Results of an Investigation

INTO THE

SHEFFIELD

SMALL-POX EPIDEMIC

OF 1887.

ву

ROBERT HAINSWORTH.

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PREFACE.

IN consequence of the many conflicting statements which found currency in the Press during the latter part of 1887 and the early months of 1888, professing to deal with the incidence of the Small-pox Epidemic in Sheffield, the Executive of the Yorkshire Union of Anti-Compulsory Vaccination Leagues determined to investigate the matter for themselves; their resolve being quickened into activity by the unsatisfactory and incomplete report furnished by Dr. Sinclair White, M.D. (Borough Medical Officer of Health), to the Sheffield Health Committee, Jan. 11th, 1888, in which it was recorded—"that of 353 children under 10 years of age who contracted the disease of Smallpox, 207 were Vaccinated, of whom only 2 died: equal to less than I per cent.; whilst of the remaining 146 Unvaccinated cases, 70 deaths occurred: equal to 48 per cent. of those attacked,"-a statement which evidently sought to prove too much.

Dr. S. White having resigned his appointment shortly after the issue of his report, his successor, Dr. Theodore Thomson, M.D., was approached by Mr. J. Weston, of Sheffield, and asked for particulars in re those persons who had died of Small-pox, special regard being paid to those cases of persons who were said to have been Unvaccinated, with the results contained in the following letters:—

Health Office, Tudor Place, Sheffield, Feb 23rd, 1888.

Dear Sir,

In reply to your letter of Feb. 22nd, I beg to inform you that at a later date a full report of the deaths from Small-pox in this Epidemic amongst the Vaccinated and Unvaccinated will be published, and that the report will be drawn up, so that reference can be made to the names and addresses of cases quoted.

Yours faithfully,

THEODORE THOMSON.

Mr. James Weston, 17, Havelock Square, Sheffield. In a further letter to Mr. James Weston, Dr. Thomson wrote:—

Dear Sir,

It will probably be <u>some considerable time</u> before the report I mentioned will be published.

As time was passing, and fears were entertained that the promised information was likely to be shelved, Mr. Councillor John Wilson, of Sheffield, saw the Mayor (Mr. Alderman Clegg), and subsequently Dr. Thomson, hoping to obtain more definite information, with the result contained in the following extract from a letter sent by Mr. Councillor John Wilson to Mr. A. E. Schoon, of Keighley, under date March 24th, 1888.

"I enquired this week of our new Medical Officer, who informs me that he has never seen the list, and supposes that Dr. White, when he left the service of the Corporation, took the list with him."

With the question of the right of Dr. White when leaving the public service to carry away with him those records which belonged to the Corporation, which he well knew would be required for reference, I leave for others to judge upon.

I think it will be conceded that affairs in connection with the Health Office at Sheffield, up to this date, were such as did not inspire hope or confidence as to actual facts being disclosed. †

As there was every reason to believe that, in process of time, Dr. S. White's report would be cited as conclusive authority unless proved unreliable, and that the promised information at a later date contained in Dr. Thomson's letter, Feb. 23rd, might merge into the some considerable time of his next letter to Mr. J. Weston (if such information was ever published), when it would be practically impossible to examine its details by any system of inquiry, I was, therefore, appointed by the Executive of the Yorkshire Union of

⁺ Up to date March 6th, 1889. No further information in re the Epidemie, 1887, has been officially disclosed.

Anti-Compulsory Vaccination Leagues to investigate into

this serious outbreak of Small-pox.

The work was perilous, yet the issues involved so momentous, that I felt it my duty to undertake the task. During the greater part of this undertaking I was assisted by Mr. Samuel Knowles, of Halifax, to whom any reference can be made.

At the latter part of my inquiry I wrote Dr. Thomson of my intention to wait upon him, "when I hoped he would please furnish me with the private addresses of those persons who died of Small-pox in the Sheffield Borough Fever Hospital during 1887."

In pursuance of my note, I called upon Dr. Thomson at

his office, to receive a stereotyped reply.

