allow for the difference in heat value of the two coals. For example, the test at Chatham was made on coal which ran only 12,750 heat units per pound and showed a net result without making any allowance for the difference in fuels of 1 and 18 one-hundreths of a pound per brake horse power hour. After making the corrections, however, the actual showing in Chatham was 92 one-hundreths of a pound of coal per brake horse power hour.

The average steam engine coal consumption will run from 3 1-2 to 7 pounds of coal per H.P. hour, or 3 1-2 to 7 times as much coal in order to produce a corresponding horse power output.

It, therefore, resolves itself to fuel cost, as compared with steam engines, and total cost of power as compared with current purchased from the outside. As against steam engines it is safe to say that the Hornsby-Stockport suction gas engine in units from 10 to 500 H.P. each, or of pressure producer type up to 2,000 H.P. each, can produce power, including all operating costs and fixed charges, for 50 per cent. less than the best steam engine practice and from 25 to 50 per cent. less than for current purchased from the outside.