

The Vagaries of Vaccination Propaganda

Being a Reply to the Statements of

Mr. HAROLD KERR, M.A., M.D., O.B.E.
Medical Officer of Health for Newcastle-on-Tyne, and
Professor of Hygiene in the University of Durham.

Mr. T. EUSTACE HILL, M.A., M.D., D.Hy., O.B.E.
Medical Officer for the County of Durham.

AND

Mr. R. EWART CREE, M.D.

Compiled from Official Sources
BY
ARTHUR TROBRIDGE.

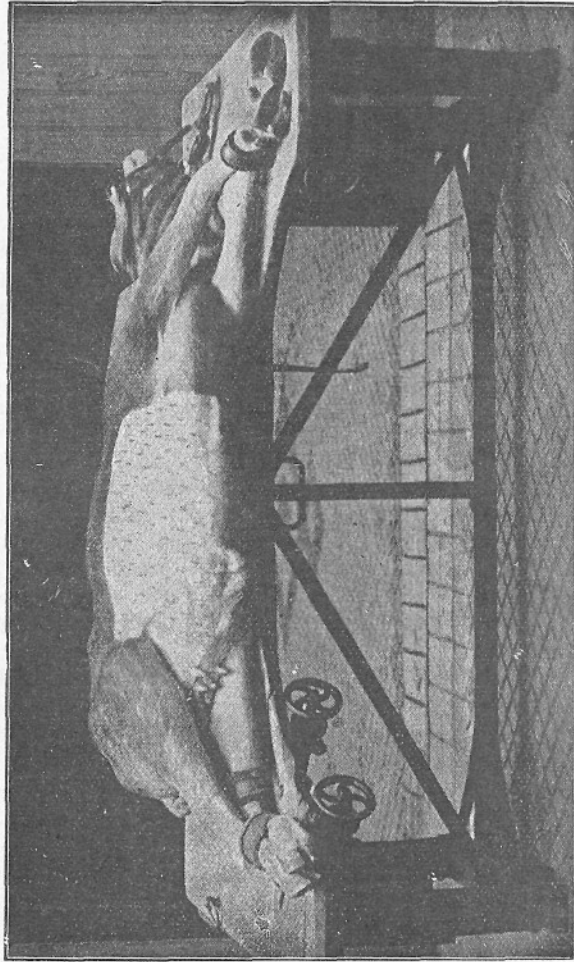
(WITH FRONTISPIECE).

Price Fourpence.

Published by the NATIONAL ANTI-VACCINATION LEAGUE,
25 Denison House, 296 Vauxhall Bridge Road, London, S.W.1.
Printed by PARTRIDGE & LOVE LTD., Broadmead, Bristol.

The Vaccinated Calf.

"The performance causes the animals no pain."
—DR. HAROLD KERR (*The Shipyard*, September, 1925).



"Calves must be happy and contented."
—DR. R. EWART CREE (*The Shipyard*, October, 1925).

OFFICIAL ILLUSTRATION.

Reproduced from Parliamentary Publication [C-8587] 1897.

CONTENTS.

	Page
The Vaccinated Calf	Frontispiece
Preface	1
Vaccine Lymph Production.. .. .	2
The Protective Value of Vaccination	5
Re-vaccination	7
Doctors, Nurses, etc.	10
Injuries by Vaccination	13
Sanitation and Small-pox	16
The Present " Small-pox Epidemic "— The Changed Position}	21
Statistical Tables	25,26,27
Index.....	28

PREFACE.

Dr. Harold Kerr, Dr. Eustace Hill and Dr. R. Ewart Cree have high Medical qualifications, and the two first-named gentlemen, by reason of the important public positions they hold, are great authorities on all matters appertaining to the Public Health ; but, when they speak or write on Vaccination, they do so with the irresponsibility and inaccuracy which could only be excused of first-year medical students.

Dr. Kerr, when speaking at Durham on June 15th, 1925, charged anti-vaccinators with carrying on a propaganda " by misdirection, mis-quotation and falsification," but, though repeatedly challenged to do so, he has made no attempt to justify his slander. If he could point to *one* such " mis-representation or falsification" in any of my numerous published statements, the following pages had not been written. Any cause which necessitates the resort to such methods of controversy is altogether indefensible.

Most of the facts and figures quoted in the following pages are taken direct from Government and other Official Publications, and are thus the collective records of the highest medical authorities.

A. TROBRIDGE.

41 KENTON ROAD,
NEWCASTLE-ON-TYNE.
June 30th, 1926.

Vaccine Lymph Production.

What we are NOT told.

Dr. Kerr and Dr. Cree have dealt at length; in the *Shipyard Magazine* of September and October, 1925, with the methods of producing "Calf-lymph."

Dr. Cree gives lengthy details of the construction of the stables for the calves, and of the precautions observed for preventing the extraneous contamination of the product, as furnished to him by the Government Lymph Establishment : but neither he nor Dr. Kerr gives any information as to the ultimate origin of the virus with which the calf is inoculated. It may be the Horse-Grease of Jenner, or the spontaneous Cow-Pox which he condemned as non-protective : the Horse-Pox which seems to find most favour with French vaccinators, or the human Small-pox virus, recommended by Dr. Monckton Copeman, one of the Government's Inspectors of Vaccination, to whom is mainly due the introduction of the "Glycerinated Calf Lymph" now in use. At the Victoria University, Manchester, on April 25th, 1904, Dr. Monckton Copeman stated :—

"The most satisfactory material was found to be the vesicle pulp obtained in the *post mortem* room from cases of discrete small-pox that had died during a comparatively early stage of the eruption."

"Correct" vaccine vesicles can be obtained by the use of any of the above viruses—and of many more—but to specialise one is to condemn the others, and the point is discretely left a mystery. Professor E. M. Crookshank, when investigating this subject in 1888, found that the officials of the Local Government Board could give him no information on this point. As *The Lancet* of May 13th, 1922, states :—

"No practitioner knows whether the lymph he employs is derived from Small-pox, Ass-pox or Mule-pox."

Vaccinating the Calf.

Dr. Cree informs his readers (*Shipyard*, October, 1925,) that, when this operation is done—

"The calf is placed on the operating table and several incisions are made in the surface skin, care being taken not to draw blood." . . . On the fifth morning the lymph is collected. . . ." The material contained in the vesicles is then gently collected in a small sterilised spoon."

Dr. Kerr states (*Shipyards*, September, 1925) :—

" The performance of the operation causes the animal no pain, since it does not even draw blood. The lymph, when it appears in the blebs, is drawn off, mixed with disinfectant—glycerine or chloroform—tested," etc.

The FACTS, as officially stated.

The Local Government Board, prior to the introduction of the new Glycerinated Calf Lymph, sent their Medical Officers, Dr. R. Thorne-Thorne and Dr. Monckton Copeman, to investigate the preparation and storage of this lymph on the Continent, where it had been in use for many years, and their Report, as " Presented to Parliament," forms the Government Publication* from which our illustration and the following extracts are taken. The process was found to be substantially the same in all places visited, viz., Paris, Berlin, Brussels, Dresden, Cologne and Geneva.

After the calf has been fixed to the operating table—

" Incisions, about two or three inches in length, are made at right angles to the long axis of the body, all over the shaven area of the skin and also on the scrotum : the average number for each calf being about 150. The incisions are made with a dry lancet, and are placed *en echelon*, and about a couple of inches distant from one another." "Vesicle pulp" from a previous operation, mixed with glycerine, is then "well rubbed into each separate incision." On the sixth day the lymph is collected. " For this purpose compression forceps are applied to each vesicle separately, and the crust is first carefully removed with the edge of a lancet. These crusts " (i.e., scabs) " are collected in a watch-glass, and are employed for the vaccination of children." " The vesicle is then thoroughly scraped with the edge of a somewhat blunt lancet, and the resulting mixture of lymph, epithelial tissue " (i.e., skin)" and blood, is transferred to a small nickel crucible." . . . " To the pultaceous " (i.e., gruelly) " mass contained in the crucible, there is added about an equal quantity of glycerine." This mixture is then stirred for some time in a mechanical mixer, of which particulars are given. " The mixture of pulp and glycerine, having thus been rendered thin and homogeneous, is received in a clean sterilised nickel crucible placed beneath the machine, but with a view of still further *improving its appearance* and of removing any extraneous matters, such as *hairs*, it is afterwards pressed through a small brass-wire sieve." After further mixing, the product is ready for filling into tubes. (*The italics and explanatory words in brackets are ours.*)

It will be seen from the above how greatly Dr. Kerr and Dr. Cree have misled their readers. So far from " precautions being taken not to draw blood," the lymph cannot be obtained without squeezing each of the 100 to 150 vesicles with a metal clamp, when, as Dr. Robert Cory (Director of the Government

*" Report to the Local Government Board on the Preparation and Storage of Glycerinated Calf Vaccine Lymph." (C—8587). 1897.