Upon reflection I wrote again as follows:—

May 23rd, 1888.

Dr. T. Thomson,

Sir,—I beg to notify you that I will further wait upon you tomorrow morning at II a.m., in order to give you an opportunity to furnish or refuse my request made to you to-day in person and now by letter for the names and private addresses of those persons who died in the Borough Hospitals from Small-pox during the periods March to December 1887, well knowing such information to be contained in your office books. Hoping that you will see the wisdom of complying with my request.

I have the honor to be, yours,
ROBERT HAINSWORTH.

On May 24th I called at the Health Office, when Dr. T. Thomson said he had been to the Registrar's Office and had found that he had not the private address of those who had died in the hospitals, and he asked me to call in the afternoon of the day following, and he would see what could be done.

I called at the office, according to the appointment agreed upon by Dr. Thomson. The subjoined letter will supply the result:—

175, Pond Street, Sheffield.
May 25th, 1888.

Dr. T. Thomson, M.D.,

Dear Sir,—When I called at your office this afternoon I must confess I was disappointed to find you out. Anyhow, I will call upon you to-morrow morning, between 9-30 and 10 a.m., when I hope you will see your way clear to give those particulars you have in your books, which are,

as you must be aware, material in furthering the inquiry in which I am engaged. If you are not at the office at the time specified to-morrow, I must take it for granted as an equivalent to a positive refusal. In the event of your refusal, I shall leave Sheffield to-morrow. If you should have afterwards any communication to make, please address, yours,

ROBERT HAINSWORTH,
45, Ascot Avenue, East Leeds.

I called at the Health Office, Tudor Place, at the time specified in the letter just quoted. Taking the liberty of being accompanied by Mr. Adams, the manager of the Refuge Assurance Company (for reasons I need not state), I reminded Dr. Thomson of his previous promises to do what he could in the matter, only to be informed that he could not give the information, as the whole of his inspectors' books would have to be gone through, &c., &c. I ventured to ask permission to examine the Office Report Book, and stated that, as I had a list of the persons' names who had died in hospital, a couple of hours (no very considerable time) would suffice me in obtaining the addresses from whence removed to hospital.

I then found that Dr. Thomson, when fairly cornered, never really intended to help in the matter. Mr. Adams was indignant at the shallowness of pretence displayed by Dr. Thomson on that occasion.

I have not had any further communications with Dr. Thomson since.

On Friday, the 25th May (having previously wrote to Dr. Willey, Medical Superintendent of the Fever Hospital), I went to the Winter Street Hospital, hoping to be able to see his admissions to hospital book. I found Dr. Willey in company with Dr. Barry, Local Government Board Inspector.

After a conference of some duration, in which Dr. Barry affirmed he saw no reason why my request should not be complied with provided the Chairman of the Hospital Committee (Alderman Brooksbank) would consent, I took my leave and applied direct to the Chairman referred to, who refused to help in any shape or form.

I was very much amused at the transparent prevarication of the Local Government's Board Inspector, Dr. Barry, who, in the interview just recorded, made much pretence at regret in not being able to meet my demands save with the consent of Alderman Brooksbank, he not knowing at the time that I was cognisant of the mean tactics he had had resource to some weeks previous in his endeavours to prevent my obtaining any information whatever. Had the obliging Local Government Board Inspector then succeeded, my investigation could never have taken place.

Being determined to make the inquiry complete, if possible, I wrote the Right Honorable the President of the Local Government Board, as follows:—

Sir,

Having made some extensive progress in re an investigation of the incidence of the Small-pox in Sheffield, I am led to apply to you for an authorisation upon your Inspector, Dr. Barry, that he do supply me with a list of the private addresses of those persons who, suffering from Small-pox, were conveyed to, and died in, the Sheffield Hospitals.

I am, yours faithfully,

ROBERT HAINSWORTH.

I received the following letter in reply:—

Local Government Board, Whitehall, S.W., June 25th, 1888.

