WESLEY MILLS, M.D. I think we all agree that these are very interesting practical cases and they serve also the additional purpose of raising problems for discussion. There is nothing like always having something which calls for solution. The explanation that occurred to me first of all is the possible one, in regard to some of these cases, of primary degeneration. It has been found that section of the nerve not only leads to Wallerian degeneration but also to a primary degeneration which is marked especially in the cell bodies. Now, if these cell bodies actually die of course the whole neurone must perish. In my experiments I found, with others, that the character of the injury had a good deal to do with the degree of degeneration in the body of the cell; the amount of shock determined whether the cell actually died or not. Mere section did not lead to the actual death of many cells in certain individuals, but pulling out the nerve—evulsion—did cause widespread death of cells. Now, fracture is a violent thing, and if the nerve is injured this occurs in a very severe form; there seems to be a kind of shock. The question of ascending neuritis did not occur to me, but I should say that that was in these cases probable. Some years ago I had a fractured humerus myself and it caused a good deal of trouble for a long time. There was a certain amount of atrophy of muscles and a good deal of pain and tenderness, so that I am satisfied that there was neuritis in this case. According to the notions that are most prevalent in English-speaking countries at present the principal part in the regeneration of a nerve is taken by the central neurone. I must say that in some of these cases that have existed long without operation, and when after the best surgery there is no result, the facts seem to point to the importance of the peripheral part of the neurone in regeneration; and I am inclined to think that we have come to believe a little too strongly in the neurone doctrine which presents many difficulties in practice and people are a little too much inclined in England and on this side of the Atlantic also, to give insufficent weight to the influence of the external sheath in regeneration. And these practical cases that do not respond to surgery seem to me to rather emphasize the importance of this peripheral part, otherwise, why should there not be regeneration after any length of time; that is to say, if the whole thing was dependent upon the central portion that remains.

A. LAPTHORN SMITH, M.D. Dr. Shirres is to be congratulated upon his untiring energy and perseverance in these difficult cases. With his treatment he gets the muscles ready so that if the nerve ever came down there would be something to work upon. Sometimes his work would cover a whole year before he would be rewarded by success.