

Report of the medical officer of health with reference to smallpox in the city.

Contributors

Liverpool (England)
London School of Hygiene and Tropical Medicine

Publication/Creation

Liverpool : C. Tinling, 1902.

Persistent URL

<https://wellcomecollection.org/works/d4jscuj2>

Provider

London School of Hygiene and Tropical Medicine

License and attribution

This material has been provided by This material has been provided by London School of Hygiene & Tropical Medicine Library & Archives Service. The original may be consulted at London School of Hygiene & Tropical Medicine Library & Archives Service. where the originals may be consulted. Conditions of use: it is possible this item is protected by copyright and/or related rights. You are free to use this item in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s).

**wellcome
collection**

Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

Reese
Collection

TOWN CLERK'S OFFICE,
MUNICIPAL BUILDINGS,
LIVERPOOL, 13th March, 1902.

Sm Par
notf.

P28582

CITY OF LIVERPOOL.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

WITH REFERENCE TO

SMALLPOX IN THE CITY.

(Ordered by the Health Committee to be printed, 13th March, 1902.)

LIVERPOOL:

C. TINLING AND Co., PRINTING CONTRACTORS, 53, VICTORIA STREET.

[*Copy.*]

LOCAL GOVERNMENT BOARD,
WHITEHALL, S.W.,

19th *February*, 1902.

SIR,

I am directed by the Local Government Board to state that they observe that there has been an outbreak of Smallpox in the City of Liverpool, and I am to request that the Board may be furnished with a Report by the Medical Officer of Health on the subject. The Report should contain information as to the number of non-fatal as well as of fatal cases, and the circumstances in which they have occurred, and as to the measures taken by the Council or the Medical Officer of Health for checking the spread of the disease.

A copy of an Official Memorandum on Smallpox is enclosed for your information.

I am, Sir,
Your obedient Servant,
(Signed) W. E. KNOLLYS,
Assistant Secretary.

The TOWN CLERK,
Liverpool.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

SMALLPOX IN THE CITY.

The total number of cases of Smallpox (including imported ones) occurring in the City since December 6th, 1901, has been 112. Of these 2 died, unvaccinated, and 69 remained under treatment on March 13th, 1902.

During the first ten months of the year 1901, twenty-five cases of smallpox occurred in the City of Liverpool, eight of which were imported by sea, and one developed smallpox a few days after arrival from a neighbouring town.

The City was entirely free from smallpox during the month of November, 1901; and it may therefore be assumed that the present outbreak originated subsequent to that month.

On the 6th December the ss. "Volta" arrived, having eleven convalescent cases of smallpox on board, five of which were temporarily detained. This was followed, on 12th December, by the discovery that a fireman from the ss. "Devonian" had landed on November 28th, and subsequently developed smallpox at his home. This case was followed by a second one at the same address, on the 22nd December.

On 19th December the ss. "Norseman" arrived; one case of smallpox was removed from her, and three persons who had been in contact developed smallpox shortly afterwards.

It does not appear that there were any further extensions from these cases.

During January, 1902, importations of smallpox by sea repeatedly occurred, and besides these there was also the case of an emigrant intending to travel to America, and who had arrived from Austria via Grimsby the previous night; he was rejected from the ss. "Garth Castle."

One other case during January calls for special comment, and that is a case of a saloon passenger who arrived on board the "Celtic" on the 10th January. This passenger had been suspected to be suffering from chicken pox, and had been carefully isolated by the surgeon. The disease, however, was ultimately regarded as a highly modified case of smallpox.

On February 18th a man named Conroy arrived from London. He had been one of the crew of the ss. "Ulunda," and was removed to Hospital from 15, Becket Street, suffering from smallpox. He had been in attendance on a case of smallpox whilst on the "Ulunda," but he had not been re-vaccinated.

It will therefore be seen that the importations of smallpox since the 6th December last, either by sea or by land, number no less than 30 cases.

The accompanying table shows the sequence and history of the importations by sea, and it will be observed that the same vessel has on an occasion left smallpox patients at the home and also at the outward port.

IMPORTATIONS OF SMALLPOX BY SEA.

Date of Arrival in Liverpool.	Ship.	From.	History.	Disinfection.	Vaccination.
1901. December 6th...	"Volta"	West Africa	Brought 11 convalescents into Liverpool, only 5 of whom required further detention in Hospital. During voyage had over 40 cases on board, 17? cases and 2 deaths among Kroo boys, 13 cases and 2 deaths, including Surgeon, among Europeans.	Disinfection.....	All crew re-vaccinated, and some of passengers.
December 7th...	"Devonian"	Boston	Reported all well. Smethurst who said he had been suffering from a cold, developed smallpox on December 12th; removed to Hospital.	Disinfection.....	No re-vaccination, all crew and cattlemen gone. Ship sailed 14th Dec.
December 19th...	"Norseman"	Boston	Brought Watkins suffering from smallpox, 26 of the cattlemen who could not give satisfactory addresses were removed to New Ferry Hospital and re-vaccinated; 3 of these subsequently developed the disease, one died of haemorrhagic variety having no primary vaccination.	Disinfection.....	All crew and cattlemen re-vaccinated, 125 in number.

IMPORTATIONS OF SMALLPOX BY SEA—Continued.

Date of Arrival in Liverpool.	Ship.	From.	History.	Disinfection.	Vaccination.
1902. January 1st ...	"Ultonia"	Boston	Two cases were removed from the Royal Infirmary (January 4th).	Disinfection.....	No vaccination. Crew and cattlemen gone.
January 6th ...	"Lancastrian"	Boston	A case reported from this ship by Medical Officer of Health, Salford.	Disinfection.....	No vaccination.
January 11th ...	"Devonian"	Boston	Brought J. Connolly suffering from smallpox, removed to Hospital. 7 cattlemen, who could not give satisfactory addresses were removed to New Ferry Hospital. Of these J. Obie, who had been vaccinated for the first time on January 11th, developed confluent smallpox on the 15th. John Highland and R. Kelly, two cattlemen who had also been removed from the ship for isolation and observation, refused on the 16th to stay longer, as they wanted to sail in their ship on the 17th. They were, therefore, liberated on the	Disinfection.....	Crew and cattlemen said to have been re-vaccinated in Boston, and shewed scars and scratches. Re-vaccinated 12 cattlemen who had poor marks (including Obie, Kelly, and Taylor). Ship sailed January 17th.

