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## Original Communications.

ADDRESS DELIVERED BEFORE THE  
BATHURST AND RIDEAU MEDICAL  
ASSOCIATION.

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PRESIDENT, OTTAWA.

Gentlemen :—During the six months that have elapsed since our pleasant meeting at Pembroke, many and important facts in the various departments of medicine and surgery, have from time to time been brought under the notice of the profession, with all of which I feel satisfied the members of this medical section are fully conversant. Gatherings such as the present of scientific men tend to produce a very beneficial effect. The observations and deductions arising therefrom are freely and openly discussed, and thus a good opportunity is afforded to think out any objections which may arise, either as to the character of disease or the various methods of treatment adopted. Thus all concerned are stimulated to renewed exertion in the observation of the manifestations of disease and a systematic mental training constantly kept in operation, which in time must be productive of beneficial results. The very intellectual and scientific friction, springing out of a free interchange of ideas tend towards the spread of knowledge, and the development of vigorous intellectual activity, the pure outcome of meetings such as the present, only I trust in the incipient stage of organization. In the social sense these gatherings are of much service, thus bringing the members of our profession, more intimately in contact, and establishing a reciprocity of action, which must enlarge our ideas, make us more useful members of society, and give a stability and firmness to that very bond of good fellowship which binds us together morally, intellectually, and scientifically.

We are the members of a working and a live profession, and we have a kind Providence showering upon us the privilege of ministering to the physical imperfections and diseased manifestations of human nature. In that mission we have a noble work which if carried out with thorough and determined resolution and a high sense of professional responsibility, the results must be productive of much good to the state, and the personal benefits fully equal to the most sanguine anticipations.

A short retrospect of work under careful consideration by many master minds may not be unacceptable on the present occasion. In the department of physiology, some exceedingly important facts have recently come to light. Professors Tyndall and Lister have by their untiring investigations, given such a stimulus to the whole subject of minute organisms and the ferment actions so intimately associated with these forms of life, that our knowledge of the unorganised or unformed ferments has also advanced very considerably. Ferments are divided into two classes, organised and unorganised, and are distinguished from each other as follows ;—The unorganised ferments may be dissolved in certain menstrua without any impairment of their ferment action ; thus the ferments of the animal body are mostly soluble in glycerine and in water. Also their action is not prevented by agents such as chloroform and salicylic acid, which almost immediately interfere with the action of organised ferments. The ferments of this class longest known to us, are *ptyalin*, the amylolytic ferment of the saliva ; and *pepsine*, the proteolytic ferment of the gastric juice. The fact that ptyalin is absent from the saliva of the great majority of the animal creation, causes it to dwindle down very considerably, as to its physiological importance. Pepsine however, plays a most important part chemically, as a ferment in the gastric juice, and in the presence of dilute acids, at the temperature of the body, has the power of dissolving insoluble proteids and thus converting them into bodies, called *peptones*, which have the power of diffusing readily through animal membranes, bodies which when absorbed are reconverted into the various proteids, entering into the composition of the organs and tissues of the body. From the researches of Kuhne, Bernard, and Corvisart, it is placed beyond doubt that the gastric juice is not the only alimentary secretion