Animal Vaccine Station) told the Royal Commission on Vaccination (No. 4652) :—

" This pressure also squeezes out the blood, and you cannot obtain the calf lymph without taking also a certain amount of blood, which is at the same time pressed out of the vesicles by these clamps."

Dr. Kerr states that the lymph, " when it appears in the blebs, is drawn off " : Dr. Cree says that " it is then gently collected in a small sterilised spoon." A " bleb is a small watery blister. The truth is that what Dr. Kerr is pleased to call a " bleb " is a scabbed vesicle from two to three inches in length—Dr. Hime, who runs a private Vaccine Factory at Bradford, told the Royal Commission you could have them a *foot* long—but these vesicles contain so little lymph that none can be obtained without scraping, whilst under pressure of metal clamps, with consequent rupture of the blood vessels and contamination of the lymph with blood.

" *Volkmann's Spoon.*"—The *gentle* collection of the lymph in a small spoon, which Dr. Cree mentions, probably refers to this instrument, which has a sharp cutting edge on the one side. Drs. Thorne and Copeman, in the above-named Report to the Local Government Board (page 12), refer to this spoon, as they saw it in use at Dresden :—

" The pulp is collected with a Volkmann's spoon, but as Dr. Chalybaus goes over the same surface again and again, a not inconsiderable amount of blood becomes mixed with the epithelial scrapings. The raw surface of the abdomen is afterwards dusted over with fine oatmeal."

I do not know whether Dr. Kerr includes this scraping process under pressure, until the whole abdomen of the calf is a raw bleeding surface, in his statement that " the performance causes the animal no pain," but the above descriptions will enable my readers to recognise the subtle sarcasm in Dr. Cree's statement :—" The calves must be happy and contented."

The Glycerination of the Lymph.—Dr. Kerr omitted to tell his readers the object to be attained by the addition of glycerine to the mixed scrapings of epithelial tissue, blood and lymph, but the vendors of this " glycerinated calf-lymph " supply the information—that it is to destroy the "extraneous microbes commonly present in the lymph." For many years, up to 1888, we had always been assured of the purity of the lymph in use, but in that year Dr. E. M. Crookshank, the Professor of Pathology and Bacteriology in King's College, London, upset the complacent assurances of his medical colleagues with the results of his classic investigations into the

bacteriology of vaccine lymph. After protracted researches, he found that there was no specific germ in any brand of vaccine lymph, but that all were teeming with micro-organisms, some of which were pathogenic (disease producing).

This Glycerinated Calf-Lymph had been in use on the Continent for many years prior to its introduction into this country, and in 1886 its use was condemned by no less an authority than Sir George Buchanan, M.D., F.R.S., the chief Medical Officer to the Local Government Board. When called upon in Parliament to explain away a widespread disaster following vaccination, with injury to 320 persons, in the island of Rugen, he attributed it to the mixture of glycerine with the lymph, adding—

"I have heard of dilutions of lymph with glycerine : always from people complaining of the lymph. It will, I trust, be long before such *preposterous adulterations* of vaccine give the opportunity of investigating their results in English practice."*

This "preposterously adulterated" vaccine is now the accredited new Glycerinated Calf-lymph in general use in Great Britain.

The Protective Value of Vaccination.

Dr. Kerr states :—

"Vaccination is an absolute protection for at least ten years."
(Newcastle *Evening Chronicle*, August 5th, 1925.)

Dr. R. Ewart Cree states :—

"It is a fact that vaccination *absolutely protects* for at least ten years, and insures against death or a severe attack for very much longer." (*The Shipyard Magazine*, October, 1925.)

Dr. W. Gayton, Medical Superintendent of the Homerton Small-pox Hospital, told the Royal Commission on Vaccination (Nos. 1755-1772) :—

"I think primary vaccination is a very fleeting protection indeed. . . not absolutely protective up to any age."

Dr. Gayton supported this statement by giving particulars of 1,306 cases of small-pox, resulting in 137 deaths, all in vaccinated children under ten years of age, which had been treated in his own hospital.

In almost every Official Report on small-pox epidemics in England such cases of small-pox in Vaccinated children under ten years of age are recorded. The following

""Transactions of the Epidemiological Society, Vol. V, pp. 117, 118.

is summarised from a few of such Official Reports :-

Years	Official Reports	small-pox in Vaccinated Children under 10.	
		Small-pox Cases	Small-pox Deaths
1870-1872	Metropolitan Asylums Board	981	.. 98
1873-1884	Homerton (Dr. Gayton)	1,306	.. 137
1880-1885	Fulham (Dr. Sweeting)	202	.. 16
1887-1888	Sheffield (Dr. Barry)	444	.. 6
1891-1892	Dewsbury	44	.. 1
1892-1893	Warrington	33	.. 2
1892-1893	Metropolitan Asylums Board	110	.. 0
1892	Rotherhithe (Dr. Browning)	25	.. 3
1901-1902	Metropolitan Asylums Board	134	.. 2
		3,279	.. 265
To these may be added the following :			
1865-1874	Berlin*	3,273	.. 870
1896-1910	Germany!	437	.. 17
		6,989	.. 1,152

We thus have a total of 6,989 cases of small-pox, resulting in 1,152 deaths, all in Vaccinated Children under ten, in refutation of Dr. Kerr's and Dr. Cree's confident assurances of "absolute protection" for ten years.

The Age-Distribution of such cases is rarely given, but the following has been compiled from Dr. Barry's Official Report on the Sheffield epidemic of 1887-8 :—

In Vaccinated Children	Small-pox.		
	Cases	Deaths	
Under 3 months' old	1		
3 months, but under 6 months	0		
6 months " " 9 months	3		
9 months, " " 12 months	3		
1 year, " " 2 years	22		
2 years, " " 3 years	29		
3 years, " " 4 years	37	.. 1	
4 years, " " 5 years	42		
5 years, " " 6 years	47	.. 1	
6 years, " " 7 years	56	.. 1	
7 years, " " 8 years	64	.. 1	
8 years, " " 9 years	62	.. 2	
9 years, " " 10 years	77		
Age not given	1		
		444	.. 6

*From the Journal of the Berlin Sanitary Commission, quoted in the official " Beitrage zur Beurtheilung des Nutzens der Schutzpockenimpfung."

† Quoted from Dr. Bruce Low's Blue Book, " The Incidence of Small-pox throughout the world in recent years." Published in 1918.

We thus see that, so far from vaccination being an " absolute protection for ten years," it cannot be guaranteed to protect for even three *months* : in fact, in the same year, 1888, the Registrar General records a *fatal* case of small-pox in a vaccinated infant between the age of *three* and *six months*.

Re -Vaccination.

Dr. Kerr states : —

" In no case, in modern times, has any person died from small-pox who has been vaccinated or re-vaccinated within seven years. Wherever there is vaccination and *re-vaccination* it (small-pox) does not appear at all." (*Shipyards Magazine*, September, 1925.)

ARMY MEDICAL RETURNS.—The most striking refutation of the above rash statement is furnished by the Medical Statistics of the various Armies, wherein Vaccination and Re-Vaccination are conditions of service.

British Army.—Brigade Surgeon W. Nash, M.D., who presented the official Army statistics to the Royal Commission on Vaccination, informed that body that :—

Re-vaccination had been enforced since 1858. (No. 3455.) He knew of no suggestion to increase the thoroughness of re-vaccination in the Army. (No. 3557.)

There was no year since 1860 without small-pox deaths among our troops. (No. 3557.)