January 23rd ...	"Cestrian"	Boston	<p>morning of the 17th. Both went to No. 17, Duke Street. Highland visited a barber's shop, where he took suddenly ill with vomiting, and was removed to the Workhouse Infirmary, and thence to the Smallpox Hospital on 17th Jan. Kelly was also removed, and developed smallpox. William Taylor, re-vaccinated on board on the 11th, did not go to the address which he gave on board, he subsequently developed smallpox, went to Glasgow for a short time, came back by a coasting steamer, and was detected in the out-patient department of the Royal Infirmary (Feb. 15th). Seven cases in the City have been traced to this man.</p>	Disinfection.....	No vaccination.
January 25th ...	"Norseman"	Boston	<p>J. DeFaure, a cattleman, was removed from Workhouse Infirmary to Smallpox Hospital.</p> <p>One death (Jan. 5th) from smallpox on outward voyage (left Liverpool, Dec. 28th). Ship visited and found all well. All well vaccinated.</p>	Disinfection at Boston	Previously done at Liverpool, Dec. 19th, and at Boston (new hands).
February 3rd...	"Ultonia"	Boston	<p>Brought P. Maher, cattleman, suffering from smallpox, Patient and attendant re-moved to New Ferry Hospital.</p>	Disinfection.....	Crew re-vaccinated at Boston. 28 cattlemen and firemen were re-vaccinated on arrival here.

IMPORTATIONS OF SMALLPOX BY SEA—Continued.

Date of Arrival of Liverpool.	Ship.	From.	History.	Disinfection.	Vaccination.
1902. February 6th....	" Kansas "	Boston	<p>Brought 9 convalescents and 1 contact (attendant). All were removed to New Ferry Hospital; 8 had already been isolated on board, and the 9th was found on making an inspection of the cattlemen; he had an abundant crop of vesicles on his arms. This ship sailed from Liverpool on January 4th, and it was reported that amongst the cattlemen were 2 who were ailing and had been treated by the Steward; 1 died at sea. At Boston, the other was landed as a case of smallpox, and all the cattlemen taken to the Quarantine Station and re-vaccinated, as also the crew. Later, and before the vessel sailed, 4? men were removed (5th Engineer, 2 refrigerating Engineers, and another), and put ashore by the Medical Officer. (There was a report that 20 men were put ashore).</p>	Disinfection.....	<p>Crew and some (old hands) of cattlemen re-vaccinated at Boston. Re-vaccinated 18 of crew and cattlemen shewing poor marks.</p>

February 16th...	" Vedamore "	Baltimore.....	One death from smallpox on outward voyage, and landed one case at Baltimore. Ship visited and found all well.	Disinfection at Baltimore.	All on board re-vaccinated.
February 17th...	" Devonian "	Boston	Ship arrived and reported all well. No sickness during voyage.		
February 18th...	" Lancastrian "	Boston	Ship arrived and reported all well.		
February 22nd...	" Indore "	Baltimore.....	Landed one case at Baltimore on outward voyage. Ship visited and found all well.	Disinfection by Captain.	All ship's company and cattlemen re-vaccinated.
	" Sachem "		Landed one case on passage outward to Boston.		
February 17th...	" Sachem "	Boston	Arrived Liverpool all well.		
February 26th...	" Sachem "		Sailed from Liverpool to Boston.		
February 28th...	" Kansas "		Arrived at Boston all well.		
March 6th...	" Norseman "	Boston	Arrived and reported all well.		
March 9th...	" Sachem "		Arrived at Boston all well.		
March 10th...	" Ultonia "	Boston	Arrived and reported had landed case of chicken-pox at Queenstown. The diagnosis of this case was subsequently confirmed by telegram.		

The appended diagrams show the consequences of some of these imported cases, and the extension of disease from person to person. The intense infectiousness of smallpox makes it difficult or impossible to trace the source of infection in the majority of instances.

ROUTINE PRACTICE.

Under the routine practice, whenever a case of smallpox is notified (often by telephone) the patient is at once removed to hospital, the house is disinfected throughout, and the bedding and clothing removed to the Disinfecting Station the same day. The following day the rooms are stripped of wall paper, which is removed and burnt. Special Inspectors, experienced in the work, visit the houses to ascertain precise particulars as to the vaccination of the inmates, visitors, and neighbours, and also endeavour to find out all the persons who have been in contact with the patient. Notice is sent to the Vaccination Officer that the case has occurred, and full particulars of all contacts are also sent to him. If any persons living in other towns have visited the patient, information is at once sent to the Medical Officer of the district. Notice is sent to the school attended by the children (if any), precluding their further attendance.

A special effort is made to induce other inmates of the house who may be employed in large works or offices, &c., to be re-vaccinated. If they refuse, an intimation is sent to the employer that it is advisable for them to remain at home for 14 days.

The infected house is visited, and all contacts are visited every day for 14 days, and every few days after for another period of two weeks, to ascertain if any further sickness occurs; and if any ailment is reported, word is sent to the office, and the Assistant Medical Officer visits the sick person.

When a case occurs in a court-house or similar insanitary premises, the other inmates are removed to the City Hospital for isolation and re-vaccination. They can usually be persuaded to go.

A special staff of 20 men is at present engaged exclusively in the prevention of smallpox.

The following details of an outbreak at No. 30, B—— Street, illustrate the methods adopted and the difficulties to be met.