Sir,

I am directed by the Local Government Board to acknowledge the receipt of your letter of the 18th inst. asking them to cause you to be furnished with a list of the addresses of the persons who died of Small-pox in hospital during the recent prevalence of disease in Sheffield, and I am to state it rests entirely with the hospital authorities to decide to whom they shall supply information derived from the record of the hospital. Your application should therefore be addressed directly to them. The Board direct me to add that they must decline to communicate to you particulars furnished by their Inspector for the special purposes of the inquiry which he is making, and on which he will report in due course.

I am, your obedient servant, C. A. DALTON,

Assistant Secretary.

Thus driven upon my own resources, I used my best endeavours to obtain every possible evidence within reach, and I venture to think that a perusal of these pages will show that I was able to obtain evidence of sufficient volume (in spite of official obstruction) to utterly disprove, statistically and logically, the statements contained in Dr. White's report.

In my researches amongst the pestilential quarters of Sheffield, every kindness and help was afforded by the persons I there came in contact with (with two exceptions), and I could not resist a conviction forcing itself upon me, from the evidences I came across, that the many statements which had been trumpeted forth in favour of Vaccination were perhaps due more to a desire to divert public attention from the *real* causes of this dire epidemic than a simple bolstering up of a diminishing faith in the utility of Vaccination.

The negligence displayed by those in charge of the Sanitary Department in Sheffield prior and subsequent to this outbreak, was a disgrace and outrage upon the common sense of our time.

Having submitted the results of my investigation to the Executive of the Yorkshire U. A. C. V. Leagues, I was requested to prepare the same in the form now given. I have endeavoured to make the subject matter clear, hoping with perhaps some little vainness, that should these pages find their way into the hands of our Legislators, they might, upon perusal, see the strong desirability for the appointing of a Royal Commission of Inquiry into the subject matter of this investigation.

I have the honor to be,
Yours truly,
ROBERT HAINSWORTH,

45, Ascot venue, East Leeds.

March 6th, 1889.

SHEFFIELD SMALL-POX EPIDEMIC,

1887.

SMALL-POX CASES AND MORTALITY.

PERMIT me to draw your attention to a report supplied to the Sheffield Borough Health Committee on January 11th, 1888, by their Borough Health Officer, Dr. S. White, M.D., containing certain tabulatory information with which I now propose to deal.

Dr. White, on a Table numbered 1., gave the numbers of cases, admissions to hospitals, and of deaths from Small-pox during the ten months, March to December, 1887.

On reference to this Table, which I reproduce, you will find that the total number of Small-pox cases is given as 2,732, of whom 826 are shown as admitted into the hospital for treatment: leaving a balance of 1,906 cases (which are not shown separately, nor ever mentioned in his report) treated at own homes; the total deaths being given as 277.

In looking over this Table, one cannot fail being struck with the incomplete manner in which the professed information is given; for whilst it is possible to ascertain the number of Small-pox cases occurring at own homes by deducting the 826 admissions to hospital from the 2,732 cases of Small-pox, it is impossible to ascertain any information regarding the mortality rates attending those two classes of cases. As Dr. White in no part of his report ever alludes to any such separate rates, one might be easily led to believe in a general mortality rate of 11.1; but such a belief would be in opposition to the facts.

Now, what I would point out is this: that, in view of the importance which is at present attached to the question of hospital, in contradistinction to other methods of treating highly-infectious diseases, the information which Dr. White could have given in re comparative mortality rates would have been very material as an index of efficiency in re the best methods of dealing with Small-pox. That he had this information in his possession I am certain, as I am equally positive that he never intended it to be known: hence the incompleteness of Table No. 1. For the present I will remain content in pointing out this fact, as I shall have to deal with those mortality rates later on.





By reference to Table No. 2, compiled by accepting Dr. White's statement as to number of cases and admissions to hospital as correct, but obtaining the number of deaths when and where occurring from the records kept by the Superintendant Registrar, you will observe that serious discrepancies occur in Dr. White's mortality column. Commencing in July with one death less than what actually occurred, he blunders along until in December he actually gives 28 deaths more than those contained in the Supt. Registrar's books, until, at the end of the year we find that Dr. White is furnished with a record of 31 deaths in excess of the actual number—equal to some 400 cases of Small-pox.

