Non-fatal (Serious) Accidents.

7th May, 1907.—David Wilson, twenty-seven, trucker, Castle Hill Colliery, Kaitangata: Fracture of right leg; struck by runaway box on the stone drive.

16th May, 1907.—Alexander Robertson, miner, Castle Hill Colliery, Kaitangata: Fracture of skull, by winch-handle reversing while winding a box of coal at top of No. 7 dip.

7th June, 1907.—Donald McMillan, miner, Nightcaps Colliery, Nightcaps: Burns of face, breast, and arms, by accidental ignition of blasting-powder in cannister.

1st July, 1907.—James Fibbes, roadsman, Kaitangata Colliery, Kaitangata: Injury to spine, jammed by runaway rake of boxes.

5th December, 1907.—Andrew Harris, jun., trucker, Woolshed Creek Colliery, Mount Somers: Crushed leg between trucks, necessitating amputation at the thigh.

I have, &c.,
E. R. GREEN,
Inspector of Mines.

APPENDIX B.

PAPERS SET AT THE 1907 MINE MANAGERS' EXAMINATION.

EXAMINATION OF CANDIDATES FOR FIRST-CLASS CERTIFICATES OF COMPETENCY AS MINING MANAGERS.

SUBJECT 1.—PROSPECTING, SHAFT-SINKING, TUNNELLING, AND OPENING OUT A COLLIERY.

1. State conditions by which you would be guided in deciding the position of a pair of shafts required to be sunk for the development of a new coalfield, stating—
(*a.*) The position of the shafts in relation to each other;
(*b.*) The position in relation to the boundaries of the lease if seam lying horizontal; and
(*c.*) If lying at an angle of 17° from the horizontal.
And, assuming the depth of shafts to be 1,000 ft., what size should the winding-shaft be to enable 1,000 tons to be raised in 8 hours from a seam 8 ft. thick, with tubs carrying 11 cwt.?

2. Describe and show by sketches how you would proceed to sink a shaft from the surface to the stone head 100 ft. through very loose ground, with water 500 gallons per minute. Describe the pumps you would use and mode of application, and the means you would adopt to dam the surface water back after reaching the stone head.

3. State the conditions under which it would, in your opinion, be imperative to drive the winning-places in a new colliery right to the boundaries before opening out the workings; and under such conditions, assuming the main seam to be 10 ft. thick and a seam underlying 5 ft. thick, with only 20 ft. of rock between the seams, how would you arrange the working-places in the respective seams so as to permit of their being worked at the same time? Say in which of the seams you would first work the pillars, and give sectional sketch of such workings.

SUBJECT 2.—WORKING COAL AND TIMBERING UNDERGROUND.

1. Sketch a highly inclined seam of coal, and show how you would timber same, the roof being tender, and show how the sets of timber should be secured so that if one were knocked out others would not be affected. Show by sketches the various systems of timbering in use in collieries, and describe the best appliance with which you are acquainted (and means of using it) for driving a heading in hard coal where the use of explosives is not permitted.

2. Enumerate the varying conditions which should, in your opinion, be considered in deciding the mode of working a coalfield, and state the most advantageous conditions for working coal by the longwall method, giving your own experience of the working of coal under this method.

3. When deciding the size of pillars required for the support of a colliery-shaft, state to what extent you would be influenced by the thickness of the seam, the depth from the surface, and the inclination of the strata. Give an example showing the size of shaft-pillars, choosing your own data as to depth and other conditions.

4. Give a short description of any branch of coal-mining, or any special feature connected with same, of which you have made special study, and which you think is of special or important interest to the industry. The subject may be either practical or theoretical, but the work must show special study.