The premises in question are used as a common lodging-house, registered for 147 lodgers, with a public cocoa room on the ground floor. The lodging-house is often used by cattlemen coming from the United States. Early in January some cattlemen from the ss. "Kansas" stayed at this house and returned to America on January 4th. The "Kansas" had 2 cases of smallpox on board on the outward voyage. On the 20th January 2 men who had for two weeks previously been staying at 30, B—— Street, were removed from the Workhouse with smallpox. The premises in B—— Street were disinfected and kept under observation. On the 25th of January information was received from Dr. Tattersall, of Salford, that a cattleman ex the "Lancastrian" had been staying at 30, B—— Street, and then had gone to Salford and had developed smallpox. On 3rd February 5 men at 30, B—— Street, were discovered by the Inspector to be ill; they were removed to hospital and the illness developed into smallpox. All of these men had refused vaccination, mostly on the ground that it would interfere with their work. About 12 men who had been in close contact were removed for isolation. On the 4th February the premises were closed to newcomers, and no further lodgers taken, there being 85 lodgers left in the house, and it was desired not to take any step which might lead to these lodgers leaving the house. Dr. Griffiths vaccinated 71 of the lodgers on the 4th and 5th February, but 13 others refused to be done, as they thought it was likely to interfere with their work. The men who were vaccinated were paid at the rate of £1 per week whilst they remained isolated in the lodging-house. These payments commenced on the 5th and ended on the 15th February. The premises were visited each morning, also during the day, and late in the evening, when all the lodgers were in, by the special Smallpox Inspectors, to ascertain if there was any further illness in the house.

On 5th February a man named Devaney was found at the North Dispensary suffering from smallpox. He was removed to hospital.

This man gave his address as 23, S—— Street, a lodging-house; but it was ascertained that he had been staying at 30, B—— Street until February 3rd, and had no doubt contracted the disease there. At the house in S—— Street all but two, who refused, were re-vaccinated, and paid at the rate of £1 per week for 10 days. No further cases occurred at this house, and no cases occurred amongst the persons who had been exposed to infection at the North Dispensary, all of whom had been kept under close observation, many being re-vaccinated.

On Sunday, 9th February, the Inspector, on visiting 30, B—— Street, found all the men well. He went again at 11 p.m., and found Stephen Maloney was not well. He was forthwith removed to hospital, and developed smallpox. This man had been re-vaccinated on the 5th inst., too late, it will be seen, to be of use.

On the following Sunday, 16th February, at 10.30 a.m., John Rock was found to be sick. This man had no primary vaccination marks. He had been vaccinated on the 5th inst., but developed the disease six days after in a mild form.

Early on the morning of the 19th February the Inspector on his visit found two men—Daniels and McConnell—to be sick. They were at once removed to hospital, where the disease proved to be smallpox. These two men had refused to be re-vaccinated. On March 8th an exceedingly mild case, probably dating from March 1st, but which had been concealed, was removed, and again on March 11th another case. Both of these had refused re-vaccination.

After the removal of each case disinfection was carried out, and a large quantity of the bedding in this lodging-house was destroyed, and compensation paid to the owner.

The number of persons who were re-vaccinated at this house was 85 (71 lodgers and 14 of the staff).

None of these took smallpox.

Thirteen refused to be vaccinated, and nine of them have been removed to hospital with smallpox. Two other lodgers refused to be vaccinated at first, but were afterwards vaccinated. This was done too late, and they also developed smallpox.

On the 19th February a case of smallpox was notified as existing at No. 39, D—— Street, the patient being a lodger. The usual information was sought, and the persons who were ascertained to have been in contact with the patient were reported for re-vaccination and kept under observation.

After some days had elapsed, the Inspector found out that two other persons had been in contact—a Mrs. Brown, of 35, H—— Street, and Mrs. Lanham, of No. 9, A——— Road. Visits were made to these addresses, and the Public Vaccinator informed; the latter person was re-vaccinated by the Public Vaccinator. The Public Vaccinator also called at No. 35, H—— Street, in order to re-vaccinate Mrs. Brown, but by that time the house was found to be empty, the occupier having removed. Enquiries were at once made as to where she had gone to, but it was only after several days that she was found to be living at No. 96, A—— Street, Walton. Information was at once sent to the Public Vaccinator, and she was found and re-vaccinated by him on the 7th March. Daily visits were made to the house, with the result that on the morning of the 9th March she was found to be suffering from smallpox.

DEFECTIVE LEGISLATION.

The foregoing record shows conclusively that the difficulties in dealing with smallpox are largely owing to defects in legal powers to ensure efficient protection by vaccination. It is no doubt true that in cases of limited importation, or in cases in which the infected person has by chance only been in contact with the vaccinated, it has been possible to effectually isolate infected persons, and by unceasing

watchfulness to track out those who have been exposed to infection, and by persuasion, by bribery, or by other means, to induce those persons who have been exposed to infection to submit to re-vaccination, and so the outbreak has terminated; but this is by no means always possible.

It is only necessary to cite the instances of those persons who, whilst actually suffering from smallpox, possibly without being aware of the nature of the illness, have pursued their avocations, or have gone to various entertainments, riding in tramcars, &c., to show how impossible it is to trace everybody who is exposed to infection. Moreover, the linen of these people has been sent to the usual laundry, and articles they have handled have been sent to the homes of customers.

IMMUNITY OF NURSES, &c.

Nurses, doctors, laundrymaids and servants at the Smallpox Hospital in Liverpool are rendered immune from smallpox by efficient vaccination. No one can doubt that if the general public were as efficiently vaccinated as the hospital staff, they would be equally immune from smallpox, and it is indeed remarkable that there is no legal provision to ensure protection of this character for the people.

SANITARY AUTHORITY SHOULD ADMINISTER THE VACCINATION ACTS.

The Medical Officer has already pointed out the necessity for consolidating the vaccination machinery. The whole of the staff engaged in the administration of the Vaccination Acts, when amended, must act together, and be responsible to the Authority, which in turn is responsible for the public health. When this is brought about there will be close and constant communication between the Health Department and the Vaccination Officers—each will be conversant with the work of the other, and the energies of all the officers engaged will be directed with precision towards one end, viz., war against smallpox.

