Medical Matters.

MALARIA.



PROFESSOR KOCH has, for some time past, been investigating the nature and origin of tropical malaria, and has recently announced the remarkable conclusions, at which he has arrived, to scientific circles in Berlin. In brief, he considers that the study which he has devoted to

Texas fever in cattle has been of much assistance in throwing light upon the obscurities of He found that cattle disease was malaria. transferred from one herd to another by the agency of an animal parasite-the tick. He has succeeded by this agency in infecting sound cattle, and also in protecting other animals against Texas fever, by inoculating them with the ova of ticks taken from cattle which were suffering with the disease. His attention was then drawn to the similarities between malaria and Texas fever, and he finally came to the conclusion that the former disease is largely conveyed from one human being to another by means of mosquitoes. He points out the fact that where there are no mosquitoes, there is no malaria-as, for example, in the case of a small island on the German East African coast; and that, on the other hand, wherever there is malaria there are also mosquitoes. As a matter of logic and pathology there is, of course, a flaw in the reasoning; but Professor Koch believes that, practically, his conclusions cannot be refuted. He has made further discoveries concerning the changes which are found in the blood of patients suffering from malaria, and the effects which the administration of quinine produces upon the microbes of malaria, not by killing them, but by arresting their growth. The result of his discoveries would seem to be that it should be possible to stamp out malaria altogether. But it is difficult to understand, at present, whether he would do this by greater skill in the use of quinine or other drugs, or by the extermination of mosquitoes! To our independent judgment, there would be obvious advantages in the latter course quite above and beyond the disappearance of malaria. We recently referred to a possible connection between sunstroke and malaria, and it will be curious indeed if the former be proved to be even indirectly due to mosquitoes.

KRYPTON.

LAST week, the newest wonder of science was introduced to the Royal Society. It has been discovered that, in addition to our old friends oxygen and nitrogen, and our modern acquaintance argon, there is also at least one other element in the atmosphere to which the discoverers have given the name of Krypton, a word meaning "hidden" or "concealed." The methods, by which the new constituent of the air was discovered. were very interesting. Taking a supply of liquid air, Professor Ramsay and Mr. Travers removed from this the oxygen, nitrogen, and most of the argon, and then there was found in the gas which was left, a spectrum which had never been seen before, showing that beyond the trace of argon remaining, there was another and hitherto un-discovered constituent. The further investiga-tions which were made showed that Krypton is heavier than argon and less volatile than oxygen or nitrogen. The great importance of the discovery, of course, is that it makes it probable that scientists are within a measurable distance of still greater and more important discoveries, in connection with the air we breathe, and its influence on animal and vegetable life.

YELLOW FEVER.

THE latest accounts from the seat of war in America show that the United States is now threatened with a far graver invasion than was anticipated by the Spanish in Cuba. The refugees from the latter island have brought with them the dreaded disease known under the popular name of Yellow Fever. All the ordinary sanitary precautions and quarantine regulations which are usually enforced with complete success have broken down under the stress of the preparations for war; and the consequence is that not only have undoubted cases occurred upon the Mississippi River, but that infected persons are known to have gone to many different towns in the United States and almost certainly conveyed the germs of disease with them. In fact, there seems grave reason to fear that the United States may be on the verge of a very serious outbreak of this dreaded fever. The sanitary authorities are making heroic efforts to prevent the spread of the epidemic, and it seems probable that the camps prepared in order to invade Cuba may be broken up in order to escape an enemy more insidious and infinitely more powerful than the Spaniards, was set