The following are the Statistics for the British Army from 1860 to 1913 :—
from 1860 to 1913 :—

	Small-pox	
	Cases	Deaths
In the United Kingdom	1,355	96
In India (British Troops only)	2,807	312
In the Colonies	946	84
Total . . .	5,108	492

No further statistics for the whole Army are yet published, but the following are those of the *British Army in India* :—

Years	Small-pox	
	Cases	Deaths
1914	12	0
1915	5	0
1916	26	4
1917	35	9
1918	117	18
1919	173	19
1920	24	4
1921	32	7
1922	25	10
Total	449	71

The British Army in Mesopotamia during the late war also suffered severely from small-pox. In the official history of the War, all British soldiers vaccinated or re-vaccinated prior to 1913, and those "unsuccessfully" vaccinated after 1913 were put into the "unprotected" class. Yet it had to be admitted that 287 men who had been successfully vaccinated or re-vaccinated within the three preceding years, took small-pox in 1917 and 1918 in Mesopotamia, and twenty-nine died. These 287 cases, with twenty-nine deaths, appear in a table in the History under the heading "protected."

German Army.—Dr. Hopkirk, who presented the Official Statistics for the German Army to the Royal Commission on Vaccination (Nos. 6799, etc.), told that body that :—

Re-vaccination had been enforced on all recruits since 1834, "with ten insertions on each arm"; those who objected "were tied down and vaccinated by force."

The Official Medical returns, as given in the *Beitrag zur Beurtheilung des Nutzens der Schutzpockenimpfung*, show :—

	small-pox	
	Cases	Deaths
From 1835 to 1887	7,505	291

Italian Army.—Dr. Charles Ruata, Professor of Materia Medica in the University of Perugia, in a letter published in the *British Medical Journal* of May 27th, 1899, gives the following statistics of small-pox among the thoroughly re-

Years	Small-pox	
	Cases	Deaths
1867-1878	3,619	358
1882-1897	1,273	31
	<u>4,892</u>	<u>389</u>

BRITISH NAVY.—Vaccination was made compulsory on all men and boys entering the Navy on April 15th, 1864. The following is the small-pox record, summarised from the Official Returns, as presented to the Royal Commission on Vaccination (2nd Report pp. 250-253), by Staff-Surgeon T. J. Preston, R.N. :—

Years	Small-pox	
	Cases	Deaths
1865 to 1888	1,335	101

In view of the small-pox epidemic of that year, on March 7th, 1871, the Admiralty issued an order for the compulsory *re-vaccination* of all men and boys then in the Navy. The following are the statistics for the three years 1870, 1871, 1872 (included in the above) :—

Years	Strength	Cases	Small-pox Deaths	Fatality per cent
1870	46,710	40	1	2.5
1871	47,460	148	12	8.1
1872	46,830	89	11	12.3

At Gloucester, in 1895-6, there were 190 cases of small-pox recorded in re-vaccinated persons. Six of these were after recent successful vaccination, five of them from nineteen days to three months after.*

London, 1901-2.—The Report of the Metropolitan Asylums Board shows 276 successfully re-vaccinated cases, with twenty-seven deaths, and eighty-six "unsuccessfully" re-vaccinated cases with fourteen deaths.

Period elapsing between re-vaccination and attack of small-pox :—

5 weeks, 4 months, 5 months, three of 2 years, 2-1/2 years, two of 3 years, 4 years, three of five years, and so on.

Period elapsing in some of the fatal cases :—11 years, 10 years, 8 years, 3 years, 2 1/2 years. Thirty-three cases were admitted officially to have been re-vaccinated less than ten years before attack, of whom ten were admitted to have evidence of previous successful re-vaccination.

In *Germany*, from 1896-1910, there were two cases of small-pox in re-vaccinated children from three to ten years of age, and 122 re-vaccinated cases with five deaths from eleven to twenty years of age.†

The above records total 20,166 cases of Small-pox, resulting in 1,405 deaths, which have occurred in thoroughly vaccinated and re-vaccinated persons, and should afford sufficient answer to Dr. Harold Kerr's rash statement that "wherever there is vaccination and re-vaccination small-pox does not appear at all." If further proof is needed, it is furnished by the following paragraphs.

*From Dr. Coupland's Official Report, page 146, Table XII.

†From Dr. Bruce Low's "Incidence of Small-pox throughout the World."

Doctors, Nurses, etc.

Dr. KERR states :—

" Every worker dealing with the disease—doctors, nurses, hospital servants, sanitary inspectors—is protected in this way, and who ever heard of one of them taking it unless he or she had foolishly omitted the necessary vaccination ? " (*The Shipyard*, September, 1925.)

The evidence in refutation to this statement is so abundant that only a selection of the most authoritative cases can be given.

Liverpool.—The following is from Dr. Sidney Coupland's Report to the Royal Commission on Vaccination, on the small-pox outbreak at Liverpool in 1892-3 :—

" During the same period (1892-3) seven other cases of small-pox were reported :—Dr. O., the house surgeon of Netherfield Road Hospital, who had visited Parkhill wards, and who was attacked on February 22nd ; Dr. W., the resident physician at Parkhill, attacked on February 24th, and who had variola in childhood : this attack was very mild ; and E.T., a wardmaid in the hospital, who had been re-vaccinated." (Page 37.)

" It will be seen from Table VI, that eighteen of the patients admitted into Parkhill had been re-vaccinated." (Page 43.) The total cases were 206.

Sheffield.—The following is from *The Times* of April 7th 1882 :—

" At Sheffield Borough Hospital the whole staff is prostrated by small-pox, and it has been found necessary to engage a doctor from London to take temporary charge of hospital and patients. For some time, cases of slight ailment have prevailed, affecting the matron and servants. Last Sunday, the Medical Officer was taken ill with small-pox, and since then the cook has fallen a victim to the same disease. One of the nursing staff is also ill with small-pox."

The Report of the SHEFFIELD BOROUGH FEVER HOSPITAL for the year ended 25th March, 1883, page 4, gives the doctor's own words as to the re-vaccination of himself and the other sufferers :—

" ' My own case was very mild, there being scarcely any eruption, although there was considerable primary fever. I had been repeatedly re-vaccinated, and had been much exposed to infection during the last few years, without ill effect. The wardmaid had been re-vaccinated on commencement of duty, but with only slight results.' The fever was high, and there was a fair amount of eruption. The cook was vaccinated, but not re-vaccinated ; the nurses, vaccinated and re-vaccinated." (Quoted from the Minutes of Evidence of the Royal Commission on Vaccination, No. 20,008.)

Dr. Killick Millard, M.O.H. for Leicester, in his book, " The Vaccination Question," when dealing with the spread of small-pox by the mis-diagnosis of mild cases, gives the

following three instances :—

BRISTOL.—" The persons infected at the general hospital to which the man was taken were two nurses, who had attended upon the patient, and who had been re-vaccinated the year before."

SALFORD.—" The doctor himself, as well as the patient's wife and child, were taken ill of the small-pox."

OLDHAM.—" The medical man attending the four lads, who had not recognised the nature of their illness, and had been treating them for chicken-pox, also contracted the disease from them."

Dr. R. S. Archer, Public Vaccinator for the Everton District, West Derby, told the Royal Commission on Vaccination :—

" I was re-vaccinated when I was about fourteen years of age, I think, and I took modified small-pox when I was a student, when I was about twenty-one."

Dr. F. Caiger, of the Northern Fever Hospital, in the *Lancet* of May 4th, 1889, reported that the only nurse there who took the small-pox was one who had refused re-vaccination—because she had a bad arm *when she was re-vaccinated thirteen months before*.

The Metropolitan Asylums Board, on the 6th February, 1894, supplied to the Royal Commission on Vaccination (Vol. VI, page 687) a " Return of cases in which small-pox has attacked members of the Staff on the Hospital Ships who had been successfully vaccinated or re-vaccinated after joining the Service "—giving a total of seven cases.

Poplar.—In the small-pox outbreak in the Poplar Workhouse in 1923, the Public Vaccinator himself took the disease.

The Lancet for June 6th, 1925, records that the Vicar of Radlett, Hertfordshire, was suffering from a severe attack of small-pox. " The patient had been twice vaccinated successfully, the last time in 1910. He was again vaccinated in 1919, but ineffectively."

The above examples—selected from many—are sufficient to show that Doctors, Nurses, Hospital Attendants, etc., *do* take small-pox in spite of " successful " re-vaccination. On the other hand, there are many instances in which Doctors, Nurses and attendants on small-pox cases have carried out their duties without taking the disease, despite the fact that they have not availed themselves of the alleged protection of vaccination and re-vaccination.

