

itely and as destructively as quinine acts upon the plasmodium malarie, in malaria, then the use of such agent would materially advance our therapeutic resources and prove of vast importance.

I have reason to believe that, speaking broadly, quinine does thus inhibit the growth of the pneumococcus, or antagonize its toxins, though I have no scientific demonstration of my belief to offer you, but only my clinical experience, and that of a few practitioners who have adopted this plan of treatment.

As to the possibility of this inhibition being accomplished, Abbott, of the University of Pennsylvania, says: "The pneumococcus is an organism of low resisting powers and easily destroyed by either thermic or chemical methods of disinfection."

How does quinine act as a specific (to use the word in its ordinary sense, for we have really no specifics) in malaria?

In a word, it poisons or inhibits the growth of the ameba-like plasmodium malarie in the blood.

The discovery of the plasmodium is of comparatively recent years, although Binz in 1867—forty years ago—offered the theory that malaria was due to the presence of a germ. It remained for Laveran, Machiafafa, Celli and others to place the quinine treatment of malaria upon a scientific basis by demonstrating the plasmodium as the causative agent, and showing that quinine acts upon the organism as a real poison in solutions as weak as 1-20000. Previous to this scientific showing the treatment of malaria by quinine was for scores of years truly empirical, though not on that account any the less successful.

So now the treatment of pneumonia by quinine is, so far as I am concerned, in a sense empirical, though by parity of reasoning, after my experience, and that of others also, the mode of action of this therapeutic agent is not difficult to understand; and we have found it, as did the men of long ago, in malaria, eminently successful in pneumonia.

I have no statistics. I can only tell you in a general way what my experience has been since I have regularly used quinine in sufficient doses in croupous pneumonia and the broncho-pneumonia of children.

From my observation I believe that any case of frank pneumonia, in which the treatment is begun within say 24 hours of the initial symptoms or the initial chill, and the sooner the better, may be aborted in from 36 to 50 or 60 hours.

It will at once occur to you that cases of pneumonia abort