

son. As medical men, we should value the inestimable privileges conferred upon us by the State, and manifest our gratitude by, not only respecting our special laws, but also by uniting to make them more effective for the accomplishment of the good and worthy ends for which they were enacted.

The fact that here and there a quack may be found plying his vocation, is but a weak argument against our laws. The man who so contravenes the law is a law-breaker, and his vocation is thereby made so odious that but few will follow his example. \* A few more short years and the quack will for ever disappear.

The people, even more than medical men, are interested in this question. It is appalling to think of the amount of suffering, physical and mental, daily superinduced or prolonged by the hundreds of quacks who prey on the sick and suffering in the state of Michigan alone. I will give one illustration. A medical friend asked me to ride with him to see an elderly lady said to be suffering from ovarian tumor. We found her in bed. She stated that she had suffered for eight years, from what the seven or eight physicians whom she had consulted in that time, called ovarian tumor. She informed us she had been recently treated by two physicians, one of them from a city some fifteen miles distant. They told her that an operation would be necessary—of course they had no idea of operating, that was a mere blind,—and that in any event her case was extremely doubtful. After listening to this history, we proceeded to take the dimensions of the tumor, but a most diligent search failed to reveal either its size or location. In short, there was no tumor at all, nor had there ever been. The woman suffered from chronic congestion of the kidneys, and was speedily relieved by suitable treatment. Who can estimate the amount of mental suffering endured by this woman during the long eight years she believed herself to be the victim of an incurable and fatal disease? This is the unhappy condition of a people enjoying, what some amongst us would call, the blessing of free trade in medicine.

Every where, I found that Canadian graduates are held in high esteem, their superiority being freely acknowledged. As a consequence, all worthy Canadian practitioners locating there, are in immediate demand, and soon find themselves in re-

munerative employment. The compliment thus paid to Canadian talent and Canadian institutions, was to me a source of much pride and gratification. Canadian practitioners are to be found all over the State, and there is room for hundreds more. Most of the medical talent of the State is concentrated in the larger centres of population, while pleasant villages and beautiful country places are left the almost undisputed preserves of the charlatans.

OBSERVER.

October 13th, 1877.

### Selected Articles.

#### THE DOCTRINE OF CONTAGIUM VIVUM AND ITS APPLICATIONS TO MEDICINE.\*

GENTLEMEN,—The notion that contagious diseases are produced by minute organisms has prevailed in a vague way from a remote age; but it is only within the last twenty years—since the publication of Pasteur's researches on fermentation and putrefaction—that it has assumed the position of a serious pathological doctrine. In the last decade startling discoveries of organisms in the blood have given this doctrine the support of actual observation; and its application as a guide in the treatment of wounds by Professor Lister has made it a subject of universal interest to medical practitioners.

The resemblance between a contagious fever and the action of yeast in fermentation—or the action of bacteria in decomposition—is in many points so striking that it is difficult to avoid the impression that there is some real analogy between them. If, for example, we compare the action of yeast with the small-pox, this resemblance comes out very distinctly, as the following experiment will show. I filled two pint bottles, A and B with fresh saccharine urine, and inserted a delicate thermometer in each. A was inoculated, with a minute quantity of yeast, but nothing was added to B. Both bottles were then placed in a warm place in my room, at a temperature of about 70° Fahr. In order to get a correct standard of temperature for comparison, I placed beside these a third bottle, C, filled with water, and inserted a delicate thermometer in it. All these bottles were carefully swathed in cotton-wadding, for the purpose of isolating their individual temperatures, and to obviate as much as possible the disturbing effects of the varying tempera-

\*Address in Medicine by W. Roberts, M. D., F. R. S. Manchester, delivered at the British Medical Association August 9th.