DR. W. R. HADWEN, of Gloucester, was daily engaged in the treatment of small-pox cases during the two epidemics in that city—in 1895-6 and 1923—without any protection beyond that afforded by a good constitution and a healthy

life. On December 30th, 1924, one of his medical colleagues had to apologise in the public Press for spreading the rumour that he had been secretly vaccinated.

DR. F. T. PORTER, late of the South Dublin Union Hospital, has no belief in re-vaccination. He told the Royal Commission on Vaccination :—

(No. 22,232.)—" I have known great medical men to attend to very-bad cases of small-pox, and they did not take the infection, although they were not re-vaccinated. I attended a very bad case of miscarriage myself, when the woman had confluent small-pox, and if a man is likely to take small-pox he would be likely to take it from a case of that kind, and I was not re-vaccinated and took no infection."

(No. 22,233.)—" You have never been re-vaccinated since infancy ? "
" No, never."

SOUTH DUBLIN UNION HOSPITAL.—Dr. Porter informed the Commission :—

(No. 22,211.)—"The experiment of not re-vaccinating the nurses was tried in the South Dublin Union in 1871-2 : 29 out of the 36 attendants had not been re-vaccinated, and these all escaped small-pox as well as the other seven."

BICETRE HOSPITAL.—Sir W. J. Collins, M.D., and Mr. Picton, in their Minority Report of the Royal Commission on Vaccination, state :—

(No. 152.)—" In the hospital at Bicetre during the siege of Paris, in the midst of a larger accumulation of small-pox cases than has ever been known before or since, the immunity of those attendants and doctors who had neglected re-vaccination was even more marked than in the case of the orderlies, who were nearly all re-vaccinated. We attach considerable importance to the narrative given by M. Colin of his experience as Chief Medical Officer to the Bicetre Hospital during the siege. The point of his narrative is that while fifteen of the re-vaccinated or well-protected hospital orderlies took the disease, not one of the eighty who composed the medical and nursing staff, so many of whom had neglected re-vaccination, was attacked." . . . " It is sufficiently clear that M. Colin, though an impassioned advocate of vaccination, was so struck by the complete immunity of the medical and nursing staff, who by their neglect of re-vaccination appeared to offer less guarantees of protection than the orderlies, nearly all of whom had been re-vaccinated under his own eyes, that he thought it necessary to attempt an explanation."

Dr. Colin's explanation was that " a certain tolerance is acquired by repeated exposure to contagion, and that in those who are not at once attacked the receptivity to the disease becomes exhausted."

It is for this reason that a large number of the nurses who are attacked by small-pox, acquire the disease within the first week or fortnight of taking on their duties, and are thus classed as " re-vaccinated during the incubation of the disease.

Injuries by Vaccination.

Dr. EUSTACE HILL told the Durham Citizens' League, on Tune' 15th, 1925, he " had never seen a single ill-effect of vaccination."

The Registrar General, from 1875 to 1923, recorded 1,464 deaths resulting from Vaccination, on the certificates given by Medical Men themselves. Of these, from 1907 to 1923, 162 deaths were from the use of the new Glycerinated Calf Lymph.

There are strong reasons for stating that these are *very far short* of the total fatalities from vaccination.

Dr. H. May, in an article on Death Certification, published in the *Birmingham Medical Review*, of January, 1874, stated :

"In certificates given by us voluntarily and to which the public have access, it is scarcely to be expected that a medical man will give opinions which may tell against or reflect upon himself in any way, or which are likely to cause annoyance or injury to the survivors. In such cases he will most likely tell the truth, but not the whole truth, and assign some prominent symptom of disease as the cause of death. As instances of cases which may tell against the medical man himself, I will mention erysipelas after vaccination and puerperal fever. A death from the first cause occurred not long ago in my practice, and, although I had not vaccinated the child, yet in my desire to preserve vaccination from reproach, I omitted all mention of it from my certificate of death."

Dr. Bridges, formerly an Inspector under the Local Government Board, writing in November, 1896, said :—

" A doctor vaccinating a child will obviously be unwilling to say that vaccination did harm, unless he is a man above the ordinary standard of courage and conscientiousness."

Whenever a death or deaths have been brought home to vaccination as the result of a Public Enquiry, in a case or cases in which a death certificate has been previously given, the fact has also been brought home—that the death certificate or certificates have not given a true record as to the cause of death. Thus :—

At MISTERTON in 1876, at NORWICH in 1882, at DERBY in 1882 and at NEW HUMBERSTON in 1889, twelve deaths were attributed to vaccination as the results of Official Enquiries under the direction of the Local Government Board, but in only *one* of the twelve certificates which had been previously given had vaccination been mentioned.

Dr. Charles Fox (Cardiff) followed up the vaccinations in his own district, and came across fifty-six cases of injuries, resulting in seventeen deaths, of which he published particulars.

Of these seventeen deaths, vaccination was only mentioned on

the death certificates which he himself had given.

Dr. Makuna, Medical Superintendent of the Fulham Small-pox Hospital, in 1883, instituted an "Enquiry" into Vaccination, in conjunction with thirty other Medical Men, with the object of reinstating confidence in the operation. They addressed enquiries to all Medical Men in England asking among other questions, if they had had any experience of ill effects? The "First Report" contained replies from 384 doctors, who stated that they had known or suspected the following as the results of vaccination :—

126 cases of Erysipelas.

43 cases of Syphilis.

64 cases of Eczema.

9 cases of Scrofula, and over 30 other diseases.

The promised Second Report was never published.

Dr. Cuthbert Ward, Medical Officer of Health for Harrogate, told the Royal Commission on Vaccination (Nos. 21,530-21,550) that he had seen 100 cases of erysipelas after vaccination—in his own practice. He had not vaccinated his own children in consequence.

Dr. P. M. Davidson, Medical Officer of Health for Congleton, told the Royal Commission (No. 22,490) that he "had certain doubts as to the protection of vaccination against small-pox." As to injuries, he stated :—

" 1. That the operation causes suffering in all cases, increasing with the number of marks.

" 2. That extensive inflammation, perhaps of simple character, is often set up.

" 3. That bad arms of a suspicious character often occur, where the wound did not heal for three to six months, and then only after specific (i.e., Mercurial) treatment."

The Royal Commission on Vaccination had 626 cases of more or less serious injury and death from vaccination reported to them, mainly by anti-vaccinators. Dr. Acland, who reported on these cases for the Commission, admitted that probably 495 of these cases were the results of vaccination. The summary of these cases forms Appendix IX to the Royal Commission's Report.

Dr. Killick Millard, the Medical Officer of Health for Leicester (who professes a belief in vaccination), after referring to these cases, says :—

" Undoubtedly the record of the injuries which have been caused by vaccination constitutes painful reading, and the recollection of the past should make medical men more tolerant of the opposition to vac-

tion than is sometimes the case." (" The Vaccination Question," p. 182.)

Gore Farm Disasters.—Dr. W. J. J. Stewart, in his Report to the Metropolitan Asylums Board, on the Vaccination of the men employed on extensions at Gore Farm Hospital, in 1907, admits that, of the 587 men vaccinated—

166 had to go on the sick list in consequence.

35 men were off duty with fever, an average of 5-1/2 days each.

125 men with septic inflammation, average 6.8 days each.

3 with abscesses, an average of 34.6 days each.

3 with general pustular eczema, an average of 23 days each.

The lymph used was the new Glycerinated Calf-lymph. The total cost of the vaccinations, and compensation to men injured, amounted to £1,029 10s. 2d., equal to £1 15s. per vaccination performed.

Leeds Case. In 1889, during the sitting of the Royal Commission, Emily Maud Child died of " Syphilis acquired at or from Vaccination," according to the verdict of a Coroner's jury, based on the unanimous testimony of the three Medical Officers of the Leeds Infirmary, where she was treated. The Local Government Board instituted a private enquiry, and stated that the mother and other children were syphilitic. Thanks to the action of the National Anti-Vaccination League, the whole family was brought up to London and submitted to a most searching examination by medical referees appointed by the Royal Commission. The result was that *no evidence was found of any syphilis, past or present*, in either of the parents nor in any of the surviving children.