Having got wrong in so simple a matter as the foregoing, I think I am entitled to call into question and examine the veracity of other and more complicated matters with which he professes to deal. There is only one portion of Dr. White's report where I find I cannot (much as I should have liked) follow him, and that is in relation to statements contained in a Table in which he professes to give "the age distribution and the proportion of the Vaccinated to the Unvaccinated of those attacked during the year 1887." I have no desire to undervalue the information which the above title sets forth, and

it would have afforded me the greatest pleasure to have examined its statements, but as Dr. White by his own act † prevents such examination, he must certainly pardon me if I blot out the whole of the statements given on this table as assertions unsustained, as I shall prove that Dr. White's statements are inaccurate where it is possible for me to follow him. I think I am entitled to call in question those statements which he has prevented my examining.

Analysis of Deaths from Small-pox in Respect of Age and the Incidence of Vaccination.

I purpose to meet Dr. White on surer ground by an analysis of statements contained in his Table No. 3. You will see on reference to this table, which I reproduce, that we have professedly given an "Analysis of Deaths from Small-pox in respect of Age and the Incidence of Vaccination, 1887." Now, as Dr. White has stated—and I entirely agree with him—that "If we turn to the Death Tables, which, after all, are the most valuable criterion, we shall find still stronger evidence of the utility (or otherwise) of Infantile Vaccination."

We will now examine the manner in which Dr. White sets about to prove this proposition.

[†] Taking away his Looks.

Adopting a favoured method of grouping his cases in years, and dividing the same into Unvaccinated, Vaccinated, and not known, we are given to understand that 39 deaths occurred in children during the first year of life-36 of whom were Unvaccinated—no attempt having been made to furnish any reason why so large a number of Unvaccinated children died in their first year of life; but seeing that Dr. White admits that only one Vaccinated child succumbed under such an age period, one cannot be blind to the conclusion which the Dr. was so eager to arrive at in making out a case in favour of the "Utility of Infantile Vaccination," his very eagerness being fatal to him as an authority in matters of fact; for by referring to Table No. 4, which I have framed for comparative purposes, you will find that, instead of 39 children dying of Small-pox under I year old, the number was 31; instead of 36 Unvaccinated children dying the number was 13; instead of 1 Vaccinated death the number was 5; and Dr. White's 2 cases of "not known" as to Vaccination were 13, caused mainly by his own obstructive tactics and those of his successors. If the whole of the not known cases on Table 4 were added to those Unvaccinated cases, Dr. White's statements would still remain grossly inaccurate when we contemplate the many

reasonable causes to account for absence of Infantile Vaccination. But if we deduct those cases of Unvaccinated children born of Vaccinated mothers ill of Small-pox at their birth, together with those other cases refused as unfit for Vaccination, giving correct age periods under the first year of life, we arrive at the following interesting result:—

Age at Death.	Conditions of Birth and Health opposed to Vaccination.	Vacci- nated.	Un- Vacci- nated.	Not known	Total.
9 to 28 Days.	7	4	nil	nil	II
τ t o 4 Months.	5	I	4	6 †	16
4 to 12 Months.	I	nil	nil	3 †	4
	13	5	4	9	31

I think the most prejudiced pro-Vaccinator will admit the fairness of this classification. It is thus easy to account for 70 per cent. of the cases terminating fatally in the case of those children who died from Small-pox under the first year of

[†] Died in hospital.



Given below Dr. S. White's Table No. 3, professing to show "Analysis of Deaths from Small-pox in respect of Age and the Incidence of Vaccination, 1887.

TABLE No. 3.

