

8 BRITISH COAL INDUSTRY

Thus originated the office of fireman, examiner, or deputy, which exists to-day in full force as we shall see; only to-day the circumstances of the duty have entirely changed and the fireman, instead of being a man who for a pittance is prepared to face death day by day, is now the holder of a position superior to that of the collier, a position of responsibility and of some authority, and one upon whom to no small extent depends the safety of the men at the face.¹

Once, however, the difficulties connected with deep shaft sinking and drainage had been partially overcome, the greater depth and extent of mines rendered the danger of explosions much greater, and the early years of the eighteenth century were marked by two disasters of considerable magnitude, one at Fat Field, Chester-le-Street, killing no fewer than sixty-nine persons. This pit was 57 fathoms deep, i.e. 342 ft.—an exceptional depth in those days—yet two men and one woman were blown from the bottom up the shaft and a considerable distance into the air.

Fire-damp and other noxious gases have presented and still present some of the most difficult problems which the mining engineer has to face. The main weapon against them is ventilation, though in late years dusting has been found a cure for certain types of explosions. Ventilation there-

¹ i.e. the place where the coal is being got—the coal-face. Mine labour is roughly divisible into three parts: (1) Those employed at the face; (2) those employed on the roads (underground); (3) those employed on the surface.