

PIPED COAL TO BOOST OUTPUT

Coal today is Britain's greatest problem, and with output still below our needs, a new way to tackle poor seams and opencast deposits makes news. Instead of destroying the fertile surface ground, the idea is to turn the coal into gas on the spot and pipe it off. Fuel Ministry officials watched the demonstration, and results justify further tests.

Boring locates the seam and the holes, in turn, form part of the process. Shallow seams are expensive and hard to work by ordinary methods. With the seam located, a horizontal hole is then bored till it reaches the vertical bore. We're now ready to start operations. This horizontal bore - here in the diagram - becomes an air-intake and the vertical bore is where coal seam is ignited. The generated gases then travel via a check-station, by temporary piping to the factories. Through the bore-hole a thermite incendiary bomb is lowered and fired to set the coal alight.

To check the quality of gas produced a sample-pipe is fixed. Here at Newman Spinney - between Chesterfield and Sheffield - Mr. Alfred Robens, fired the charge and this is what happened. The bomb lights the coal. Air is pumped in and forces out the gas. With the coal alight, the vent is sealed. As there's no surface disturbance, the farmer can go on cropping as usual.

When one seam is worked out, plant and pipes can be easily moved to the next. A close check is kept on quality, which so far is a little low. Gasification of coal can bring cheaper costs to steel works. After steel is manufactured, processing is done with gas furnaces, whether it be a small part or (as here) a huge high-pressure boiler. Gasification is still under test, but the prospects certainly look good.