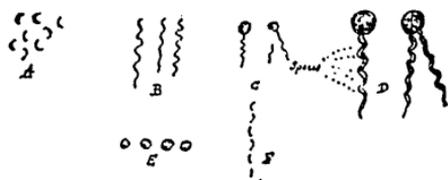


These are the facts which are now produced and which claim the attention of the entire learned world.

Let us examine now what is the method employed by Dr. Ferran. This method is only an application of the magnificent discoveries of M. Pasteur as to the nature of epidemic maladies in general, and upon symptomatic charbon and hydrophobia in particular.



Let us learn from Dr. Ferran what are the different states which are presented in the evolution of the cholera microbe. When we examine in the microscope some cholera dejections

we notice two kinds of infinitely small beings to which has been given the name of *Comma bacilli* [A] and *spirilles* [B]. These two being of the same origin as we shall soon see owe their name to their form. If we collect them and place them in beef broth, observing certain conditions, they soon develop and multiply. At the end of a given time spirilles give birth at their forward part to spherical bodies which have been called oogons or oospheres [C]. We soon see forming in the interior of the *spirilles* little granulations or spores [D]. They pretend that these are female organs which are fructified by the *oospheres* or male organs. The fructified spores constitute what have been named muriform bodies [E]. If we leave these muriform bodies some time in the broth, they soon give birth to new spirilles. These last ones are those which in breaking up produce the comma bacilli [F]. On this last point Dr. Ferran departs altogether from the theory of Dr. Koch and supports the opinion of Prof. Ray Lankester that the comma bacilli are only the segments of a spirille that is to say the result of the rupture of a spirille into small fragments, each one of the fragments corresponding to one turn of the spire.

The anti-cholera vaccinations are made with the liquid culture when the bacilli which they contain have arrived at the condition of muriform bodies. The inoculations are made in both arms and should be repeated twice at intervals of five days to be free from danger. They produce in the person who submits to them sharp pains in the upper limbs and a high fever which generally disap-