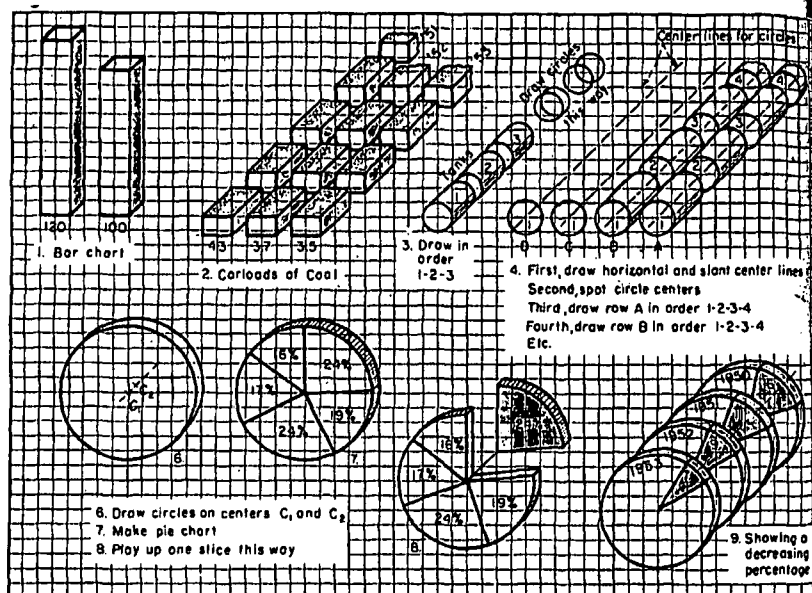




HEADWORK

PHIL SWAIN BRINGS ENGINEERING
THEORY DOWN TO EARTH



Easy Sketching System-12

► HERE ARE some more ways to put life into dull engineering reports.

Fig. 2 shows how to drive home the fact that you have been saving coal. Chart shows you burned 4.3 carloads (per month, week or day) in 1951, cut this to 3.7 cars in 1952, and 3.5 cars in 1953. Note that the front cars partly hide those behind, also right-side cars partly hide those at the left. So, to save erasing, draw the right-hand front car first. Then work back in that row. Next, draw the 1952 row, again starting with

the front car and then working back.

The same idea holds for the oil tanks in Fig. 3 and 4. Drawing tanks in the indicated order will save a lot of erasing of hidden parts. The tanks are drawn so the ends, which face you, are simple circles. Depending on the size of your plant, each tank may represent an actual tank car of fuel oil, or any other convenient unit—say 1000 or 10,000 gal.

You've often seen "pie" charts showing how 100% is divided up among several uses. To draw such a pie chart

in three dimensions: first (Fig. 6), spot centers C_1 and C_2 for near and far face of disk. Next (Fig. 7), complete the near face as for a conventional pie chart. Then draw the indicated edge lines.

Fig. 8 shows how to dramatize any particular segment when you want to call attention to it. For the best effect, arrange the chart so this segment is in upper right-hand corner, as shown.

Fig. 9 drives home your accomplishment in cutting down a certain cost over a 4-year period. More next month.



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