## PUBLIC HEALTH ACT.

(11 \& 12 Vict. cap. 63.)

## REPOR'T

TO THE

## general board of healith

ova

## PRELIMINARYINQUIRY

INTO THE SEWERAGE, DRAINAGE, AND SUPPLY OF WATER, AND THE SANITARY CONDITION OF THE INHABITANTS

OF THE TOWNSHIP OF

## NEWTON HEATH,

IN THE COUNTY PALATINE OF LANCASTER.

By ROBERT RAWLINSON, Esq.,
suferintending inspector.


## LONDON :

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE, printers to the quebn's most exceliemt majesty.
FOR HER MAJESTY'S STATIONERY OFFICE.

## NOTIFICATION.

The General Board of Health hereby give notice, in terms of section 9th of the Public Health Act, that on or before the 10th day of April next, being a period of not less than one month from the date of the publication and deposit hereof, written statements may be forwarded to the Board with respect to any matter contained in or omitted from the accompanying Report on a preliminary Inquiry into the Sewerage, Drainage, and Supply of Water, and the Sanitary Condition of the Inhabitants of the Township of Newton Heath, in the Parish of Mancheeter, Hundred of Salford, and County Palatine of Lancaster ; or with respect to any amendment to be proposed therein.

> By order of the Board, Henky Austin, Secretary.

Whitehall, 28th February 1852.



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## PUBLIC HEALTH ACT (11 \& 12 Vict.c. 63.)

Report to the General Board of Health on a Preliminary Inquiry into the Sewerage, Drainage, and Supply of Water, and the Sanitary Condition of the Inhabitants of the Tounship of Newton Heath, in the Parish of Manchester, Hundred of Salford, and County Palatine of Lancastei: By Robert Rawlinson, Esq., Superintending Inspector.

London, February 1852.
My Lords and Gentlemen,
Whereas, in pursuance of the Public Health Act, 1848, your Honourable Board appointed for the purposes of that Act have, upon a certain petition from more than one tenth of the inhabitants rated to the relief of the poor of and within the Township of Newton, commonly called "Newton Heath,"* in the Parish of Manchester, and County Palatine of Lancaster, (the number of the said petitioners greatly exceeding thirty in the whole,) directed a Superintending Inspector to visit the said township, and to make public inquiry, and to examine witnesses as to the sewerage, drainage, and supply of water, the state of the burialgrounds, the number and sanitary condition of the inhabitants, and as to any local Acts of Parliament in force within such township for paving, lighting, cleansing, watching, regulating, and supplying with water, or improving the said township, or having relation to the purposes of the Act ; also as to the natural drainage areas, and the existing municipal, parochial, or other local boundaries, and the boundaries which might be most advantageously adopted for the purposes of the said Act :

Now I, Robert Rawlinson, having previously published and given the notices as directed by the Act, proceeded upon the inquiry in the manner directed by the Act, and do report in writing upon the several matters with respect to which I was directed to inquire, and upon certain other matters in respect of which I deem it expedient to report.

[^0]The preamble of the petition in favour of the inquiry is herein set forth :-

No. 1.
Preamble of Petition prating for the Inquiry.
"'To the Honourable the Gencral Board of Health.
" The petition of the undersigned inhabitants of the township of Newton, in the county of Lancaster,
" Sheweth, -
"That your petitioners are one tenth of the inhabitants of the said township of Newton, which has a known or defined boundary, rated to the relief of the poor for that township.
" That your petitioners do hereby, in pursuance of the provisions contained in 'The Public Health Act, 1848,' and 'The Public Health Supplemental Act, 1849,' pray your Honourable Board to direct a Superintending Inspector to visit the said township of Newton, and to make public inquiry, and to examine witnesses as to the sewerage, drainage, and supply of water, the lighting, the state of the burial-grounds, the number and sanitary condition of the inhabitants, the boundaries which may be most advantageously adopted for the purposes of the said Act, and as to other matters mentioned in the 8th section of the first-mentioned Act, for the purpose of enabling your Honourable Board to judge of the propriety of reporting to Her Majesty, or of making a Provisional Order as by the said Acts provided, in order that the said Acts may be applied to the said township of Newton, or such part thereof as your Honourable Board may see fit.
" Dated this 30th day of April 1851.
(Subscribed) Edward Nightingale, Guardian of the Poor. Charles Ellis, Josepin Long, " " John Warhicrst, Overseer of the Poor. Charles Fitton,
Thomas Tongle, " "
Willlam Pegge, Surgeon.
Joseph 'Tatlor,
John Pegar, "
William Marshall "Ireland.
Alfred Norton.
Williak Nimmo.
Collinson \& Simpson.
Jorn Welsh.
Jorn Chadwick.
F. A. Hahnell.

