The Influence of Alcohol on Physical Efficiency.

The effect of alcohol on physical efficiency has been investigated by a number of different methods, many of them involving the use of elaborate scientific apparatus, but for the most part I shall confine myself to describing the results obtained in comparatively simple muscular movements with which everyone is conversant. The most obvious of these is walking, and an exact series of experiments on the speed of walking and climbing was made by Professor Durig,* of Vienna. Durig walked regularly for a month up a slight incline followed by a climb up a steep ascent to the summit of the Bilken Pass, and after he had got into training he found that he took 50 minutes over the slight incline, and 2 hours 40 minutes over the steep ascent. He then made a number of observations, in which he took the moderate dose of alcohol (30 c.c.) above mentioned. He drank it, diluted with 6 ozs of water, along with his early morning tea and a scrap of bread. It produced no subjective sensations or disinclination to climb; yet Durig found that the slight incline took him 60 minutes instead of the previous 50, and the steep ascent 3 hours 5 minutes instead of the previous 2 hours 40 minutes. Not only was his speed diminished by the alcohol, but Durig found, from observations made with an apparatus carried on his back, that he expended 9 per cent. more bodily energy over the work. He was inclined to attribute his deterioration in performance to the lack of skill with which he directed his movements, and he felt as

* Durig, *Pflüger's Archiv*, vol. cxiii., p. 341, 1906.