ing up into segments and even into coccus-like bodies is paralleled by many of the mucors among the moulds, though I am inclined to think that an even closer resemblance is to be seen in the sexual fructifications of forms like penicillium, where the terminal filaments branch and break off into a series of round spores. I am inclined, that is, to regard these coccoid bodies as conidia or as being of the nature of spores. This view, I know, is controverted by Lehmann and others. It is interesting to note that, when the organism grows in the tissues, while the majority of the peripheral filaments become thickened and clublike-presumably as a reaction and protection against the action of the body cells and humours-some filaments are often to be seen passing between the clubs into the tissues, and these are peculiarly apt to show the coccoid metamorphosis. We know that, as a general rule, sporebearing organisms, when placed under unfavourable conditions, are reculiarly apt to pass from mere vegetative existence to spore formation. It is just under these conditions above mentioned that we should be prepared to find spore formation.

This question of the exact relationship of the Ray fungus is the subject of active debate at the present moment, and here, perhaps, I may say that the view I would take is that actinomycetes or Ray fungus constitute an intermediate form between the bacteria and hyphomycetes We have, it seems to me, a series of forms starting from deproper. finite bacilli, like, for example, B. typhosus, which show no signs of branching, through forms like the B. diphtheriæ and B. tuberculosis, which under certain conditions exhibit undoubted branching (Dr. A. G. Nicholls recently exhibited before the Lister Club certain tubercle bacilli grown in Courmont's media, in which this branching was most extensive), up to the Ray fungi in which branching and the formation of mycelium are very prominent, but there are little or no signs of acrial hyphæ; so up to the lower hyphomycetes, in which there are branching and formation of acrial hyphæ with asexual fructifications, and so on to the higher hyphomycetes or moulds, in which, in addition to all these, we obtain definite indications of sexual reproduction. It is true that nowadays this term hyphomycete is going out of use. What in the old days we termed hyphomycetes are now largely separated off into separate families-ascomycetes, basidiomycetes, zygomycetes, and so on. Nevertheless the name is still useful as indicating all those mould-like organisms characterized by the formation of a dense, felted mycelium, composed of hyphæ or branched filaments.

And here a word may be said with regard to the nomenclature of the Ray fungus. During the last year, more particularly in America, following certain European observers, it has become fashionable to speak