

paper, and ask you to observe its highly volatile character. In an instant it will be diffused through every part of the room, imparting increased activity to the oxygen in the air, and rendering it more capable of purifying and disinfecting it.

When we consider that large forests of eucalypti abound in Australia, and that they are incessantly giving off from their evergreen leaves volatile essential oils which possess, in a very remarkable degree, the property of diffusing themselves through the atmosphere, and transforming a portion of its oxygen into peroxide of hydrogen—a purifying and disinfecting agent of recognized power—we may cease to wonder that our climate should have become so proverbial for its salubrity.

I will now say a few words in favour of gasoline as a disinfectant. Kerosene and benzine are chemically nearly allied to it, and possess equal powers of generating peroxide of hydrogen, but kerosene is dirty and benzine has an offensive odour. I look on gasoline as being in many respects the best disinfectant with which I am acquainted.

All disinfectants, to be of much value, should be volatile and capable of freely diffusing themselves through the air of a sick or infected room. Now, gasoline, as you all know, is highly volatile, and this property constitutes it a good atmospheric disinfectant, but it possesses another property, the exact nature of which it is very difficult to explain. For long—very long—after all evidence of its presence has passed away, it either continues to generate peroxide of hydrogen, or else it originally forms it and stores it up until it is brought into contact with any of those oxidizable substances for which it has an affinity. I am unable to say which of these two actions takes place, but certain it is that when unglazed paper or any other porous substance is brushed over with gasoline, it will at once give the reactions of peroxide of hydrogen, and continue to do so for a year or more. Therefore, gasoline, unlike all ordinary disinfectants, may be considered to be persistent in its action, and this gives it immense value as a disinfectant.

Here is a sheet of French note paper, which I brushed over with gasoline in June, 1873, exactly two years ago, and it still gives the reaction of peroxide of hydrogen, although rather feebly. Here, again, is a sheet of the same kind of paper which I brushed over with gasoline four days ago, and you will see when I apply the tests that the reactions will be both rapid and well marked.

It is well-known that the poison-germs of scarlet fever and other infectious diseases are sometimes conveyed in letters, and these papers were prepared for the purpose of showing that it