

Eighty-three of the children were weighed, and the average was seven pounds and a half; only four of that number weighed twelve pounds each.

Malformation was observed in only two of them, one had spina bifida, and the other was anencephalous and survived nearly an hour; it was at the full term, and otherwise well formed.

The longest umbilical cord was thirty, and the shortest six, inches.

Only five children were still-born, being in the proportion of one in seventy-five births.

Montreal, January 25, 1847.

#### REMARKS ON DR. MACDONNELL'S PAPER ON THE USE OF THE MICROSCOPE.

To the Editors of the *B. A. J. of Medical and Physical Science*.

Gentlemen,—I received the enclosed communication from Dr. — some days ago, but disliking to place it before the public through the medium of the daily journals, I desire to know whether you will insert it as it stands, in your next number.

I remain, &c.,

F. T. C. ARNOLD, M. D.,  
58, Craig Street.

Montreal, Jan. 7, 1847.

The October number of the *British American Journal*, having but very recently reached me, I apprehend, that any observations which I may have to offer on Dr. Macdonnell's article upon the use of microscopes, will seem, at the present time, rather out of place: but laying aside this considerations, *bongré malgré*, I deem the exalted and self-sufficient tone which that gentleman has assumed, in reference to illuminating various operations of nature, and to explain certain properties of matter through the microscope, ought not to remain entirely unnoticed.

On a subject of so much importance as one which also treats upon the means of discovering the hitherto concealed causes of those morbid actions or excitements which disturb the animal economy, from its normal operations, the author, in my humble opinion, should court the practical investigation of his professional brethren in terms less intemperate, and less dogmatical than those he seems to have adopted in his communication.

I am ignorant of what is meant by the pretended value of his information not being intended to such scoffers of science.

I may class myself among those against whom so offensive an insinuation cannot be applied, but I must confess to be one who entertains strong doubts as to the success and benefits the learned experimentalist

promises to result from the use of the microscope in the elucidation of many departments of practical medicine. I hold it no inconsiderable step in favour of science, to bring ourselves to doubt of the reality of some facts advanced for truth, without any reference whatever to the celebrity of names: nay, it is to doubt, that innumerable medical errors have not been permitted to travel down to us, from time out of mind, as matters of unquestionable veracity: and it is to a rigid and impartial investigation, that many of the facts that are ushered into the world, lose their importance,

We cannot all with the same electrical rapidity as the learned doctor, penetrate at once into a *new Theory of Physics*, however simple its principles, without dissipating many clouds, and bringing to our examination the clearest and steadiest rays of the light of science and experiment. Experience, indeed, has taught many of us, that discoveries founded on novel principles and experiments, and bolstered by strong professions of success, have often disappointed the expectations built upon them; and the hope of something solid and useful as well as new, has been puzzled by the vanishing tenuity of the thread of reasoning which has been drawn out beyond the staple of the argument, till apparent axioms have sunk into postulates, and these have dwindled away into hypotheses, rather darkened by variously interlaced inductive reasonings; and in the end, Ixion-like, we embraced a cloud, or like the sage of old, terminated our labour with the no feigned cry of "all this is vanity and vexation of spirit."

It is not my intention to interpose any doubts which I entertain from practical results, to the success assumed by Dr. Macdonnell on the application of the microscope, in ascertaining the properties of matter in certain diseased actions of the animal economy, but merely to content myself with submitting such sources of information upon the subject as cannot fail to be regarded as the highest in the scientific world: I allude to the Royal Society of London; and than which, no society's transactions, contain richer and almost unrivalled treasures of facts and discoveries in every branch of demonstrative and experimental knowledge, and are more constantly referred to, as the highest and most satisfactory authority by all writers on subjects connected with the arts and sciences.

I shall now offer a short abstract of Mr. Lister's paper on the compound achromatic microscope of Mr. William Tully. Mr. Lister enters into a searching review of the comparative merits of various microscopes constructed by Cuthbert and Dolland in England, and by Chevallier, Selliqué, Amici, Utschneider and Franhope on the Continent—but the author speaks with much