At present the area of the Sanitary Authority is, for vaccination purposes, split up into independent units, each under separate control. However much the various bodies desire to act in co-operation—and there is abundant proof that they do so desire—there must necessarily arise delays, inconvenience, misunderstandings, want of interchange of information, which cannot operate other than prejudicially to the public when time is an essential element towards success. In Liverpool since January last, a large number of persons requiring vaccination, or re-vaccination, numbering approximately some thousands, have been referred to the Vaccination Officers by the Health Department, a large number of whom had through lapse of time lost the protection afforded by their primary vaccination, whilst many had never been vaccinated at all. The following may be quoted:—

28, L—— Street—

A family of six persons occupied the above house, and one of the family, a child aged 3 years, who was unvaccinated, developed small-pox, which was reported on March 8th, and has since died.

St. J—— Schools—

The number of boys found by the Head Master to be unvaccinated was 24 per cent. in this school.

84, B—— Street—

The number of inhabitants in this street is about 600. Fifty persons were found never to have been vaccinated at all. Indeed, one of the Public Vaccinators has found that upwards of 10 per cent. of people coming for re-vaccination have never been vaccinated at all.

PROVISION FOR RE-VACCINATION WANTED.

Every day reveals the lamentable deficiency of the law in regard to vaccination. The President of the Local Government Board himself very properly laid down the importance of re-vaccinating inmates of an infected house, or contacts with an infected person. Unfortunately the law has never contemplated this necessity, and consequently people are deprived of the protection which the law should ensure them. Glaring cases of the mischief resulting from the want

of this protective power are frequent not only from negligence, but also from wilfulness, as when a thoughtless, maybe an improvident, drunken person, a vagabond, or tramp, will march away from an infected lodging-house, and the next that will be heard of him is that he has himself developed smallpox in some other equally low and crowded district of the City.

If there are any who think that under ordinary circumstances smallpox is a lesser evil than a general requirement for re-vaccination, there can be no grounds for supposing that in the presence of the imminent peril arising from exposure to infection, safety can be found in any other measure than re-vaccination.

Persons leaving an infected house, or persons who have been exposed to infection, must inform the Sanitary Authority of their address and of any change of address, so that they will not be lost sight of, and perhaps create a fresh centre of infection.

CORRECT INFORMATION NECESSARY.

The following clause is included in the Liverpool Corporation Bill which is now before Parliament, and if this clause is allowed to come into operation will apply with special force and be of much benefit in combating smallpox:—

“ 38.—Any person who when applied to by the Medical Officer
“ of Health for the City, or by any officer acting on his behalf
“ and on his instructions, for information as to any dangerous
“ or infectious disease withholds any information in his possession, or knowingly gives false information, shall be liable to a
“ penalty not exceeding forty shillings.”

CONTROL OF SUPPLY OF LYMPH.

There is abundant reason for urging the necessity for some official control over the supply of vaccine lymph, so as to ensure efficiency of quality. No doubt commercial enterprise has to a great extent met the demand for lymph, but what is wanted is some efficient guarantee of its quality, a guarantee which nothing short of Government supervision can give.

The measures necessary to control smallpox are perfectly well-known, and means must be devised and sustained by legal authority to put these measures into execution.

Not less than 35,000 persons (other than infants below six months of age) have been vaccinated or re-vaccinated in Liverpool during the last three months; a result largely owing to the highly creditable manner in which the Press, Ministers of Religion, Teachers, Employers, Medical men, and others have stimulated the interest of thinking people in the subject.

E. W. HOPE,

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT,
MUNICIPAL OFFICES,

LIVERPOOL, 13th March, 1902.

The following is a list of the names of the persons who were present at the meeting held on the 10th day of the month of June, 1901, at the residence of the undersigned, in the city of New York, New York.

The names of the persons present are as follows:

Mr. J. P. Morgan
 Mr. C. D. Walcott
 Mr. W. H. Dall
 Mr. J. S. Henshaw
 Mr. J. B. Woodworth
 Mr. J. C. Merriam
 Mr. J. A. Rehn
 Mr. J. W. Galloway
 Mr. J. H. Thompson
 Mr. J. M. Peck
 Mr. J. R. Easton
 Mr. J. S. Kirtland
 Mr. J. C. Brainerd
 Mr. J. W. Foster
 Mr. J. H. Van Dine
 Mr. J. S. Henshaw
 Mr. J. B. Woodworth
 Mr. J. C. Merriam
 Mr. J. A. Rehn
 Mr. J. W. Galloway
 Mr. J. H. Thompson
 Mr. J. M. Peck
 Mr. J. R. Easton
 Mr. J. S. Kirtland
 Mr. J. C. Brainerd
 Mr. J. W. Foster
 Mr. J. H. Van Dine

LIST OF NAMES

The following is a list of the names of the persons who were present at the meeting held on the 10th day of the month of June, 1901, at the residence of the undersigned, in the city of New York, New York.

The names of the persons present are as follows:

Mr. J. P. Morgan
 Mr. C. D. Walcott
 Mr. W. H. Dall
 Mr. J. S. Henshaw
 Mr. J. B. Woodworth
 Mr. J. C. Merriam
 Mr. J. A. Rehn
 Mr. J. W. Galloway
 Mr. J. H. Thompson
 Mr. J. M. Peck
 Mr. J. R. Easton
 Mr. J. S. Kirtland
 Mr. J. C. Brainerd
 Mr. J. W. Foster
 Mr. J. H. Van Dine
 Mr. J. S. Henshaw
 Mr. J. B. Woodworth
 Mr. J. C. Merriam
 Mr. J. A. Rehn
 Mr. J. W. Galloway
 Mr. J. H. Thompson
 Mr. J. M. Peck
 Mr. J. R. Easton
 Mr. J. S. Kirtland
 Mr. J. C. Brainerd
 Mr. J. W. Foster
 Mr. J. H. Van Dine