James Clegg.
John Keighley.
Williak Simpson. Philip Berky. Grorge Bbiscor." And others.

The following letter was received with the petition:-
" Township of Newton Heath, Parish of Manchester.
" To the Honourable the General Board of Health, London.
" Herewith I humbly transmit to your Honourable Board the petition emanating from the ratepayers of the township of Newton Heath, which contains the signatures of all grades; from the largest employer of operatives to the humblest occupier of a rated tenement; the population of the township has been nearly doubled within the last ten years, and the rateable value of property has been more than doubled within the same time.
"Newton Heath is part of the parliamentary borough of Manchester, but not of the incorporated borough ; it is bounded for about a mile on the south-west end by the township of Manchester; and the unfavourable contrast in the sanitary condition of Newton is very obvious at first sight.

" I am, my Lords and Gentlemen, " Your most obedient, humble Servant, " Whliam Marshall Ireland." " Church Terrace, Newton Heath, " $2 d$ May 1851."

Petitions against the Act were presented, the preambles of which are as under :-

Preambles of Petitions against tie Application of the Аст.

## No. 2. <br> " To the Honourable the Board of Health.

"The humble petition of the undersigned inhabitant ratepayers of the township of Newton Heath, within the parish of Manchester, in the county of Lancaster,
"Sheweth,-
"That in the opinion of your petitioners, the position of and the circumstances connected with the said township of Newton Heath render the application thereto of the provisions of the Health of Towns Act unnecessary, and extremely undesirable.
" That the said township contains an area of 1,584 acres, of which 64 are used for the purposes of railways, roads, and a canal, and 240 are covered by houses and other buildings, or occupied as appurtenant to the same; and that 1,280 acres are under cultivation, and occupied as farming land.
"That the houses within the said township are principally erected on each side of the public turnpike-road, leading from Manchester to Oldham, for a distance of nearly two miles, and have fields immediately behind them, or are detached, or semidetached houses, widely separated from each other, and surrounded by fields.
"That the said township is bounded on the coutheeast by the river Medlock, and on the north by a rapid stream separating Newton Heath from Moston ; and that through the centre of the said township runs the Rochdale canal, navigable for vessels of 60 tons burden.
"That Newton Heath stands in an elevated position, being at its highest point, which is one of the most densely populated districts, on a level with the summit of the tower of the cathedral church of Manchester.
"That in consequence of the numerous outlets for ventilation within, and the clevation of Newton Heath, it is deemed to be one of the healthiest townships in the neighbourhood of Manchester, and is at all times remarkable for its freedom from visitations of epidemic diseases. On this point your petitioners would respectfully direct the attention of your Honourable Board to the Report of the Registrar General, as to the average number and percentage of deaths in the township of Newton Heath.
"That the population of this township consists principally of hand-loom weavers, factory operatives, dyers, bleachers, block printers, railway labourers, workmen in steel works, farmers and farm labourers; and numbers in the aggregate about 10,800 persons, of whom about 2,400 are ratepayers.
"That the greatest difficulty prevails in collecting the poor and highway rates within the township; that in consequence thereof a public notice by placard and otherwise has been recently issued, intimating that legal proceedings would be taken against all persons whose rates should be in arrear after the 12th instant; that the overseers of the poor and the surveyors of the highways were on the 2 d instant served with summonses by the Board of Guardians of the Prestwich Union for payment of the sum of 320l. ; and that 200l. of the rate laid twelve months since is still uncollected, and is owing by about 500 ratepayers.
"That in the opinion of your petitioners the township of Newton Heath is unable to bear the expenses which would follow the introduction of the Health of Towns Act, or the expenses of the preliminary inquiry, even assuming that the application of that measure to the said township is desirable, which your petitioners humbly submit is not the case.
"Your petitioners, therefore, who represent upwards of five tenths of the inhabitant ratepayers, humbly beg that the Health of Towns Act may not to any extent whatever be applied to the said township of Newton Heath, and that your Honourable Board will be pleased to exempt them from the operation of that measure.
" And your petitioners will ever pray, \&cc.

