

As it occupies a good deal of time to apply these tests, and obtain their full reactions, I thought it advisable to prepare, some of the specimens ready for demonstration before commencing my lecture. I will, however, single out for special experiment and consideration the following substances, simply because they strike me as possessing a good deal of interest, viz., cod-liver oil and olive oil, beef fat and mutton fat, eau de Cologne, eucalyptus oil, gasoline, and Baltic deal and deal shavings.

Now, our knowledge of the presence, which until recently was quite unsuspected, of a highly purifying and disinfecting principle in all fats and fatty oils, whether derived from the animal or vegetable kingdom, may help to explain why one of the earliest symptoms of consumption is dislike to fat and inability to digest it, and why cod-liver oil, which is more easily assimilated than any other fat, is often of so much use in the treatment of this disease. It may also afford a clue to the comparative immunity which it is well known the Jews enjoy from consumption, for they use large quantities of olive oil in their food. Dr. Edward Smith, in his excellent little work on "Health," written specially for households and schools, say:—"It is not a sign of a good health to refuse to eat fat generally, for fat is necessary, and we should eat probably from one to three ounces of it daily."

We now come to eau de Cologne, of which there are two specimens on the table, and I will show you that they are both pretty highly charged with peroxide of hydrogen, and consequently are possessed of purifying and disinfecting properties. In this respect they merely represent perfumes in general, including those given off from flowers. We will at the same time examine the palm and coca-nut oils, and shall find that they, also, contain peroxide of hydrogen. Now, it is a remarkable fact that men and women in every part of the world, from the highest type to the lowest, appear to possess an instinctive desire for the use, in some form or other, of those substances which generate this purifying principle. Europeans, for instance, commonly use them in the form of perfumes, whilst our African brethren prefer their use in the form of palm or coca-nut oil.

We must not pass over the eucalyptus oil without a few remarks. Here is a specimen obtained from the far-famed blue gum, the *eucalyptus globulus*. It is the only one I have brought with me, but I have ascertained that the oils from any of the eucalypti will give the same reactions.

Now, I will pour one single drop of this oil on a piece of