LIST OF NAMES

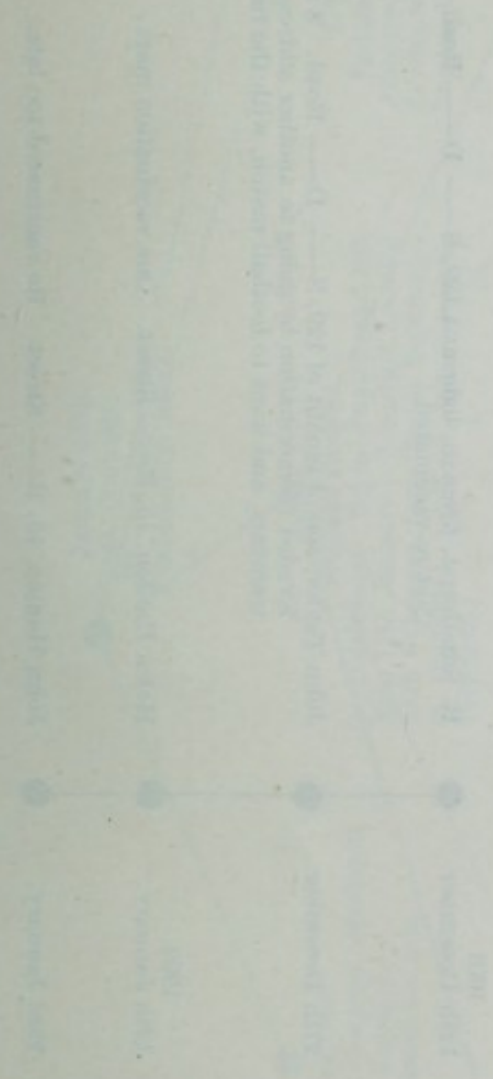
The following is a list of the names of the persons who were present at the meeting held on the 10th day of the month of June, 1901, at the residence of the undersigned, in the city of New York, New York.

The names of the persons present are as follows:

Mr. J. P. Morgan
 Mr. C. D. Walcott
 Mr. W. H. Dall
 Mr. J. S. Henshaw
 Mr. J. B. Woodworth
 Mr. J. C. Merriam
 Mr. J. A. Rehn
 Mr. J. W. Galloway
 Mr. J. H. Thompson
 Mr. J. M. Peck
 Mr. J. R. Easton
 Mr. J. S. Kirtland
 Mr. J. C. Brainerd
 Mr. J. W. Foster
 Mr. J. H. Van Dine
 Mr. J. S. Henshaw
 Mr. J. B. Woodworth
 Mr. J. C. Merriam
 Mr. J. A. Rehn
 Mr. J. W. Galloway
 Mr. J. H. Thompson
 Mr. J. M. Peck
 Mr. J. R. Easton
 Mr. J. S. Kirtland
 Mr. J. C. Brainerd
 Mr. J. W. Foster
 Mr. J. H. Van Dine

LIST OF NAMES

The following is a list of the names of the persons who were present at the meeting held on the 10th day of the month of June, 1901, at the residence of the undersigned, in the city of New York, New York.



1000
1000
1000
1000

1000

1000

1000

GROUP 1.

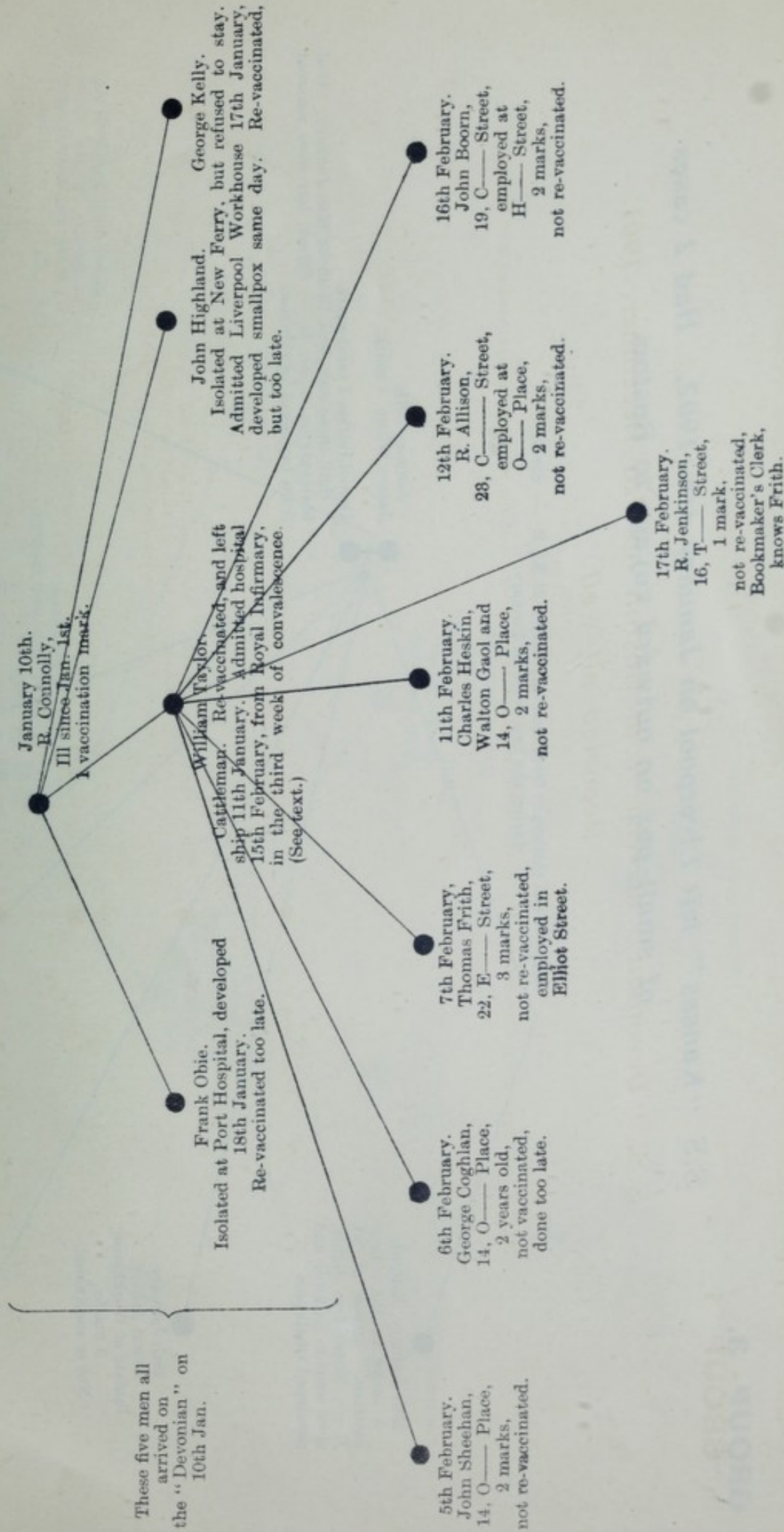
S.S. "Devonian" arrived from Boston on 7th December, 1901. Reported all well.

