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and the men should never be allowed to go down or come up in the ore buckets. These ladders should be placed in a favorable spot and as far as possible where they cannot be reached by pieces of rocks projected by the explosions. The ladders should be kept in the best order and clear of snow and ice in winter. It is astonishing to see in what bad order sometimes the ladders are kept. It would seem as if the miners believed that these may be neglected as they are only an accessory of the mine. It is to be hoped that some effort will be made to improve this state of things so that one may be able to descend into the mines by means of safe ladders.

As regards mines worked by shafts and at a great depth, the chief sources of accident in moving workmen are the insufficiency of the signals between the bottom and the surface and the breaking of the suspension cables and guiding ropes. It is absolutely necessary to have frequent inspections of this equipment made by men of unquestionable competency and on the other hand it is essential that the engineer should be able from his post to see the exact position of the cage at any moment by consulting an indicating dial.

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