mucous membrane gradually determined an absence of secretion, but this gave way when the blast of air and turpentine was stopped. A watery solution of the oil of turpentine increased the secretion, whilst the vessels became constricted; therefore, this medicament is of great practical value, for, whilst diminishing hyperæmia, it increases the fluidity of the sputa; and, besides, it has an anti-septic influence on decomposing mucus. Apomorphia, emetin, (ipecacuanha), and pilocarpin increase the secretion. These three agents are expectorants *par excellence*. Practically, Rossbach believes that apomorphia is the best, as producing least nausea and anorexia. The strongest (pilocarpin), owing to its action on the salivary and sweat-glands, as well as its effect on the heart, is not recommended. Rossbach has not had sufficient experience of emetin, although the action of ipecacuanha is well known. Atropin and its related alkaloids are just the antitheses of the above. The narcotic influence of atropin was found to be very uncertain. Under the use of morphia, it was observed once that there was a considerable decrease in the secretion (to about one-fifth of the normal amount), as well as great diminution in coughing. A complete cessation of secretion was not produced by morphia. Experiments on animals and in practice were made on the joint action of morphia and apomorphia with favourable results. 1. Hydrochlorate of apomorphia may be used as an expectorant; the best prescription is: R. Hydrochlorate of apomorphia, 3 to 5 centigrammes (about 0.45 to 0.75 gr.); dilute hydrochloric acid, 5 cubic centimètres; distilled water, 150 cubic centimètres. Keep in a black glass bottle. The dose is one tablespoonful every two hours. 2. The combination of apomorphia and morphia lessens the frequency of cough and increases the fluidity of the sputa: R. Hydrochlorate of morphia, hydrochlorate of apomorphia, of each 3 centigrammes; dilute hydrochloric acid, half a gramme; distilled water, 150 grammes. One tablespoonful is given every two or four hours. 3. Morphia and atropin must be made up separately, as follows: Hydrochlorate of morphia, 2 to 5 centigrammes; distilled water, 120 grammes; red syrup, 30 grammes. The dose is one tablespoonful every two to four hours. R. Sulphate of atropia, half a milligramme (about 1-150 grain); liquorice powder and juice, enough to make twenty pills. One, two, or three pills are to be taken every night. These pills of atropin are best given in the evening from six to ten o'clock, at intervals of two hours, simultaneously with one or two spoonsful of the morphia solution; only the morphia to be given during the day should the cough indicate it. This joint action is recommended in catarrh, emphysema, and phthisis with abundant sputa (when, in the last, this does not come from cavities.)—*Lond. Med. Record.*

Minute Anatomy of Spinal Roots.—M. Ranvier states, as the result of his latest researches in the anatomy of the nervous centres, that, on suitably prepared specimens of the spinal cord, Schwann's sheath is not continued upon the intramedullary fibres of the root, these fibres being simply surrounded by a layer of protoplasm, in which at times there is a nucleus. By isolating the intramedullary root fibres down into the roo s, tracing them from the centre towards the periphery, we find the nerve fibres cylindrical in that portion of their length comprised in the root; but, at the surface of the cord, they become irregular, and their diameter suddenly increases. No longer maintained by Schwann's sheath, their envelope of myeline is swollen by the water. By a comparative study of transverse sections of the cord, hardened in in ammonium bichromate, stained with picrocarmine, and decolourized by formic acid, the details are well brought out. The fibres of the neuroglia are completely decolourized; the nuclei they contain still