NOTE.—Unless otherwise stated, the dates indicate the date of report and not the commencement of the illness.

1901. 12th December.	●	R. Smethurst, fireman, lodger at 129, S— D— Road. Not re-vaccinated.
27th December.	●	John Taylor, son of tenant of 129, S— D— Road. 3 marks. Evaded re-vaccination by going to another address. Rode in tramcars, and went to football match, with the rash out.
1902. 12th January.	●	Helen Hanlon, 15, R— Street. One vaccination mark.
23rd January.	●	John Hanlon, 15, R— Street. Re-vaccinated too late.

GROUP 2.

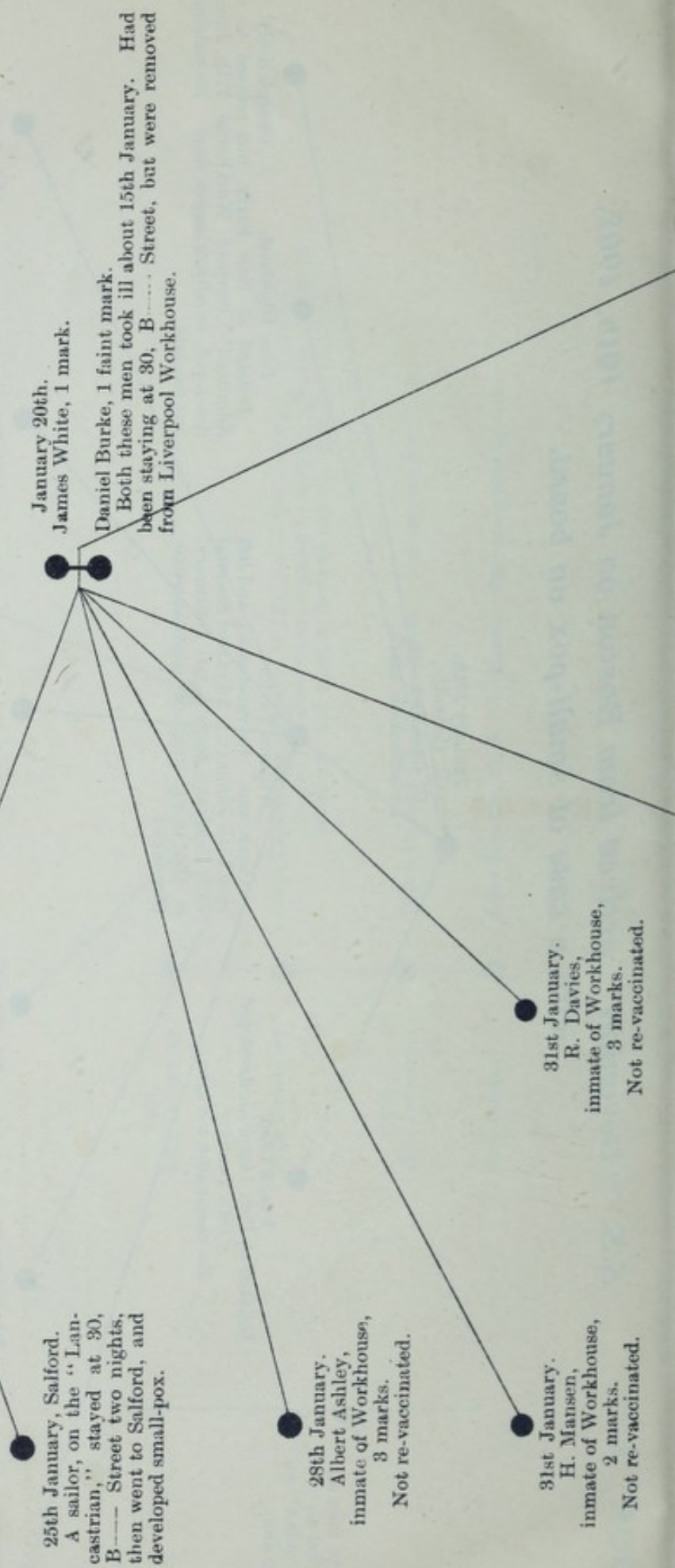
S.S. "Devonian" arrived from Boston on January 10th, 1902,
with a case of small-pox on board.



GROUP 3.

S.S. "Kansas" left Liverpool on January 4th, 1902. Had 2 cases of small-pox on outward voyage to Boston.

Some of the cattlemen from this ship stayed at 30, B Street during the first week in January.



3rd February.
 30, B— Street.
 C. Connor2 marks.
 W. Girling2 "
 L. Dixon2 "
 R. Bernard2 "
 W. Toole1 "
 These men had refused
 to be re-vaccinated.

5th February.
 J. Devaney.
 23, S— Street.
 1 mark, not re-vaccinated.
 Stayed at 30, B—
 Street until February 3rd.

9th February.
 Stephen Maloney,
 30, B— Street,
 2 marks.
 Re-vaccinated too late.