Dr Jonathan Hutchinson, the great authority on Syphilis, after reviewing the above case, and several other series of similar cases, reported to him, says :—

The final supposition is that it is possible for vaccination independently of any syphilis, whether implanted or hereditary, to evoke symptoms which have hitherto been regarded as peculiar to the latter malady, and which are apparently greatly benefited by specific (i.e., mercurial) treatment." (" Archives of Surgery," January, 1891, p. 215.)

Dr. Charles Creighton, the eminent medical author, states that the analogy of Cow-pox is not to small-pox, but to syphilis, almost to point of identity.

Dr. E. M. Crookshank, Professor of Comparative Pathology and Bacteriology in King's College, London, confirms this view and says :—

" Inoculation of Cow-pox does not have the least effect in affording immunity from the analogous disease in man, syphilis : and neither do Cow-pox, Horse-pox, Sheep-pox, Cattle Plague, or any other radically dissimilar disease, exercise any specific protective power against human Small-pox." (" History and Pathology of Vaccination " Vol. I, p. 464.)

The above brief extracts are sufficient to show that the injuries and deaths resulting from Vaccination are much more serious and widespread than is usually thought. That Dr Eustace Hill has never seen any such cases does not imply that they do not frequently occur in his own district : it only shows the attitude of his mind towards such cases.

Sanitation and Small-pox.

Dr. Harold Kerr, Professor of Hygiene in the University of Durham, sneers at the influence of " so-called Sanitation"* in controlling small-pox—and all the slum-landlords who heard him rejoice at so influential an ally. It is cheaper for them to advocate vaccination at the Public expense than to pull down their rookeries, abolish their slums and provide decent sanitary houses for the workers, whose industry enables them to live in luxury and ease.

Sir Edwin Chadwick, F.R.S., when speaking at the Brighton Health Congress in 1881, said :—

" Cases of small-pox, of typhus and of others of the ordinary epidemics, occur in the greatest proportion, on common conditions of foul air from stagnant putrefaction, from bad house drainage, from sewers of deposit, from excrement-sodden sites, from filthy street surfaces, from impure water, and from overcrowding in private houses—and in public institutions. The entire removal of such conditions by complete sanitation and by improved dwellings is the effectual preventive of diseases of those species, and of ordinary as well as of extraordinary visitations."

Lord Shaftesbury, when speaking in support of the Vaccination Bill of 1853 in the House of Lords, said :—

" It is perfectly true that small-pox is chiefly confined to the lowest classes of the people, and I believe that with improved lodging-houses the disease might be all but exterminated."

Newcastle-upon-Tyne, during the third quarter of 1925, had the distinction of providing the only death from small-pox in England and Wales. Dr. Kerr says of this case :—" This little girl, aged about ten, was unvaccinated, and had a profuse rash. She made no progress, and in spite of every care,

*At Durham, June 15th, 1925.

died."* Here is Dr. Kerr's own certificate of this case :—

"Name	Jane Ann Boylan.
Address	2 St. Lawrence Road, Byker.
Age	9 years 11 months.
Vaccinal condition	Never Vaccinated.
Type of disease	Semi-confluent, with severe constitutional symptoms.
Other diseases present	Advanced tuberculosis of the lungs.

(Signed) H. KERR.
Medical Officer of Health."

Dr. Kerr, in all his references to this case, has never referred to the condition of this " home." The family, of four were living in *one* upstairs room, in one of the oldest and most insanitary houses of this insalubrious district. The character of the " small-pox " may be judged from the fact that the surviving " sufferers," the father and a boy, were only detained in hospital six days, and during this time the father was set to *fire the boiler*. He states that there was little or no eruption on any of them : that the " severe constitutional symptoms," in the case of the girl, to which Dr. Kerr refers as due to the small-pox, were pains in the chest, and that he was told at the hospital the death was due to " double pneumonia."

The mother states that this girl had been ill from birth : " too delicate for any doctor to vaccinate her," and was practically dying from consumption before she was removed to hospital. Had she been vaccinated, we should have heard nothing of the " small-pox " but death would have been certified as due to its true cause—" advanced tuberculosis of the lungs." Why has Dr. Kerr suppressed all the above facts in his reference to this case ?

SHEFFIELD AND LEICESTER, in 1870-1872, were equally well vaccinated. Sheffield had " obeyed the Vaccination Laws better than the average of large towns " ; whilst Dr. Crane, the Medical Officer of Health for Leicester, in his annual report for 1870, congratulated the town on its freedom from small-pox, which he attributed to vaccination, which, he said, " had been sedulously attended to." The Vaccination Returns from 1868 to 1872 show that 91.8 per cent. of the births had been vaccinated. But their thorough vaccination did not save either town from the devastating small-pox epidemic which followed. Thus—

**Newcastle Evening Chronicle*, August 5th, 1925.

Sheffield, 1870-2

Small-pox Deaths

1,007

Leicester, 1872

346

At that time both towns were equally insanitary though well-vaccinated. Dr. Killick Millard, the Medical Officer of Health for Leicester, says* :—

"Sanitation, as we at present understand the term, was almost unknown in Leicester, as was also the case in most rapidly growing industrial centres. The condition of the town may be judged from the fact that the general death-rate for the five years 1867-71 averaged twenty-six per thousand, whilst the zymotic death-rate averaged over six per thousand." . . . "In 1875, the great Public Health Act was passed and Leicester took early advantage of it."

LEICESTER availed herself to the utmost of what Dr. Kerr is pleased to describe as "so-called sanitation." She pulled down her slums, built decent working-class dwellings, abolished her privy-middens and installed an excellent sewage system.

SHEFFIELD did not so. No one can read Dr. Barry's Official Report on the Small-pox epidemic in that town, in 1887-8, and fail to wonder that any considerable population is content to live under such shocking and disgustingly insanitary conditions. The following extracts from Dr. Barry's Report will convey a general idea on this point:—

"Houses are frequently damp, ill-ventilated and dark. Also they are crowded together : courts are found within courts, and streets are narrow, winding and often precipitous. . . Further, a very large proportion of the houses erected prior to the last ten or fifteen years have been built back-to-back."

"A large number of yards and courts throughout the borough are either unpaved, or badly paved, and upon these yards slops and other liquid refuse are apparently flung, quite regardless of the position of the yard sink, and consequently the ground is habitually sodden with filth."

"Sheffield is essentially a privy-midden town. . . . It has been estimated that the actual area occupied by the middens themselves amounts to considerably over twelve acres. These middens are almost without exception constructed on faulty principles. As a general rule, the midden pit is sunk to a depth of three or more feet below the surface of the ground, and has privies erected on either side of it. In Sheffield it is usual for each midden to have from two to four privies discharging into it, but in some of the older parts of the town the pits are of great size, and have from eight to ten or even twelve privies in connection with them. Each privy, as a rule, serves two houses." . . .

"The middens are also used habitually throughout a large part of the town as receptacles for house slops and refuse of every description. As the midden pits are rarely made watertight, the sub-soil necessarily becomes charged with the soakage of excremental filth." . . . "In some cases, where the privy midden, common to the inhabitants of a yard, is situated at the upper end of the yard, I have seen putrid filth oozing

*"The Vaccination Question," page 123.

from the ground at the lower end, twenty, thirty, or more yards from the midden, because of the fact that the yard was asphalted."*

Sheffield and Leicester have each suffered from a small-pox epidemic since the passing of the great Public Health Act of 1875 ; but Leicester has profited by her sanitary work, and despite her comparatively unvaccinated condition, compares very favourably with thoroughly vaccinated, but insanitary Sheffield, both in the number of cases and the mildness of the disease as shown by the fatality rate. Thus :—

	Birth vaccinated	Small-pox		
	per cent	Cases	Deaths	Fatality %
Sheffield, 1887-8	98.0	7,001	653	9.3
Leicester, 1892-94	12.9	355	21	5.9

Sheffield, despite its most thorough vaccination, has repeatedly suffered from devastating epidemics of small-pox. Dr. George Buchanan, Chief Medical Officer to the Local Government Board, in his Preface to Dr. Barry's Report, says :—" For any preference shown by small-pox for Sheffield, as the place to be invaded, I can give no sufficient explanation." We maintain that a "sufficient explanation " is afforded by its grossly insanitary condition, as illustrated by the above extracts from Dr. Barry's Report.

