

and the like, and such agencies require no further discussion. This part of the subject of immunity is, however, one of the greatest interest to practicing physicians, as the predisposing factors are often more important than the infectious agents themselves in bringing about disease, and the removal of such factors is of the greatest moment in both preventive and curative treatment.

Apart entirely from the natural resisting powers of the body we have a different form of immunity, viz :—An acquired or specific form against certain infections. Thus we find that attacks of such diseases as small-pox, measles, scarlet fever give an immunity against further infection from these diseases.

It is with this subject of acquired immunity I propose mainly to deal. In the first place note that this form of immunity is specific, i.e., is active against only that infection against which the immunity has been acquired. This form of immunity cannot as yet be developed against many infections; if it were possible then medicine would be confined, so far as the infectious diseases are concerned to the science of prevention.

In what ways do we find that we can acquire this form of immunity. In the first place it is a fact known for decades that recovery from many diseases is accompanied by the acquirement of an immunity against these diseases. With some infections this immunity is life long, with others the immunity lasts months or years while others show practically no immunity, e.g., after pneumonia, immunity is at most a matter of a few days or weeks. Again, tubercular infection may attack the lung, may be healed and days after fresh infectious material be introduced and find a suitable nidus. One can see that this method has many and serious limitations and physicians never think of sanctioning such a method of acquiring an immunity. A few mothers, however, still purposely expose their children to such diseases as scarlet fever and measles, so as to get through the full course of children's diseases. This method was also made use of in the old custom of inoculation against the smallpox.

Another way in which immunity can be developed against some infections is by vaccination. I use this term in its wide