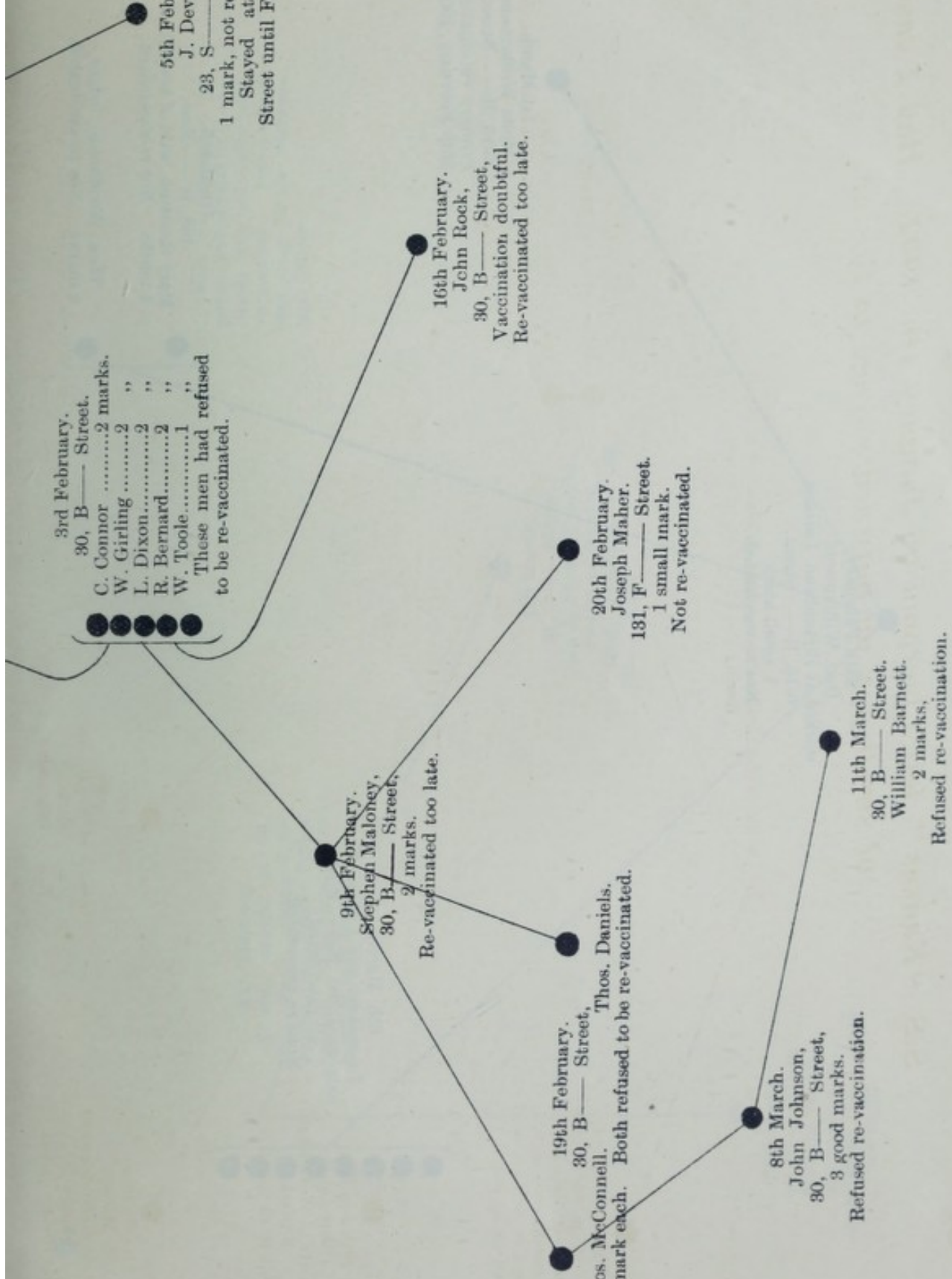
16th February.
 Jehn Rock,
 30, B— Street,
 Vaccination doubtful.
 Re-vaccinated too late.

20th February.
 Joseph Maher.
 131, F— Street.
 1 small mark.
 Not re-vaccinated.