# (Signed) "Jobar Rigg," 

 And others.No. 3.
" To the Honourable the General Board of Health.
"The humble petition of the undersigned owners and occupiers of land and houses in the several streets called Mon-sall-lane, Grimshaw's-lane, and Tenacres-lane, within the township of Newton Heath, in the county of Lancaster,
"Sheweth,-
"That your petitioners are perfectly satisfied with the state of the streets in which they respectively reside, as regards the sewerage, drainage, and supply of water therein ; that the sanitary condition of the said strects, and of the inhabitants therein, is good; and that it is the carnest desire of your petitioners to be exempt from the operation of the Health of Towne Act.
"Your petitioners therefore humbly pray your Honourable Board that the said Act may not be applied to that portion of the township of Newton Heath in which they reside.
(Signed) "John Rigc,"
And others.
4. Petitions having preambles, of which No. 3 is a copy, were handed in at the inquiry, from owners and occupiers of land in the street called Oldham-road, extending from Failsworth to the White Hart inn, signed John Marsh and others.
5. From owners and occupiers of land and buildings in the several streets called Albion-street, Hulme Hall-lane, and district, signed Garside Gradwell and others.
6. From owners and occupiers of land in the several streets, \&c. called Droylsden-road, from the church to Clay-ton-bridge, Long-lane, Bury Brow district, \&c., signed William Robinson and others.
7. From owners and occupiers of land in the several streets called Church-street, Mitchel-street, and Culchethlane, signed Joseph Smith and others.
8. From owners and occupiers of land in the several streets called Great Newton-street, and "district thereabout," signed William Bradley and others.
9. From owners and occupiers of land in the street called Dean-lane, signed James Ogden and others.
10. From Joshua Wyatt, aged 86 years, and for upwards of 80 years a resident in the township.

No. 11.
Petition against the Application of the Act from one Churchwarden and one Overseer.
"The Honourable the General Board of Health.
"My Lords and Gentlemen,
"Your petitioners humbly sheweth, -
"That the Public Health Act was first mooted in this township of Newton Heath about the month of March last, 1851. A public meeting called by the overseers took place the 16th day of April last, to consider the propriety of introducing this Act into this township; and it was unanimous at this said meeting not to apply for powers to carry it into effect. But in opposition to this decision, which has caused much party feeling, a few persons have taken on themselves to go round the township, and solicit and obtain a number of signatures in favour of this Bill, against the wishes of a very great body of ratepayers; and it is to be feared the persons who have lent their names know little of the working or expense of this Act.
"Newton Ileath, a place of industry, still must be considered not a rich township.
"We had on our last rate, June 1850, 2,158 assessments, the number under 101 . being 1,782 . We have about 150 assessments of 20l. and upwards. This township has for the last three years been torn to pieces by party against party, and internal commotion; and if this Act is introduced at the present time, your petitioners are afraid it will only add fuel to the fire.
"We have about 25 acres of poors land in this township, granted by Act of Parliament, now in the hands of the trustees and overseers, the proceeds being applied to aid the poor rate. Over this poors land the Local Board elected under the Public Health Act can have no control, as the streets, sewers, \&c., on this poors land are vested by Act of Parliament in the trustees.
"We have our surveyors for the township ; and our roads are good at Dean-lane, Church-road, and Droylsden-road.
"We have the public highway also through the township, and the turnpike-road from Manchester to Oldham, vested in the hands of trustees, over which the Board of Public Health can have no control. We have the Court Leet to correct any nuisance, and a Board of Guardians, Sanitary Committee, \&cc.
"Your petitioners have long resided in this township, and feel no want of water, lighting, or anything the Public Health Act can bestow. In fact, when some countries are considered, and the difficulties and hardships that have to be endured in point of water, roads, and such like, your petitioners consider themselves highly favoured.
"Your petitioners therefore pray your Honourable Board to consider well the condition of the inhabitants of Newton Heath; who are principally of the working class, and who have great difflculty in paying the present rates, as the township is in debt both parochial and in the surveying accounts.
" And your petitioners earnestly desire that no other burden be laid on the industrious working class of Newton Heath.
> " We remain, my Lords and Gentlemen,
> " Yours respectfully,

# "Abrabam Taylor, "Churchwarden of Newton. 

" Newton Heath, "July 28, 1851."