Age at Death.	Unvaccinated.	Vaccinated.	Not known.	Total.
Under 1 year	36	1	2	39
1 & under 5 yrs	17	I	0	18
5 ,, ,, 10 yrs	17	0	0	17
10 ,, ,, 15 ,,	15	5	2	22
15 ,, ,, 20 ,,	27	5	I	33
20 ,, ,, 25 ,,	23	20	2	45
25 ,, ,, 30 ,,	8	II	3	22
30 ,, ,, 35 ,,	6	20	1	27
35 ,, ,, 40 ,,	5	12	4	21
40 ,, ,, 45 ,,	I	11	2	14
45 ,, ,, 50 ,,	ı	3	0	4
50 ,, ,, 60 ,,	1	5	0	6
60 & upwards	0	3	3	6
Not known	0	0	3	3
	157	97	23	277

Given a Correct Analysis of Deaths from Small-pox in respect of Age, the Incidence of Vaccination, and the Place where Death occurred, compiled from Notes and Registrar Superintendent Books by Robert Hainsworth.

TABLE No. 4.

Age at Death.	Un- Vaccinated.	Vaccinated.	Not known	Un- Vaccinated	Vaccinated.	Not known	Total Deaths.
9 to 28 days	3	4	4*	nil	nil	nil	11
r to 4 months	8§	I	3*	ī	nil	3†	16
4 to 12 months	I	nil	1*	nil	nil	2†	4
The total num	found to be 31, and not 39 as on other table.						
1 & under 5 yrs	6	2	I *	2	nil	5 †	16
5 ,, 7 ,,	2	2	nil	nil	nil	5 †	9
8 " 11 "	3	3	nil	nil	I	6†	13
12 ,, 20 ,,	5	3	4	I	2	28†	43
21 ,, 69 ,,	6	23	16*	nil	4	85 †	134
Died at own homes.				Died in the hospitals.			
	34	38	2 9	4	7	134	246

^{*} Surviving relatives removed to unknown Addresses.

ERRATA.

^{§ 5} of those cases were children suckled by mothers ill of Small-pox in the first instance. † Hospital cases whom the Medical Officials prevented being inquired into.

Page 22, for 171 cases of Small-pox occurring in the periods stated, read 151. Page 23, Table 6, in re total eaths of children aged from 1 to 23 months, the number is 24, and not 14 as printed. The total deaths of all ges is 151, and not 115.



their lives; Vaccination or Non-vaccination having nothing whatever to do with it.

I confess my inability to see where "the utility of Infantile Vaccination," Dr. White speaks of, comes in.

This we do know for certain, that various medical men in four instances endeavoured to perform a Vaccine Miracle in children under 28 days old. The miracle failed: hence the silence, If by chance any of those four little ones had survived the attack of Small-pox under those conditions of birth and age, I venture to think we should have heard about it, but

Dr. S. White's Table No. 3 is Altogether Untrustworthy;

for you will find in the first column the number of (said to be) Unvaccinated persons aged from under 1 year and 60 years and upwards is given as 157.

Now, as an examination of 112 cases of deaths furnished, the results given in Table No. 4, viz:—38 cases of Unvaccinated persons, 45 cases of Vaccinated persons, and 29 cases of persons whose parents or other relatives had removed to unknown places. I want to know how Dr. White obtained his balance of 119 Unvaccinated cases, unless he unblushingly copied the same from

those 134 hospital cases he prevented being examined.

In face of the facts shown on Table No. 4, what becomes of Dr. White's statement that 70 deaths occurred in children under 10 years of age who had not been Vaccinated, with only two deaths of Vaccinated children of the same age period? It falls completely to the ground. For it will be found on reference that the total number of children dying under the age of 11 years was 69. Of this number 13 were Vaccinated, and not as Dr. White stated 2. 26 were Unvaccinated, composed of medically unfit cases, &c., &c., and of the remaining 30 not known cases, 21 occurring in hospitals, may have found a place amongst Dr. White's Unvaccinated list.

As given in example in re cases of children aged from 9 days to 12 months, so we find similar factors applying to the two classes of Vaccinated and Unvaccinated cases, which prove by excluding from computation those cases whose age, birth, or conditions of health interfered with Vaccination, that the rate of mortality amongst the Vaccinated attacked by Small-pox was 20 per cent. higher than the Unvaccinated.