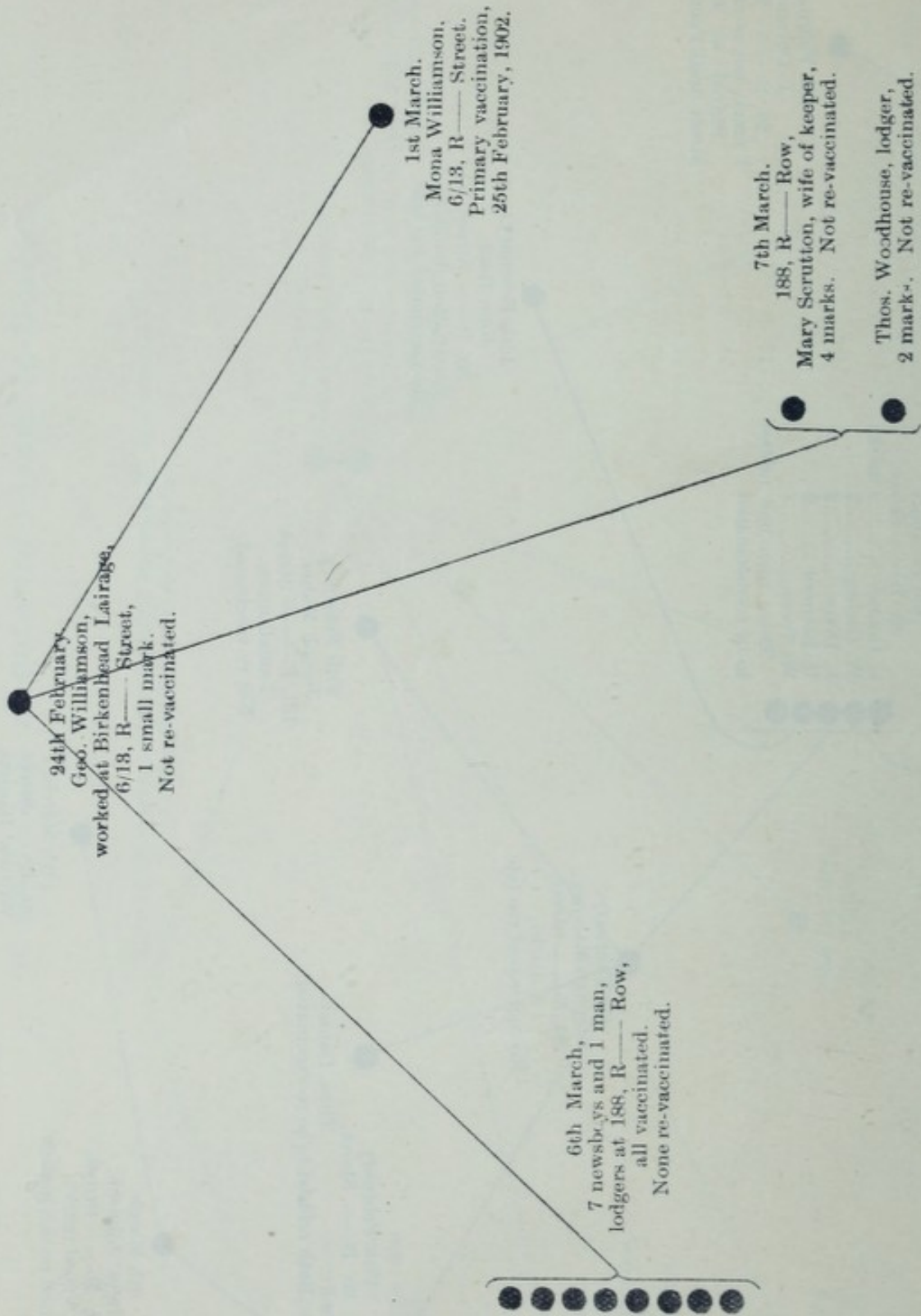
19th February.
 30, B— Street,
 Thos. Daniels.
 One mark each. Both refused to be re-vaccinated.

8th March.
 John Johnson,
 30, B— Street,
 3 good marks.
 Refused re-vaccination.

11th March.
 30, B— Street.
 William Barnett.
 2 marks,
 Refused re-vaccination.



GROUP 4.



GROUP 5.

*Note.—Upwards of 50 person were found in B— Street who had never been vaccinated. Information was given to the Vaccination Officer.

20th February.
A man stayed at 68, D— Road. Being ill, he walked into Bootle Police Station. Was removed to hospital with smallpox.

7th March.
24, C— Street,
Ann J. Flynn, 2 marks.
Not re-vaccinated,
Been cleaning at 68,
D— Road.

*3rd March.
84, B— Street
William Hinks,
not vaccinated,
stayed at 68, D— Road
one night.

GROUP 6.

21st February.
39, D—— Street
(Lodging House).
Charles Gardner.
3 marks, not re-vaccinated.
Other inmates refused re-
vaccination.

5th March.
39, D—— Street.
Henry Harvey.
5 marks, refused re-vac-
cination.

9th March.
96, A—— Street.
Mrs. Brown.
Re-vaccinated two days
prior to developing small-
pox; been visiting No. 39,
D—— Street.

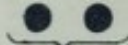
10th March.
41, St. A—— Street.
Ellen Garvey.
Been working at No. 39,
D—— Street

11th March.
39, D—— Street.
James Bennett, 1 mark.
Charles Guest, 2 marks.
Both these men had re-
fused re-vaccination.

GROUP 7.

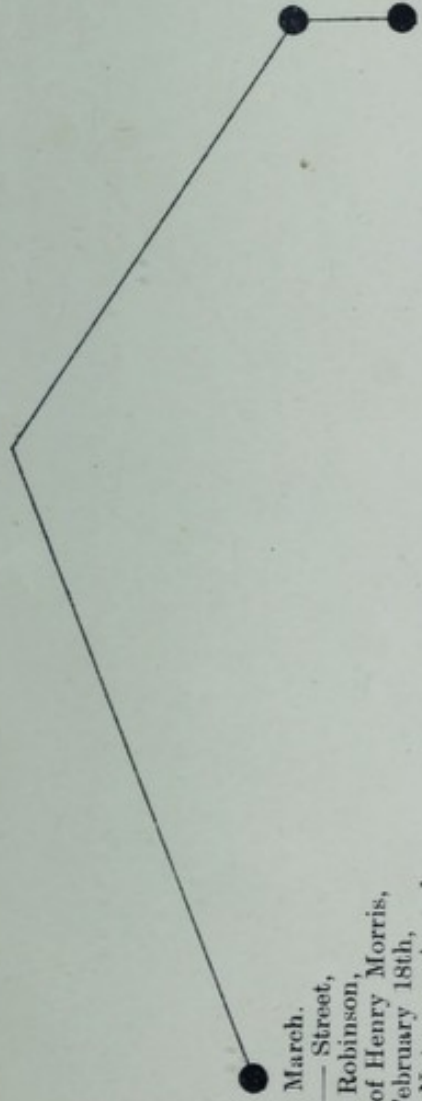
21st February.
15, B—— Street.*
Edward Conroy, 3 marks.
Arrived London on s.s.
"Ulunda." Smallpox dur-
ing voyage, but was not re-
vaccinated.

7th March.
8/2, S—— Street.
Mary J. Doolan.
Unvaccinated.



GROUP 8.

● 7th March.
14, B— Street,
Annie Robinson,
Sister-in-law of Henry Morris,
ill since February 18th,
2 faint marks. Not re-vaccinated.



7th March.
88, A— Street,
Henry Morris, son, 1 faint mark.
Ill since February 18th.

Henry Morris, father, 3 marks.
Ill since February 26th.
(These two patients had been
treated for chicken-pox. Neither
re-vaccinated.)

RS