"John Wratt,<br>"Senior Overseer of the<br>Township of Newton."

Remarks on Petitions.-These petitions show a formidable feeling of opposition to the introduction of the Public Health Act; but it is more apparent than real, as the evidence given in this Report will prove. The township of Newton Heath is about two miles north-east-byeast from the Exchange, Manchester. It forms part of the parliamentary borough, but is not within the municipal borough, although the boundaries at Gagg's Fields join. The site of the township is comparatively high, and the streets in general are open; but the township is in a transition state from an agricultural to a town district. Manchester has been built up to the extreme verge of its boundaries, and the population is now, of necessity, occupying the land of the adjoining townships; so that whatever the present condition of Newton Heath may be, it must speedily become part of one great town, and subject to all the evils incident to other suburban districts so situated, where there is no power either to pave, sewer, drain, light, watch, or regulate. At this time, in Gagg's Fields, the effects may be witnessed. The adjoining streets, up to the extreme verge of the boundary of Manchester, are sewered, paved, cleansed, lighted, and watched. The continuations of these streets in Newton Heath township, or, rather, the open spaces which ought to be a continuation, are without sewers or drains, without any form of pavement, and are positively impassable by wheeled vehicles from accumulated mud. The district is uncleansed and unregulated, and house, and other property, is in consequence depreciated in value to a very serious extent. Many loose and bad characters who are not allowed to reside in Manchester uncontrolled, settle down in this township, to the serious injury of the well-disposed inhabitants, and to the burdening of the local rates. There is not $a$ single argument advanced in the preamble of petition No. 2 which may not be used with greater force in favour of the
application of the Public Health Act to the township. The great area of agricultural land will not be oppressively affected by the Act, as there are special provisions to prevent any undue rating of land for town purposes. The main lines of road in Newton Heath are now principally built upon; but a Local Board would have power to prevent new streets from being constructed in an improper manner, as at present is the case. Detached or semidetached houses will not be affected by the Act, if they are not the means of a nuisance to any other property. The boundary of one side of the township being the river Medlock, and on the north side the boundary being a running stream, is only another reason why there should be local power to form, in the first instance, outlet sewers, so that these streams shall not be further vitiated by the drainage of houses into them. The elevation of the land within the township proves that local power is required to treat with the authorities of the intermediate towns and townships for the use of their sewers, that duplicate works may not be necessary, as it is not to be expected that the authorities of Manchester or Salford, after they shall have made outlet sewers to free the rivers and watercourses flowing into and through those towns, will allow other townships beyond, and at a greater elevation, either to use such sewers without some equitable arrangement being made; or to again vitiate these streams to the injury of the inhabitants of Manchester and Salford. The numerous outlets for ventilation will not avail if the subsoil remain damp and the streets remain unsewered, and houses and land remain undrained. At present there are in the township of Newton Heath open and covered cesspools, numerous middens, sewers of deposit, and stagnant ditches reeking with the drainage refuse from the adjoining houses; and this state of things must every year grow worse and become more difficult as also more costly to remedy, on account of land now open and unoccupied being rapidly built up. The character and occupations of the inhabitants, as detailed in petition No. 2, is one of the strongest possible reasons why there should be proper sanitary works carried out. The poverty of the hand-loom weaver renders him peculiarly sensitive to the evil influences of defective drainage; and if his health be injured so as to prevent him earning a living, both himself and his family become burdensome to the parish: the same is true of factory operatives, dyers, bleachers, and blockprinters. The difficulty of collecting existing rates is no argument against the necessity there is for the Acc. The whole
of the works which may be executed under the powers of the Public Health Act, if properly devised, economically executed, and efficiently superintended, will be in reduction of existing charges rather than burdensome. The township of Newton Heath cannot beneficially continue, as at present, without any local governing body, and this some of the largest owners of property and the most extensive ratepayers feel; hence the petition in favour of the application of the Act.