Leicester, on the other hand, has profited by her attention to " so-called sanitation," not only in the limitation of her small-pox and the mildness of the disease, but in the reduction of her general mortality—from twenty-six per thousand in 1867-71 to twelve per thousand at the present time. *For the past twenty years there has not been a death from small-pox in Leicester.*

The Sheffield epidemic of 1887-8, though severe, was accompanied by more fatal epidemics of Measles and other zymotic diseases, the deaths registered in 1887 including the following :—

Small-pox	Deaths
	.. 278
Measles	.. 286
Diarrhoea	.. 1,338
Scarlatina	205

Other Small-pox epidemics have been similarly accompanied by more serious epidemics of other zymotic diseases. Thus, the Glasgow small-pox outbreak in 1920 was accompanied by epidemics of measles and scarlet fever, which caused three times the mortality from small-pox. The deaths registered in that year included :—

*Dr. F. W. Barry's Report on the Sheffield Small-pox Epidemic, 1887-8, pages 218-222.

Small-pox	Deaths
	112
Measles	310
Scarlet Fever	58

These more serious contemporary epidemics cause no remark : the fictitious importance attached to small-pox is solely on account of the vested interests in Vaccination. They are all due to one common cause—Sanitary neglect.

As *Dr. Farr*, the late Superintendent of Statistics in the Registrar General's Department, said :—

" Efforts should be made to reduce all the contagious recurrent diseases to a minimum by placing the whole population in as favourable a sanitary condition as possible, so that these diseases may be taken, as they are then, in their mildest form."

" The Zymotic Diseases replace each other : and when one is rooted out it is apt to be replaced by others, which range the human race indifferently, wherever the conditions of human life are wanting. They have this property in common with weeds and other forms of life : as one species recedes another advances. By improving the hygienic conditions in which men live you fortify them against infection ; and further by isolating the infected the chances of attack are diminished."*

" To abolish all the rookeries is possible now, with free and cheap locomotion, if the law give facilities to the acquisition of that necessity of healthy life—sites for dwelling houses. A bad land tenure is a cause of death,"†

Sheffield, Glasgow, Middlesbrough, Warrington, Newcastle, etc., have been faithful to the Vaccination creed, to the neglect of " so-called sanitation," and have reaped the result foretold by *Dr. Farr* in repeated epidemics of small-pox, measles, scarlet fever, and other zymotic diseases. Leicester, on the contrary, has largely abandoned vaccination since 1875, and has availed herself fully of the provisions of the great Public Health Act of that year. This was considered by orthodox medicine as a " most dangerous experiment," but has been fully justified by the results. In spite of her neglect of vaccination, she has reduced small-pox and *all other zymotic diseases* to a minimum, and is now one of the healthiest towns in the Kingdom.

*35th Report of the Registrar General.

†30th Report of the Registrar General.

The present "Small-pox" Epidemic.

THE CHANGED POSITION.

Tenner's claim of life-long protection from small-pox by vaccination once performed did not survive many years. The failures were so very numerous that all attempts to explain them away—by impugning the quality of the vaccination, by ascribing the cases of small-pox in the vaccinated to "malignant Chicken-pox," etc.—had to be abandoned. Under the stress of these circumstances, the claim of "protection" was given up and that of "mitigation" substituted. This changed position was authoritatively stated by Dr. Husband, the Director of the Vaccine Institution in Edinburgh, as follows:—

Vaccination "was once put forth as a perfect prophylactic to small-pox, but the repeated occurrence of epidemics of that disease has somewhat shaken the faith once reposed in it. . . . The proper view to take of Vaccination appears to be this :—*that it does not prevent small-fox, but -modifies its virulence.*"*

Until the present decade, it was admitted on all hands that the percentage of vaccinated small-pox cases in hospital was at least as great as the percentage of vaccinated persons among the general population outside. Thus:—

Small-pox Epidemic	Years	Attacks (Vaccinated and Unvaccinated)	Vaccinated	Percentage of attacks Vaccinated
Bavaria (1)	1871	30,742 ..	29,429	95.7
Berlin (2) ..	1871-72	20,391 ..	17,038	83.6
Cologne (2)	1871-73	2,282 ..	2,248	98.5
Neuss (2)	1865-73	247	247	100.0
London Smallpox Hospital (3)	1852-67	13,581 ..	10,661	78.5
Metropolitan Asylums Board Hospitals (4)	1870-86	50,668 ..	41,061	81.0
Bromley (5)	1881	43 ..	43	100.0
Sunderland (6)	1884	100 ..	96	96.0
Sheffield (7)	1887-88	7,066 ..	5,891	83.4
Warrington (8)	1892-93	674 ..	601	89.2
Birmingham (9)	1893-94	2,945 ..	2,616	88.8
Willenhall (10)	1894	828 ..	739	89.3

Husband's "Students Hand-book of Forensic Medicine," page 559 (Italics ours.)

†Omitting cases where the vaccinal condition was not stated.

(1) Second Report of Royal Commission on Vaccination, Question 1489.

(2) Beitrage zur Beurtheilung des Nutzens der Schutzpockenimpfung, pages 152, 154, 168.

(3) Report from the Select Committee on the Vaccination Act (1867) 1871.

(4) Third Report of the Royal Commission on Vaccination. Appendix, p. 204, Table L.

(5) *Lancet*, August 27th, 1881. (6) *Lancet*, February 23rd, 1884.

(7), (8), (9) and (10) Official Reports on these epidemics.

This new claim was that the vaccinated were quite liable to take small-pox as the unvaccinated, but had it in a milder form. In support of this claim, fatality rates thirty to eighty per cent. were shown among the unvaccinated but only three or four per cent. among the vaccinated patients—despite the fact that the fatality among the total cases vaccinated and unvaccinated together, remained the same as before the introduction of vaccination, viz., twelve to twenty per cent.

The great Public Health Act of 1875 was the commencement of an era of Sanitary Reform, under which the general death rate has been reduced from twenty-two per thousand in 1870 to twelve per thousand at the present time. This Sanitary Reform has led to the practical extinction of small-pox as a cause of death. Unfortunately for the advocates of vaccination, this has been accompanied by a great and rapid decline in that operation, as is shown by the following summary :—

Annual Averages .	England and Wales	
	Small-pox Deaths	Vaccinations % of Birth*
1876-1885	2,016	85.6
1886-1895	483	76.6
1896-1905	528	69.7
1906-1915	13	51.6
1916-1925	14	42.0*

In recent years, the claim of absolute protection by vaccination has been again revived. Thus, in 1920, there was an outbreak of small-pox in Glasgow, in which it was claimed that no vaccinated child under ten had taken the disease. As "*Chicken-pox*" was also stated in the official Report to have been prevalent and made notifiable, a question in Parliament† elicited the significant fact that the cases ascribed to that disease had been more than *ten times* those from small-pox, and there had also been a contemporary epidemic of "*Measles*" with nearly three times the mortality from small-pox. The figures are :—

	Cases	Deaths
Small-pox.....	542 ..	112
Chicken-pox	5,502 ..	6
Measles	not given ..	310

It is admitted that Chicken-pox is "*never fatal*," ‡ and there is therefore every likelihood that the deaths so ascribed to it are those of small-pox in vaccinated children.

*Vaccinations, for 1916 to 1923 : last two years not yet published.

†Parliamentary Reports, August 1st, 1923, Col. 1542.

‡Dr. Alex. Collie, in Quain's Dictionary of Medicine.

In 1923, there was an outbreak of very mild disease at Gloucester, which Dr. Bibby, the Medical Officer of Health, diagnosed as Chicken-pox. But as the city is largely unvaccinated, the Ministry of Health intervened and fomented a small-pox scare. Dr. Bibby, despite his belief in vaccination, suffered himself to be superseded rather than be a party to it, and the Matron of the Hospital eventually followed his example. Medical Officers of Health from all parts of the country visited Gloucester to be "instructed" in small-pox diagnosis—which appeared to be, "Vaccinated cases, however severe—Chicken-pox : unvaccinated cases, however mild—small-pox." As Dr. J. H. Garrett, the Medical Officer of Health for Cheltenham states* :—

"Recent vaccination is the all important thing eagerly enquired about as the sheet anchor of protection and *the settling point in diagnosis*, which never seems to fail."

