anæsthetic is largely composed of alcohol, and the patients as much drunk as anæsthetized."

Dr. Arnott, of London, said: "The position taken by Dr. Macallum, that alcohol has an action analogous to chloroform, and that therefore alcohol should not be administered after chloroform, as it would be continuing the action of an anæsthetic, is a most serious statement. If this be true, then we have been acting on wrong lines and must have done immense harm by this course, not only after chloroform, but in medicine as well. A year ago I read a paper advocating the view that alcohol is not a stimulant in any dose, unless indirectly by its action in allaying nervous irritation and relieving pain. Last July Prof. Wilkes, of Guy's Hospital, opened a discussion on the subject before the British Medical Association. During the course of his remarks he incidentally said: 'Some antiquated physicians still retain the idea that alcohol is a stimulant.' In the discussion which followed the statement was not challenged. Prof. Whitla also, in his book recently published on materia medica and therapeutics, says that we will never understand the action of alcohol as long as we look upon it as a stimulant.

"With regard to which occurs first, asphyxia or heart failure, we must understand that asphyxia may occur while the patient is apparently breathing, but is really doing so insufficiently. All indications, therefore, of imperfect breathing should receive our careful and intelligent attention. This condition may go on for a length of time until we suddenly have blanching from heart failure. The *post mortem* reveals a dilated heart, clot in right heart, and blood very dark. Clinically we meet with two conditions, either lividity or blanching. Either one or both of them may occur early or late. When they occur early, the probability is that the cardiac and respiratory centres lying so close together have been paralyzed simultaneously. When they occur late, I am inclined to the opinion that asphyxia occurs first, assisting or causing the drowning of the enfeebled heart. Practically, we should in all cases secure the confidence of our patients, as cases often die from fright. This occurs when no anæsthetic has been administered at the first cut of the knife.

"We should carefully examine the blood pressure of every case, as this will often induce us to examine the urine microscopically, when we will often either discern disease of the kidneys or indications warning us of degenerations of the heart and other organs. Further, I believe that a slow or incomplete anæsthesia is always dangerous. A prolonged administration saturates the system with a large quantity of the drug, which, in case of accident, takes a long time to eliminate. Incomplete anæsthesia increases all the dangers from reflex irritation."

Dr. John Odlum, of Woodstock, asked if Dr. Macallum would invert the patient in all cases of suspended respiration. Do all patients who appear to cease breathing do so by the influence of the anæsthetic, or do some do so by force of will?

Dr. Macallum, of London, in his reply, said: "I do not object to pulling the tongue foward except when vomiting. The exciting effect of forcibly pulling the tongue forward can be as readily obtained by pinching the skin in exciting respiration. Spasms are not always voluntary. There seems to be in the medulla a 'spasm centre' which becomes excited and may lead to general convulsions. Push your chloroform here as in eclampsia in a midwifery case. I would, as a law, advise everting patients in the accidents of chloroform. One cannot tell always whether your asphyxia is primary or secondary—being due to a failure of circulation. Clinically they may look alike, and as a precaution all cases of asphyxia should be everted along with artificial respiration, as well as injections of strychnia. I agree with Dr. Arnott in thinking the beneficial action of alcohol is usually obtained by reason of its narcotic effect only in a narcotic dose, but disagree with him in thinking alcohol never a stimulant. Chloroform stimulates in the early stage the nerve centres, so may alcohol, but I will not suggest that either one is ever a heart stimulant. It is safer to administer chloroform in labor than elsewhere, because (1) there is a physiological hypertrophy of the heart, and (2) the full uterus presses on the abdominal vessels and partially prevents syncope. Watching the pulse constantly is useless; taking it occasionally does no harm, though the face is a better guide. If the abdomen contains a tumor be careful about everting your patient, for fear of this tumor