Many of the petitioners against the Act are working men and small shopkeepers, who have joined building clubs, and by such means have become possessed of small portions of land and cottages, and they fear that the Act will entail some very great expenses upon them; they do not consider that the whole of its clauses and provisions have been framed to have the contrary effect. The Public Health Act was passed for the express purpose of conferring the power of self-government on districts where it does not previously exist, as in Newton Heath, and for consolidating and extending the local power in other places, at the least cost to all parties.

The evidence contained in this Report will be found to set forth most clearly, that, in the township of Newton Heath, there are many nuisances dangerous to health; that there is no proper system of sewerage nor drainage, but that isolated sewers of the worst form have been made at a greater cost than proper drains might have been constructed for; that there is no adequate water supply; that there are no public lights; that the roads and streets are liable to be flooded; that they are not properly cleansed; that the graveyard is very much overcrowded; and that there are other nuisances which require to be corrected.

Local Mortality.-The mortality in Newton Heath is very high, having been $22 \cdot 1$ in 1,000 for the five years preceding March 1851, or $7 \cdot 1$ per 1,000 in excess of the mortality known to take place in well-regulated districts. If the average of the population for this period is taken at 9,330 , the annual loss by "preventible deaths" has been 66.243 , or, for the five years, 311 premature deaths in excess have taken place; and as it has been calculated, that for each case of preventible death there occurs thirty cases of "preventible sickness," there must have occurred 9,330 such cases. The money loss to the community may be represented as set down in the tables herein furnished :-

Table of Money Loss by Pretentible Deaths, and Cases of Preventible Sickness, for 5 Years, preceding March 1851.


$$
\notin 10,10710 \quad 0
$$

One-fourth of these lives may be considered as those of adults, and it may be presumed that they have each been prematurely shortened five years, and that the annual value of each life is not less than 20l.; there has, therefore, been a waste of 78 such lives nearly, the five years of each being valued at $100 l$. or, 78 lives at 1001. each $\quad{ }^{-} \quad$ Add $\quad \begin{array}{rrr}7,800 & \mathbf{o} & \mathbf{d} \\ 10,107 & 10 & 0\end{array}$

Total loss for 5 years $£ 17,90710 \quad 0$
Or, an annual money loss takes place in Newton Heath, from what Mr. Chadwick has so properly termed "preventille cases of sichuess anul death," of 3,969l. No sewer nor water rate will approach this amount.

Great as this money loss is, it will grow with the growth of the population, if the township continues to be unsewered, undrained, and unregulated; and the present rate of mortality ( 22.1 in 1,000 ) may be increased to that of Manchester and Salford, which is upwards of 31.0 in 1,000 .*

In the last Quarterly Return of the Registrar General occur these remarks:-
"State of the Public Health.-In the three months ending Soptember 1851, the mortality calculated on the population has been at the rate of 2.020 per cent., which was slightly below the average (2.099) of the ten preceding summer quarters; in the three months ending December 1851, the mortality was at the rate of $2 \cdot 182$ per cent., which on the other hand, is slightly above the average ( $2 \cdot 162$ ) of the ten preceding autumn quarters. The spring months of April, May, June, stand higher than the autumn quarter in the order of mortality; while in the three months of January, February, and March, the mortality is highest in winter. The mortality of Cheshire and Lancashire has been higher than the higi aferage of those counties. The population of the districts of Lancashire in 1851 was $2,063,913$; the funerals were 54,938 . The excess of sickness

[^1]and death in Lancashire is constant; in infanct, in adolt age, and in both sexes. Yet the land of a great part of the country is high and salubrious, and the occupation of the people has nothing in it essentially injurious. What then is wanting? Apparently only this one thing: that the leading men of Lancashire, animated by good will, should apply that skill and vigour which have been so successful in the use of machinery, and the production of clothing for mankind, to the amelioration of the social condition of the two millions of Euglishmen around them."

