

and perhaps surpass us as a great manufacturing and commercial nation. For, no matter what the department of human knowledge, what the investigations which the soaring mind of man feels called upon to enter, there you will find the German thinker, the German scientist, the German seeker after the truths of nature, and he has to be reckoned with.

Now, you cannot have this result without an adequate cause. If there be anything which your studies in this school will teach you, it is that for every effect there exists an efficient cause, nothing of mere chance or guesswork, and that it is your main business to discover this and connect the one with the other. Now, the efficient cause for all I have been saying about Germany is her schools.

But the great empire of Germany is not our only rival. We have only to go across her southern boundary, and there we shall find, nestled in the security of the everlasting Alps, a nation small in numbers, not larger in population than Lancashire and not greater in wealth, to which education has been the all in all. No sacrifice has been too great to equip her sons with knowledge. Her polytechnic ranks with the most famous in the world, and her land, barren of minerals, shut out from the sea, has nevertheless become a busy hive of exporting industry, of which there is no feature more remarkable than the young highly-educated Swiss who swarm in every commercial centre of Europe.

Would that we had the wisdom and fervor to say, as did a Swiss official, "Our land is steeped in poverty, we will take good care it is not steeped in ignorance also." What Switzerland is to day is but an augury of what she will be here-

after. Her unrivalled water power, which, unlike our coal, cannot be exported or exhausted, which will last as long as her hills endure, will, linked with the giant electricity, place her in the front rank of industrial nations and in respect of certain chemical products give her an unquestioned superiority.

Why, you may ask, have I travelled so far afield? Simply that I may stir your minds and quicken your thoughts to consider the business you have in hand.

This is not a place "for boys to play, but for men to work." You have to put on one side "childish things" and set your faces to the business of your lives. If you are not serious in your aims, if you are here only because you are sent, you had better put on your caps at the close of this address and frankly say, "We have no business here." Why otherwise should you waste your own time, or the time of your comrades, or, more than all, that of the men, who, at the community's great expense, are placed here to guide and aid you to the achievement of an honorable living? We want no loafers; we want no young men who by their evil example, by their idleness, by their want of loyalty to the school, by their indifference to their own well-being, place difficulties in the way and prevent the school from accomplishing its work. Better a dozen students willing and able to work than 500 who make little or no response to the teacher's efforts. "We count time by heart beats, not by minutes on a dial." What folly will be all that splendid school in Sackville street, concerning which Manchester citizens are beginning to express themselves with justifiable pride, the costly equipment and the accomplished teaching staff, if the students within its walls are blind and deaf