	35.4	4.3	91.6	
25	37.0	5.5	125.0	
30	37.7	6.7	158.3	
35	38.0	7.8	191.6	
40	38.4	8.8	225.0	

50-foot Radius Curve				
Ground slope	A	B	C	
%				
10	35.5	2.7	31.3	
15	41.4	4.3	72.9	
20	44.3	5.7	114.5	
25	46.3	7.0	156.3	
30	47.1	8.2	197.9	
35	47.5	9.4	239.5	
40	48.0	10.4	281.3	

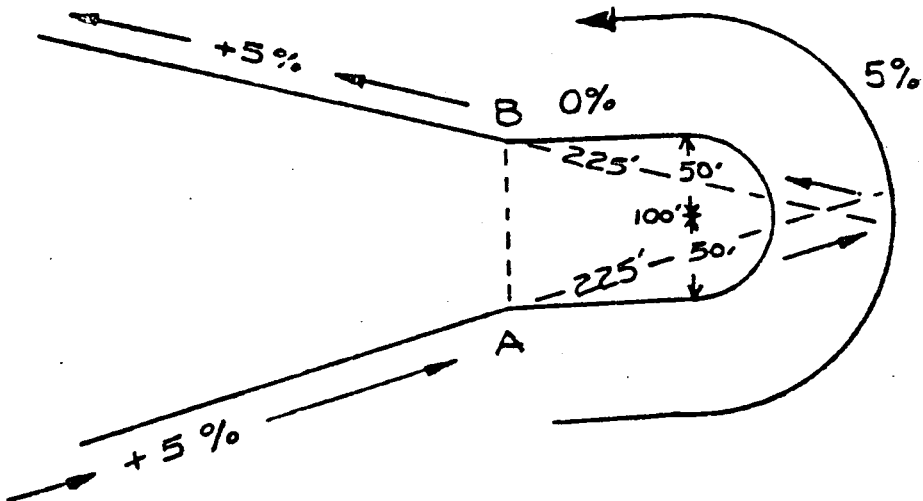
60-foot Radius Curve				
Ground slope	A	B	C	
%				
10	42.6	3.5	37.5	
15	49.7	5.5	87.5	
20	53.1	7.1	137.4	
25	55.5	8.5	187.5	
30	56.5	9.8	237.5	

80-foot Radius Curve				
Ground slope	A	B	C	
%				
10	56.8	5.0	50.0	
15	66.2	8.0	116.7	
20	70.8	10.0	183.3	
25	74.0	11.7	250.0	
30	75.4	13.0	316.7	

SWITCHBACKS

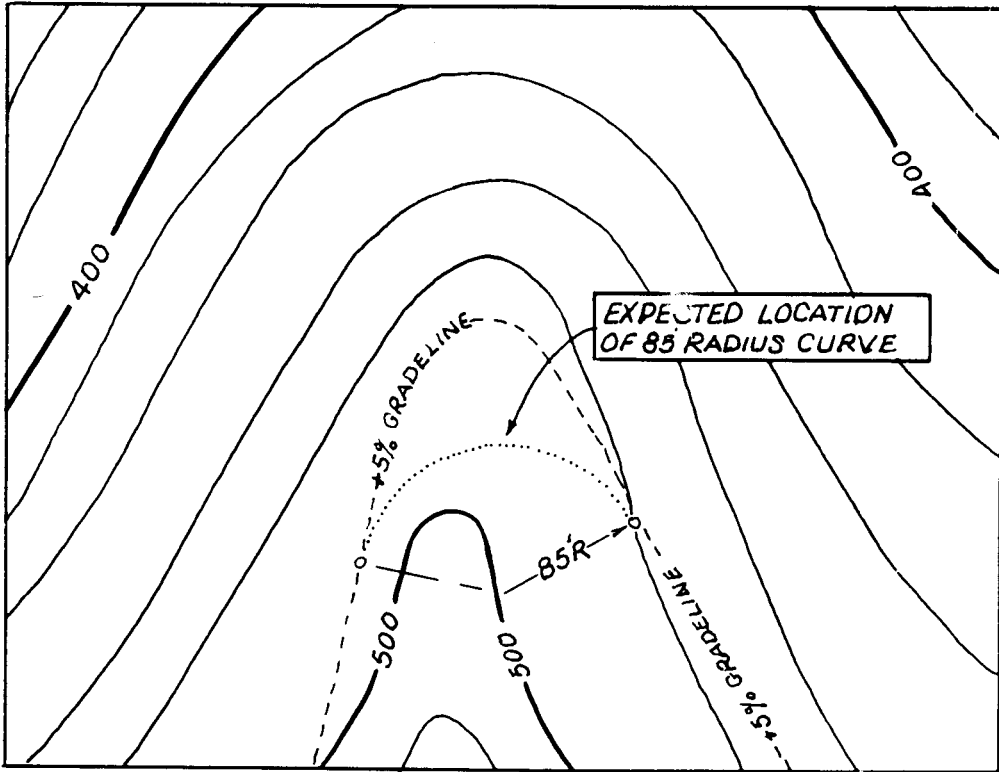


WRONG

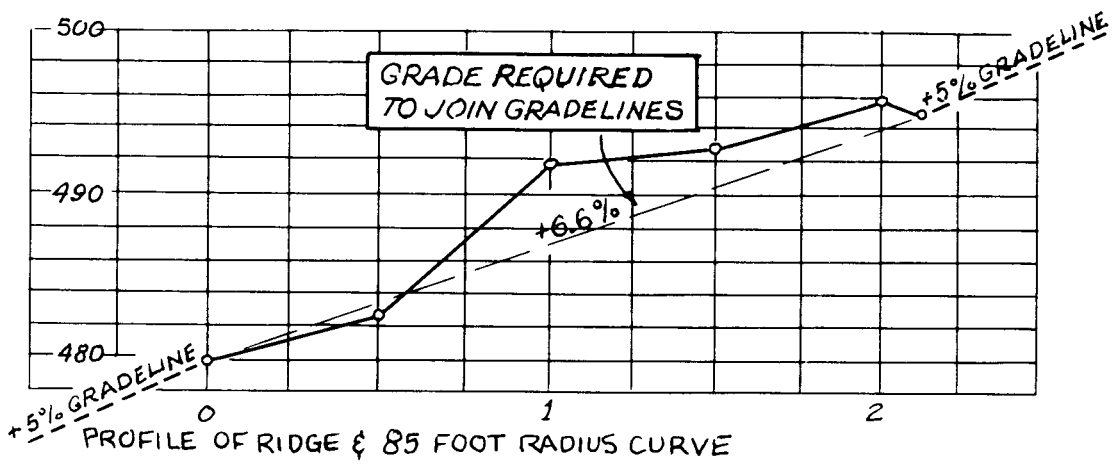


RIGHT

Difference in elevation between A-B is still 30 feet. Maximum curve is 50' Radius, giving a curve length of 150 feet. 150 feet on a 5% grade makes a difference in elevation of 7 1/2 ft.



PLAN VIEW OF GRADELINES & RIDGE



PROFILE OF RIDGE & 85 FOOT RADIUS CURVE

FIGURE 9. Improper Gradeline Location Around Ridge