

not only have perfectly clear ideas as to what a normal vaccination is, but that they further be placed in such a position in their several States and cities as to insist upon the use of only such vaccines as will produce normal vesicles and effective immunity.

One of the results of these new theories has been to cast discredit on the very great advances which have been made through the introduction of aseptic glycerinated lymph. Articles everywhere have been appearing in the medical press condemning unsparingly glycerinated lymph; and, from the standpoint of the results above indicated, with some reason. But it is apparent that when we can obtain statistical results collected from hundreds of public vaccinators under an organized system, where, as in England, in the year ending March 31st, 1902, lymph for 974,595 vaccinations had been sent out from the National Vaccine Establishments, and where for the quarter ending December 31st, 1901, 264,044 vaccinations showed a success of 97.9 per cent., and an insertion success of 93 per cent., we have a basis of fact which should wholly disabuse our minds of the idea that glycerinated lymph is a failure.

The actual figures published are:

| | Cases. | Case Success per cent. | Insertion Success per cent. |
|----------------------------|---------|---------------------------|--------------------------------|
| Primary vaccinations | 126,209 | 98.6 | 94.0 |
| Re-vaccinations | 134,835 | 97.2 | 92.0 |

Another theory which has likewise had its rise in these modern days of "sweetness and light" is that one scarification is sufficient for protective purposes. Contrary, perhaps, to what the theory of immunization might lead us to conclude, viz., *that so long as the system becomes inoculated, it does not make any difference how the lymph was introduced, whether by one or five scarifications*, we have the statistics of more than half a century proving absolutely that it does make a difference whether much or little lymph be introduced. We have long been accustomed to say that a well-pitted person will never take smallpox again; and we presume this is true. We say that a child which has suffered from a severe type of measles or scarlet-fever is absolutely immune against another attack; and in practice this is true. We surely then are justified in saying that, just as the very slight protection produced by a twelfth-day vaccine has not established an immunity even for a month against an active vaccine, so a single scarification does not allow the same absorp-