

or, indeed, cast into the shade ; nor must we regard the second sound *as we hear it* as a purely valvular sound ; for in the nature of the case it must be modified by many of the same conditions that affect the first sound. Haycraft's investigations are chiefly valuable on account of their breadth and the importance attached to the valvular element in the first sound.

THE NATURE OF KOCH'S LYMPH.

Prof. Koch has made a partial statement as to the composition of his lymph. From the beginning of the treatment of tuberculous affections with this fluid, its composition has been an open secret. There is nothing in the recent statements of Prof. Koch that will lead any one to be much wiser on the subject than they previously were. The simple statement that the lymph consists of a glycerine extract derived from the pure cultivation of tubercle bacilli does not enable one to have very clear ideas as to the nature of the agent. Prof. Koch says :
“ Into the simple extract there naturally passes from the tubercular bacilli, besides the effective substance, all the other matter soluble in 50 per cent. of glycerine, consequently it contains a certain quantity of mineral salts, coloring substances, and other unknown extractive matters. Some of these substances can be removed from it tolerably easily. The effective substance is insoluble in absolute alcohol. It can be precipitated by it, though not, indeed, in a pure condition, but still combined with the other extractive matter. The coloring matter may also be removed, rendering it possible to obtain from the extract a colorless, dry substance containing the effective principle in a much more concentrated form than the original glycerine solution. For application in practice this purification of the glycerine extract offers no advantage, because the substances so eliminated are unessential for the human organism.”

Prof. Koch himself appears to have no definite knowledge as to the nature of his lymph.