no one but a man of 22 years of age or over may be in charge of machinery used to hoist persons, and he must have a medical certificate renewed every six months to the effect that he is physically and mentally fitted to perform his duties. Hoists for moving material may, however, be operated by a person 16 years of age. In the coal mines of Nova Scotia machinery used for conveying persons must be in control of a man 21 years of age or over who holds at least a third-class certificate as a stationary engineer. The Metalliferous Mines Act of this Province fixes 18 years as the minimum age for operators of any machinery used for moving persons. The Ontario law provides that no one under 20 years of age and no person who has not had at least one month's experience may have charge of any machinery used for moving persons, but a lad of 18 years may operate an engine for hoisting material. All operators must, however, be physically and mentally fit for their work. Twenty years is also the minimum age fixed in Quebec for employees in charge of a hoist used to convey persons in a mine.

Hours of Labour.

The Territory of the Yukon and all the Canadian provinces except Manitoba and Saskatchewan have limited hours of labour for some or all classes of mine employees. The Yukon has adopted the 8-hour day and the 48-hour week for workers under 16 years of age, while Quebec has fixed the same limit for those under 17 years. Nova Scotia allows employees under 16 years to work 10 hours a day and 54 per week in both coal and metalliferous mines. A week in all cases means the six days from midnight on Saturday until

midnight on the following Saturday.

The 8-hour day and 48-hour week for certain adult workmen in mines is enforced by law in Alberta, British Columbia and Ontario. In Alberta it applies to all underground workers and in British Columbia to all workers, both above and below ground, except persons employed in the office, boarding house or bunk house of the mine. In Ontario it governs all underground workers, (except shift bosses, pumpmen, cagetenders, hoistmen, persons engaged solely in surveying or measuring, and workers in a mine where the number of persons working in a shift does not exceed six), in districts that are without county organization, which includes nearly all those parts of Ontario where mining is carried on.

In Ontario the 8 hours must be reckoned from the time the workman arrives at his place of work in the mine to the time he leaves it. In coal and metalliferous mines in British Columbia and in Alberta the period between the time a workman leaves the surface and the time he returns must not exceed 8 hours. In Alberta, it is provided that the time for the raising and lowering of each shift must be arranged by the owner, agent of manager of the mine in such a manner that every workman shall have an opportunity to return to the surface in the specified time. A conspicuous notice of the time so fixed must be posted at the pit head and all arrangements made for the observance of the schedule. The time allowed for the raising and lowering of each shift must not exceed what is reasonably required and must be approved by the Chief Inspector. The owner, agent or manager of a mine must appoint one or more persons to direct at the pit head the raising or lowering of workmen, and a book must be kept in which is entered the time of such raising and lowering, and any cases in which a workman is below

ground for a longer time than is allowed by law, and the cause of his remaining under ground. The workmen may, at their own expense, station one or more persons at the pit head to observe the times of raising and lowering the workmen, and such persons are to be appointed in the same manner as the check weigher and bear the same relations to the owner, agent or manager of the mine.

In all provinces, with the exception of Quebec, overtime may be worked in case of accident or emergency. Nova Scotia and the Yukon, where, as in Quebec, the legal limitation applies to boys only, recognize no other grounds on which longer hours are permissible. In Ontario a Saturday shift may work more than 8 hours for the purpose of avoiding work on Sunday, or for changing shift at the end of the week, or to give any of the men a part holiday or to make necessary repairs. In the event of any grave economic disturbance the Lieutenant-Governor in Council may suspend the 8hour law for such time as he deems advisable. The Mines Act of Alberta contains a similar provision. This province allows a repairing shift for the purpose of avoiding Sunday labour to commence their work period on Saturday before 24 hours have elapsed since the commencement of their last period, provided that at least 8 hours have passed since its termination. A workman may also remain below ground for more than 8 hours if any exceptional work requires to be done without interruption, in order to avoid serious interference with the ordinary work of the mine. The British Columbia Coal Mines Act provides that where more than two shifts are worked, the outsetter, bottomer or cager, pumpmen, stablemen and engineers in charge of constantly running machinery other than that directly used for the mining of coal at the face, and the fire boss or shift boss in charge, may be relieved at the place of duty, but in no case may any person remain underground for more than 81/2 hours except when extra hours are necessitated by the weekly change of shift where more than two shifts are worked. A pumpman or engineer in charge of constantly running machinery may also be below ground for more than 8 hours to deal with anything which requires immediate attention, and which, if neglected, might necessitate the closing of the mine. The overman or manager may enter the mine at any time and remain there in the discharge of his duties. The Metalliferous Mines Act of British Columbia allows overtime in case of accident or emergency only.

Wages.

The mining laws of Ontario and Alberta direct the semi-monthly payment of wages, and in British Columbia the Semi-monthly Payment of Wages Act applies to all mines, while the Mineral Survey and Development Act of 1917 makes provision for this method of payment of workmen on mining properties under bond or option. In Nova Scotia all wages except those fixed at a regular monthly rate must be paid weekly in all mines to which the Coal Mines Regulation Act applies. The other provinces make no rulings on this subject.

The Truck Act of British Columbia and the Coal Mines Regulation Act of Nova Scotia direct all wages to be paid in currency, but there are no rules to this

effect in the other provinces.

The Coal Mines Regulation Act of Nova Scotia and British Columbia, and the Mines Act of Alberta provide that where the wages of miners depend on the amount