Having shown the unreliability of Dr. White's statements based upon his Tables Nos. 1 and 3. I now purpose to deal with another very important and interesting matter.

In my opening remarks concerning Dr. White's first tabulatory effort, I said, speaking of the deep interest at present taken in the question of hospital versus other methods of treating highly infectious diseases, that "the information Dr. White could have given in re comparative mortality rates would have been very material as an index of efficiency in re the best methods of dealing with Small-pox." Having promised to deal with this matter fully, I beg to draw your attention to annexed Table No. 5, in which I give the number of cases, and of deaths, and the months in which they occur and where taking place.

HOSPITAL VERSUS HOME TREATMENT.

You will see on Table No. 5 that from March to December, 1887, 1,906 Small-pox cases were treated at own homes, and the number of deaths arising therefrom was 101, or 5'3 per cent.; whilst in the same period 826 were admitted into hospital, and 145 deaths resulted therefrom—equal to a percentage of 17.5. If we statistically assume that the whole of the 2,732 cases had gone into hospital for treatment, and been governed by its mortality rate 17.5, the total deaths would have been 478.

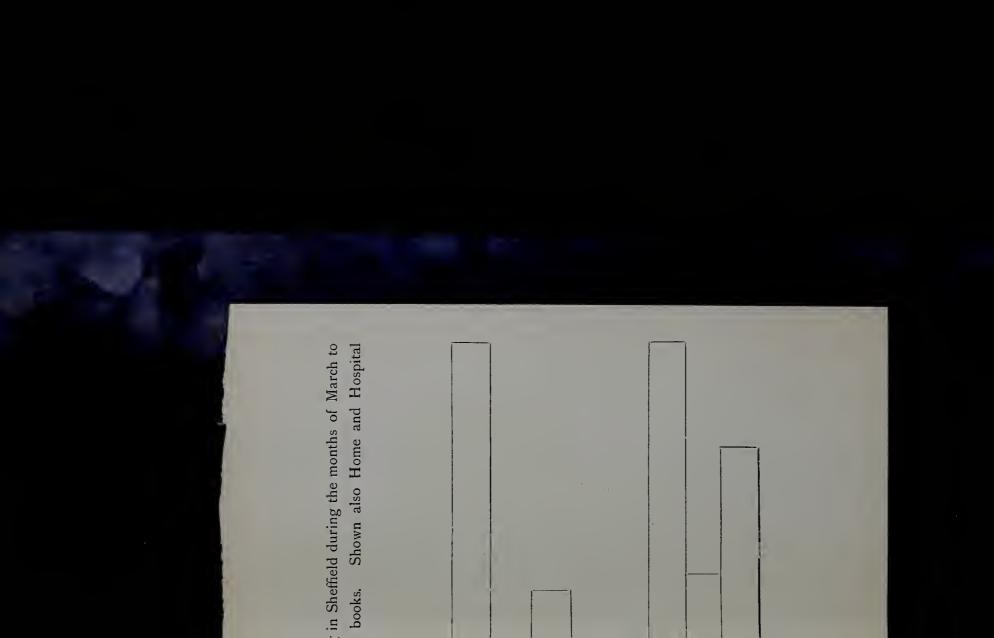
Whilst by acting upon a like statistical

assumption, and treating the 2,732 cases at own homes, subject to its governing mortality rate 5'3, the deaths would have only reached 144'9: showing statistically a saving of 333'I lives by the 2,732 cases of Small-pox being treated at own homes. As the case stands, it is evident statistically that 232'5 lives were saved by the 1,906 cases of Small-pox being treated at own homes.

Had the mortality rates been reversed, viz.—the hospital rate 5'3, and the outside rate 17'5, I venture to say that Dr. White would neither have been silent on this matter nor his Table No. 1, or subsequent Tables, so lamentably incomplete where incompleteness admits of but one construction.