The absurd position in which this new method of diagnosis places the advocates of vaccination is well set forth by Dr. H. Cameron Kidd, the Medical Officer of Health for Bromsgrove, who states † :—

"There is much that is very disturbing about the present small-pox epidemic : it makes many of us look foolish, who have been preaching for years to the public on the dangers of small-pox ; and it appears to justify some of the contentions of the anti-vaccinators. For thirty-five years, as Medical Officer of Health here, I have been urging vaccination and prophesying that when the infection was introduced and a real epidemic started people would have an eye-opener and a terrible reminder of what small-pox means in unvaccinated children, instancing the last Gloucester epidemic with its 413 deaths. Now we have had an epidemic running up to about one thousand cases with practically no mortality, and the majority of these cases is said to have been among unvaccinated persons."

He then proceeds to give an instance of the new diagnosis :—

"A colleague in the Public Health service went to Gloucester and received full instruction." . . . "Shortly after his return, he was called in consultation to a case presenting all these features " (diagnostic of small-pox). " He gave his opinion ' Small-pox.' As there was still some doubt, a medical referee from the Ministry of Health was summoned, and he pronounced it ' chicken-pox.' When I asked what the reason was for this decision, my friend replied—' Well, the chief thing was that the child had good vaccination scars! ' "

According to the Registrar General's Returns, " Chicken-Pox " is now a far more fatal disease than Small-pox. For every death under five ascribed to Small-pox there are

**The Lancet*, June 23rd, 1923. (Italics ours.)

†*The British Medical Journal*, August 4th, 1923.

twenty-four registered as from " Chicken-pox." In fact the deaths registered as from Vaccination itself—from which Dr Eustace Hill has never seen any injury—are now nearly four times those from small-pox. The figures for 1905-1923 for deaths under five years of age, are as follows :—

	Deaths
“ Chicken-pox	1,319
Vaccination	195
Small-pox	54

The present epidemic of " Small-pox " is thus a less serious disease than Vaccination, as shown by the above Registrar General's Returns. This is admitted by medical men themselves. Thus, Dr. R. W. Jameson, who was in charge of the " Small-pox" epidemic at Ashington (Northumberland) in 1923, for the Ministry of Health, says :—

" One can understand that a father of an unvaccinated family living among unhygienic surroundings should be much perplexed as to what he ought to do should he see his neighbour A's children return obviously benefited by their stay in the country small-pox hospital whilst his neighbour B's children are little bundles of misery with bad vaccination arms."*

Although this practice of using chicken-pox as a " fence " to save the waning credit of vaccination has only recently become an officially recognised system, it has been largely resorted to from the earliest times. More than a hundred years ago, the *Medical and Chirurgical Review* protested against it. That journal records, among many other similar cases, that of an infant suffering from confluent small-pox—according to the testimony of several doctors. When they were informed that it had been vaccinated by the celebrated Dr. Ring, the latter gentleman pronounced the disease " a rank kind of chicken-pox." The Editors, breaking through professional etiquette, commented on this case as follows :—

" This attempt to conceal every thing that appears unfavourable, so frequently resorted to by certain pretended friends of vaccination, cannot be too much reprobated. It shows that the business has got into very bad hands ; were truth their only object, they would court investigation, not endeavour to suppress it."†

This candid condemnation applies with added force to-day, when the same system of suppressing truth is being used to bolster up the maintenance of a Compulsory Law.

**The Lancet*, January 10th, 1925.

†*Medical and Chirurgical Review*, Vol. XI, p. cvi.

ENGLAND AND WALES.

Smallpox and Vaccination Mortality Returns for the 20 years ended 1924.

Figures for 1905 to 1919 checked at Office of Registrar-General for England and Wales, by request of Mr. A. E. Waterson, M.P. Other figures given in answers in Parliament, or in the Reports of the Registrar-General.

Year	smallpox Deaths			†Deaths associated with Vaccination		Cowpox Total	Per cent of Births vaccinated
	Under 5	Over 5	Total	Under 5	Over 5		
1905	17	99	116	26	0	26	75.8
1906	4	17	21	28	1	29	73.4
1907	1	9	10	12	0	12	70.9
1908	1	11	12	13	0	13	63.2
1909	1	20	21	11	0	11	59.8
1910	2	17	19	8	0	8	55.9
1911	5	18	23	14	0	14	52.3
1912	2	7	9	9	1	10	50.1
1913	1	9	10	7	0	7	46.5
1914	1	3	4	5	0	5	44.6
1915	2	11	13	7	3	10	45.5
1916	3	15	18	2	1	3	44.7
1917	0	3	3	6	2	8	43.3
1918	0	2	2	3	1	4	41.5
1919	2	26	28	6	1	7	40.6
1920	5	25	30	19	0	19	39.5
1921	1	4	5	8	—	8	38.3
1922	4	23	27	6	1	7	40.3
1923	2	5	7	5	7	12	47.8
*1924	4	4	8	4	0	4	47.5
	58	328	386	199	18	217	

*The Ministry of Health's Report gives the smallpox deaths in 1924 as 8, the other 5 recorded by the Registrar-General being due to other causes (see Ministry's Report for 1924, pp. 31-37, and answer in Parliament August 4th, 1925).

†The Registrar-General has included 5 deaths from anti-typhoid inoculation in the column headed "Deaths from cowpox and other effects of vaccination." They have been deducted from these figures.

ENGLAND AND WALES.

Percentage of Births Vaccinated and Number of Smallpox Deaths Registered.

(See answer in Parliament, July 16th, 1923).

1872-1881			1882-1891			1892-1901			1902-1911			1912-1921		
%	of Births	S'pox	%	of Births	S'pox	%	of Births	S'pox	%	of Births	S'pox	%	of Births	S'pox
	Vacc.	Deaths		Vacc.	Deaths.		Vacc.	Deaths.		Vacc.	Deaths.		Vacc.	Deaths.
1872	85.0	19,022	1882	85.9	1,317	1892	74.5	431	1902	74.8	2,464	1912	50.1	9
1873	85.2	2,303	1883	85.6	957	1893	72.3	1,457	1903	75.4	760	1913	46.5	10
1874	85.05	2,084	1884	84.4	2,234	1894	70.4	820	1904	75.3	507	1914	44.6	4
1875	84.9	849	1885	84.7	2,827	1895	67.8	223	1905	75.8	116	1915	45.5	13
1876	86.0	2,408	1886	83.4	275	1896	66.0	541	1906	73.4	21	1916	44.7	18
1877	86.3	4,278	1887	82.8	506	1897	62.4	25	1907	70.9	10	1917	43.3	3
1878	85.3	1,856	1888	81.7	1,026	1898	61.0	253	1908	63.2	12	1918	41.5	2
1879	86.0	536	1889	79.8	23	1899	66.4	174	1909	59.8	21	1919	40.6	28
1880	85.1	648	1890	78.0	16	1900	68.7	85	1910	55.9	19	1920	39.5	30
1881	86.6	3,098	1891	75.8	49	1901	71.4	356	1911	52.3	23	1921	38.3	5
Totals			9,230			4,365			3,953			122		
Average per annum :														
	85.5	3,708		82.1	923		67.9	436		67.6	395		43.4	12

So in the 10 years 1872-1881, when an average of 85.5% of the births were vaccinated, we had an average of 3,708 Smallpox deaths every year. In 1882-1891, when an average of 82.1% of the births were vaccinated, we had an average of 923 Smallpox deaths every year. In 1892-1901, when the vaccinations had declined to an average of 67.9% of the births, the Smallpox deaths dropped to an average of 436 per annum. In 1902-1911, when the average number of vaccinations was 67.6% of the births, the Smallpox deaths averaged 395 per annum, but in 1912-1921, when the vaccinations had dropped to 43.4% of the births, there was an average of only 12 Smallpox deaths per annum. How can any person who claims to understand statistics and *to* have a logical brain declare that it is vaccination that has stamped out Smallpox, in face of the above official figures ?

ENGLAND AND WALES.

Smallpox Cases and Deaths amongst "Vaccinated" and "Unvaccinated" respectively.
(Nearly all Port Sanitary cases excluded).

