

of war and give our best to the volunteer, so we should see that our best of support, or respect, and consideration, is given to the men who will seclude themselves in the laboratory and will give up the pleasures of gaiety or even of general culture. To secure the safety of the country, the soldier is honored on his return from the war, so the experimenter who overcomes ignorance and inefficiency should be crowned with laurels by his country.

4. "Laborare est orare" is an old motto, and so, when we see the high ideals of a Newton, a Kepler, a Clerk Maxwell or an Agassiz, worked out into discovery we regard their research as high work—a moral exploit. In short, the persistent, honest, self-denying work of the earnest seeker after truth is surely a high virtue.

THE MEANS.

If then Research is all this, how are we to secure it to our Country?

1. If it is a national asset and a benefit to all the people, then it is a fit subject for Government assistance. Probably the hundreds of brilliant Canadians who have gone abroad and are in the service of foreign nations could all have been saved to Canadian education and Canadian manufacture by judicious Government action. If during our rising entrance upon manufacturing in Canada which has been very remarkable in the last forty years, the Government had understood and taken action, the result would be very different.

The total for additional Government grants to Universities and other high-class institutions (chiefly for Science) in the British Empire for 1910 was about six and a half millions of dollars. All that I find included in this from the Dominion Government is for Experimental Farms, \$87,500. Of large sums voted for the Universities and Technical Schools in Germany for general purposes, it is well known that a great portion of this is voted by the States in order that advanced Technical Education may be given. Even little Switzerland, among the clouds, is so practical that a Swiss professor remarked to me:—"When we want a new professor in our Universities and Technical Schools, we choose him first on the basis of his being able to carry on Research, and after that on account of his power to teach." The Federal Government of Switzerland, while allowing the Cantons to carry on and pay entirely for the Universities and subordinate schools, keeps up at its own expense the only Technical School of University rank in Switzerland, and it does this in a most generous way. In Holland, while the Universities are left to manage general culture, in the old town of Delft the most magnificent of Technical Schools is found. It carries on every variety of Industrial Research and is maintained entirely by the General Government.