It is just possible that this higher hospital mortality rate may be sought to be got rid of by the excuse that the worst cases were sent into hospital for treatment, but such was not the fact. If you will please refer back to Table No. 4, you will find that of the children aged from 9 days to 12 months who died of Small-pox, 25 cases out of the 31 (and the very worst) occurred outside the hospitals. By dividing the age periods into three, as in a previous example, we find that

¹¹ deaths occurred in children aged from 9 to 28 days;
12 ,, ,, ,, ,, ,, ,, ,, i to 4 months;
2 ,, ,, ,, ,, ,, ,, ,, 4 to 12 ,,





The first class of cases wholly consisting of children born of Vaccinated mothers ill of Small-pox at their birth (4 were afterwards Vaccinated).

The second class of cases contained 5 cases of children suckled by mothers ill of Small-pox before they took it; with 3 cases of children added whose age interfered with Vaccination being performed, I Vaccinated case, and 3 cases of children whose parents I could not find.

Of the third class of cases, I child had been refused Vaccination, and one case was that of a child whose parents had removed; in all, 25 deaths.

Turning to the hospital record for same age periods, we find no deaths of children under 1 month old, and only 4 deaths in children aged from 1 to 4 months, with 2 deaths of children aged from 4 to 12 months, in all, 6 cases. Those dying in hospital prevented my ascertaining whether they had been Vaccinated or not. Thus it will be seen that over 80 per cent. of the most hopeless cases (of deaths) arising in children aged under 1 year took place outside the hospitals. We have only to add those serious cases which would occur—whom no medical man would take the responsibility to advise being removed to hospital—to say with reasonable certainty, that the worst cases undoubtedly were contained in the 1,906 persons

treated at own homes with a diminished death rate as striking as startling compared with the terrible hospital mortality rate.

VACCINATION AND STATISTICS.

Anti-Vaccinators have been frequently told that (official) statistics were opposed to them, but an opinion has existed which my inquiry has strengthened, that statistics which have been possible of examination have invariably sustained their contentions that Vaccination has no value as a remedy against Small-pox, sanitation being the only safeguard against any of the zymotic diseases.

Some of our greatest thinkers maintain that force, as a remedy, invariably defeats the end it is employed to serve. What shall we say, then, to *Vaccination Coercion* as a remedy for Small-pox?

I find that when the Borough Health Officer had succeeded (by alarming placards and other devices I would rather not name) in creating a panic in the early summer months of 1887, when people in thousands were Vaccinated and Re-Vaccinated in the work-shops under the covert threat of dismissal on non-compliance with the request that they should be Vaccinated, it was then, and then only, that Small-pox ran riot, and hospital accommodation became too small.

Having prepared the soil by sanitary neglect and panic; having sown the seed of Small-pox by Vaccine Inoculation, there remained nothing to create surprise at the abundant harvest of disease reaped in consequence.

ISOLATION.

Dr. White in his report said "infection is like fire, if it is taken in time it is easily extinguished," and then simply asked for "Compulsory Notification of the Disease." We know how Dr. White endeavoured to extinguish the fire by pouring oil upon it, and are not eager for the repeating of the remedy, which nigh destroyed the structure. But we do not know by what process the Compulsory Notification of the Disease of Smallpox will rid us of its presence. We are left to assume that Isolation by the removal (by persuasion or force) to hospital would follow as a sequence to the notification.

I cannot suppose that Dr. White forgets that Isolation by removal to hospital was practised up to June, 1887,† and still Small-pox went on increasing, (see table No. 5) for in July more cases of Small-pox occurred than in the whole of the four preceding months. Isolation then did nothing towards the stamping out of Small-pox in opposition to the stenuous efforts made in the

[†]At the end of June, Hospital accommodation became strained.

summer months by Vaccinators to stamp it in, efforts which in their preponderance simply swelled the tide of Small-pox disease, for you will find the number of Small-pox cases occuring from March to June to be 35, increasing in July to 104, August 130, September 187, October 582, November 656, and in December to 1011, disease increasing by leaps and bounds in spite of Hospital Isolation and a large force of busy Vaccinators.