Year	Extracted from Local Government and Ministry of Health						Reports.		
	Vaccinated			Unvaccinated			Total		
	Cases	Deaths	Fatality Rate	Cases	Deaths	Fatality Rate	Cases	Deaths	Fatality Rate
1912	73	3	4.1	32	4	12.5	105	7	7.0
1913	56	2	3.6	31	5	16.1	87	7	8.0
1914	43	1	2.3	15	3	20.0	58	4	7.0
1915	49	7	14.3	34	4	11.8	83	11	13.0
1916	95	7	7.3	48	9	18.7	143	16	11.2
1917	7	3	42.8	0	0	—	7	3	42.8
1918	31	2	6.4	20	0	—	51	2	3.9
1919	170	14	8.2	64	11	17.2	234	25	10.7
1920	140	15	10.7	118	13	11.0	258	28	10.9
1921	104	1	.9	222	3	1.3	326	4	1.2
1922	283	15	5.3	684	12	1.8	967	27	2.9
1923	410	2	0.5	2,073	5	0.24	2,483	7	0.29
1924	691	2	0.3	3,098	5	0.1	3,789	7	0.19
1925	988	3	0.3	4,360	2	0.05	5,348	5	0.11
	3,140	77	2.4	10,799	76	0.7	13,939	153	1.1

" Vaccinated " includes those successfully vaccinated in infancy and bearing marks ; those successfully vaccinated but bearing no marks ; and those re-vaccinated.

" Unvaccinated " includes those stated to have been unvaccinated and those vaccinated during period of incubation of smallpox.

" Port Sanitary " cases are not generally included in the official tables classifying the cases into " vaccinated " and " unvaccinated." Differences in smallpox deaths in certain years found in some tables are due to this fact.

INDEX.

	Page
Archer, Dr. R. S., his Small-pox after Re-vaccination	11
Army Regulations as to Vaccination (Brigade Surgeon Nash)	7
Armies : Small-pox in British, German, Italian	7,8
Barry, Dr. F. W., on Insanitation at Sheffield	18
Berlin : Small-pox in Vaccinated Children under ten	6
Bicetre Hospital, Immunity of Medical and Nursing Staff	12
Blood : " Not drawn in vaccinating Calf " (Dr. Cree)	2
Blood : Dr. Robert Cory's Evidence—Blood always drawn	3
Bridges, Dr., on " Shielding vaccination from reproach "	13
Calf-Lymph : Local Government Board's pamphlet quoted	3
Chadwick, Sir Edwin, F.R.S., on Sanitation and Small-pox	16
" Chicken-pox " at Glasgow, 1920	22
Chicken-pox Deaths : from Registrar-General's Returns	23
Child, Emily Maud, Syphilised by Vaccination	15
Colin, Dr., on Immunity of Doctors, etc., not re-vaccinated	12
Collie, Dr. Alexander, on Chicken-pox	22
Copeman, Dr. Monckton, on Small-pox Vaccine Lymph	2
Cory, Dr. Robert, on Blood always present in Lymph	3
Coupland, Dr. Sidney, on Small-pox (re-vaccinated) at Liverpool	10
Cree, Dr. R. Ewart, on Lymph Production	2
Cree, Dr. R. Ewart, on Lymph Collection from Calf	4
Creighton, Dr. Charles, on Analogy of Cowpox to Syphilis	15
Crookshank, Dr. E. M., on Analogy of Cowpox to Syphilis	15
Davidson, Dr. P. M., on Dangers of Vaccination	14
Doctors: Small-pox among	10
Dublin (South), Immunity of non-revaccinated Nurses	12
Farr, Dr., F.R.S., Mildness of Zymotic Diseases due to Sanitation	20
" " Bad Housing Conditions a cause of Death	20
Garrett, Dr., Diagnosis of Small-pox by Vaccination Marks	23
Germany : Small-pox in Vaccinated Children under 10	6
Glasgow Small-pox Epidemic, 1920.....	22
Gloucester Small-pox Epidemic, 1923	23
Glycerination of Lymph	4-5
" Condemned by Local Government Board	5
Glycerinated Lymph Disasters at Gore Farm	15
Glycerinated Lymph Disasters at Rugen	5
Gore Farm Disasters	15
Hadwen, Dr. W. R., Immune from Small-pox though Unvaccinated	11
Hill, Dr. Eustace, Has seen no ill-effects from vaccination	13

INDEX—continued.

	Page
Hopkirk, Dr., on Re-vaccination in German Army.....	8
Husband, Dr., on Mitigation of Small-pox by Vaccination ..	21
Hutchinson, Dr. Jonathan, on Simulated Syphilis after Vaccination	15
Injuries by Vaccination	13
Jameson, Dr. R.M., on Mild Small-pox and Vaccination ..	24
Jenner, Dr. Edward : His Claim to Absolute Protection	21
Kerr, Dr. Harold : his Statements :—	
" Falsification by Anti-vaccinators " Preface	
Vaccination of Calf Causes no Pain	2
Protection absolute for ten years	5
Absolute Protection by Re-vaccination.	7
Absolute Protection of Doctors and Nurses	10
" So-Called Sanitation"	16
Kidd Dr. H. Cameron, on Vaccination in Diagnosis of Small-pox	23
<i>Lancet</i> on Unknown Origin of Lymph	2
<i>Lancet</i> Reports Small-pox in Re-vaccinated Nurse	11
Leeds Case	15
Leicester compared with Sheffield	17
Liverpool, Small-pox among Doctors and Nurses	10
Low, Dr. Bruce : His " Incidence of Small-pox " quoted ..	6-9
Lymph Production	2-4
Lymph Collection by Volkmann Spoon	4
Lymph Glycerination	4
Makuna, Dr., on Vaccinal Injuries	14
May, Dr. Henry, on " Saving Vaccination from Reproach " ..	13
Medical and Chirurgical Review quoted	24
Metropolitan Asylums Board Report on Small-pox among Nurses	11
Millard, Dr. Killick, on Small-pox among Doctors.	10
Millard, Dr. Killick, on Vaccinal Injuries	14
Newcastle : A " Small-pox " Death.....	16
Nurses Immune from Small-pox although not Re-vaccinated ..	12
Nurses, Small-pox among	10
Poplar Public Vaccinator takes Small-pox	11
Porter, Dr. F. T., on Immunity of Nurses.....	12
Protection by Vaccination for ten years (Dr. Cree and Dr. Kerr) ..	5
Protection by Infantile Vaccination very Fleeting (Dr. Gayton) ..	5
Public Health Act, 1875	22
Re-vaccination	7
—" Absolute Protection by " (Dr. Kerr).....	7
—In British, German and Italian Armies	7-8
—Unnecessary (Dr. F. T. Porter).....	12

I N D E X—*continued.*

	page
Royal Commission on Vaccination (Minority Report) quoted	12
Royal Commission on Vaccination on Vaccinal Injuries	14
Ruata, Dr. C, on Small-pox in Italian Army	8
Rugen Disaster	5
Sanitation and Small-pox, Sir Edwin Chadwick on	16
Shaftesbury, Lord, on Small-pox and Bad Housing	16
Sheffield and Leicester compared	17
Sheffield Epidemic	18
Sheffield : Insanitary Condition (Dr. Barry)	18
Sheffield : Small-pox in Vaccinated Children at Various Ages	6
Small-pox, and Births Vaccinated, per cent (Reg. General)	22
(table)	26
„ and Vaccination Mortality Returns	25
„ and Vaccinations per cent, of Births	26
„ cases and deaths : Vaccinated and Unvaccinated	27
„ in Vaccinated Children under 10	6
„ Fatal, under Six Months old (Registrar General)	7
„ in British, German and Italian Armies	7-8
„ in British Navy	8
„ in Re-vaccinated Persons (Summary)	9
„ in Doctors and Nurses	10
„ The present " Epidemic "	21
„ Vaccinated Cases per cent. of Total Vaccinated and Unvaccinated Cases	21
"Vaccinated" and "Unvaccinated" Fatality Rates (table)	27
Statistical Tables	25, 26, 27
Stewart, Dr. W. J. J., on Gore Farm Disasters	15
Unvaccinated and Vaccinated Small-pox Fatality Rates (table)	27
Vaccination : Births Vaccinated per cent (Registrar General)	22, 26
„ Deaths from (Registrar General)	24, 25
„ More Fatal than Small-pox	24, 25
„ Risks and Injuries from	13-16
Volkmann Spoon for Collection of Lymph	4
Ward, Dr. Cuthbert, on Erysipelas after Vaccination	14