TRIMMING STATISTICS.

The object of Dr. White's report as near as I could gather, consisted in assertions calculated to support a belief in Vaccination and Re-Vaccination, totally at variance with actual fact, and never intended for close examination. Yet calculated in the main to divert public attention from causes more potent in fanning into activity Small-pox disease, than even Vaccine Inoculation. It was with the utmost difficulty that I was enabled to gather the facts which I have supplied in these pages.

Summary of Cases Investigated 1887 and Part of 1888.

I have ventured to supply another Table, No. 6, which gives the results obtained in an Investigation of 171 cases of Small-pox occurring in the periods stated.

Given Table showing the age proportion in which the Vaccinated died as compared with the Unvaccinated, as per 151 cases of Small-pox occurring during the 1887-1888 Epidemic in Sheffield.

In regard to 195 cases of deaths which occurred in Hospitals, the authorities prevented any inquiry.

TABLE No. 6.

Aged from	Vaccinated.	Unvaccinated.	Doubtful.	Total Deaths.	
9 to 28 days	4	8	2	14 ‡	
1 to 23 mns	6	16	2	14 \$	
2 to 10 y'rs	8	14	I	23 †	
10 to 21 yrs	17	9*	4	30 *	
21 to 68 yrs	41	II	8	60	
Totals	76	58	17	115	

^{# 12} of those cases were children born of Vaccinated mothers ill of Small-pox during the confinement.

^{§ 7} of those cases were children suckled by mothers ill of Small-pox prior to the children taking the disease.

^{† 10} of those cases were children who had been refused Vaccination

owing to their ill health.

* 4 of whom those cases were persons constitutionally unfit for Vaccination.

Insanitation, conditions of birth, and state of health, accounted for over 90 per cent. of the 151 cases investigated. Vaccination or Non-Vaccination had nothing whatever to do with the mortality.

as the cases contained on this Table were not selected for any set purpose, but cropped up during the investigation I conducted, it cannot be said that my Table has been unfairly prepared, the balance of 195 deaths not accounted for (to complete the total of 346 Small-pox deaths occurring in the periods March, 1887, to March, 1888) having taken place in the hospitals prevented my examination for the reasons stated.

I venture to think that a careful examination of the Tables and statements contained in these pages, and a cognizance of the position taken by various officials to prevent my investigation, can only lead to one conclusion; which, to say the least, is not flattering to the late Borough Health Officer for Sheffield, or his coadjutors. I also venture to think that you will admit the justice of my remarks when I state that the statements which have been made claiming a higher mortality rate amongst the Unvaccinated attacked by Small-pox in this epidemic under review, is not only very questionable, but *void of fact*.

It only remains for me to add that I am in possession of documentary and other evidence to support my statements, and, given the opportunity, will be only too glad to bring forward the same. My examination, where possible, was thorough.

It may not be out of place to point out some of the causes which, in my opinion, gave rise to and spread this serious epidemic of Small-pox in the best Vaccinated town in England:—

Crowded, narrow, ill-paved and flagged courts and alleys;

Earth middens, bad in construction, and improperly looked after;

Sink pipes in direct untrapped communication with main drains, when not allowed to exhaust upon flags and pavement;*

Deficient and impure water supply;†

The Winter Street Hospital in too close proximity to public park and a very populous neighbourhood;

The Winter Street Hospital totally unfit for Small-pox cases;

The rubbish tip near hospital and park;

And the increased amount of Inoculation during Small-pox panic.

Sheffield to-day is as open to an epidemic attack as ever, in spite of Vaccination or any other fad, and will never be secure until sound

^{*} I only came across one trapped sink-pipe in 151 house visitations. + To Dr. S. White's credit be it said he endeavoured to purify the water.

Radical measures of sanitary reform are carried out. Next to the Repeal of the Compulsory Clauses of the Vaccination Acts nothing would rejoice me more than to see the honoured medical profession freed from those bonds of unscientific superstition which only tend to degrade it.