This is a warning which ought not to be slighted. The mortality of all England for the last year has been below the average of years, with the exception of Cheshire and Lancashire, in which counties the high average is exceeded; and the Registrar General further remarks, that in Lancashire "the excess of sickness and death is constant; in infancy, in adult age, and in both sexes."

The ratepayers of Newton Heath will therefore do wisely to act in time ; and, through the means of self-government, establish proper works of sewerage and drainage ; and also obtain a full water supply, with all other sanitary works and regulations. In fact, apply "that skill and vigour" shown in trade "to the anvelioration of the social condition" of the inhabitants of the township.

Local Geology.-New red sandstone exists to the south and west, and the coal measures "crop" to the surface within the township. There is an alluvial covering, varying from three to ten yards in vertical thickness. The natural contour of the land forming the township is favourable to the formation of sewers and drains, as a good fall may be obtained in any direction.

Local Meteorology.-The district around Manchester has a moist atmosphere, the annual rain-fall varying from 26 to 52 inches, or the average is about 39 inches; but rainfall is so various, even in places not many miles apart, that little reliance can be placed upon any local gaugings, unless a wide margin is allowed upon the minimum quantity for water supply. The whole rain-fall of an entire year may be partially absorbed, and partially evaporated, so as to yield very much less than is shown by the rain-gauge, in which it is protected alike from the influence of a parched soil and a dry atmosphere. In ordinary seasons the evaporating power of the atmosphere exceeds the total rain-fall; in very dry seasons it is as 3 to 1 , and even more. This is one reason
there are so many failures in waterworks which are dependent upon rain-fall collected from limited gathering grounds, the average gaugings from which indicated that there would be water in abundance, the experience of a few years showing, however, a lamentable deficiency. Averages are dangerous to the inexperienced; they frequently lead those who depend upon them into serious mistakes; as, during the season of least actual rain-fall both the earth and the atmosphere are greedy of moisture. So during seasons of maximum rain-fall they are surcharged with it, and occasionally the average of a month is precipitated by a thunder shower in one hour.

The volume of water precipitated during heavy rain over wide areas cannot be passed into any sewer or sewers, but must flow away over the surface; and, therefore, this surface, whether street or road, should be prepared in the best manner to allow of the freest possible passage to heavy floods. What can be done with a volume of water which covers many square miles several feet deep? and yet outlet sewers have to be made for town drainage in such districts. As flood waters cannot be dealt with in sewers, the most economical practice will be to graduate sewers to the especial work they have to perform.

The greatest depths of rain which are recorded to have fallen at Manchester in one day are as under:-*


In the month of July 1845, 1.945 inch of rain-fall fell in Birmingham in little more than half an hour.

[^2]Table of Rain-fall at Manchenter, being an Average of soveral '. Years.

| Montre. | 8xasor. | Average Depth of Rain-fall in Inches. |
| :---: | :---: | :---: |
| November - - - |  |  |
| December - - - | Winter | $12 \cdot 2$ inches. |
| January - - - | Winter | $12 \cdot 2$ inches. |
| February - - - |  |  |
| March - - - |  |  |
| April - - - May |  |  |
| $\left.\begin{array}{lllll}\text { May } & - & - & - \\ \text { June }\end{array}\right\}$ | Spring - | $12 \cdot 2$ |
| July - - - |  |  |
| August - - - | Summer - | $14 \cdot 9$ |
| September | Summer | 14.9 |
|  |  |  |
| Total fo | 12 months | $39 \cdot 3$ inches. |

It appears from a series of observations, that the greatest average fall of rain is in October, and the least in February.

Snow yields about one tenth of an inch of water to one inch fall; that is, a fall of snow of ten inches in depth over the surface, and not the result of drifting, is equivalent to one inch of rain.

The following table exhibits the quantity of rain, as registered by a rain-gauge placed in a field at Crowden Hall, a fold of houses situated at the junction of the Crowden and Longdendale valleys :-


In January 1852, the fall was 5 inches; in the first nine [2]
days of February (1852) it was 6.5 inches; but it is calculated to have been ten inches on the summits of the adjoining hills.

The following table, by a series of averages, exhibits the very great difference in rain-fall in locality.

Table of the Average Depths of Rain for each Month of the Year, deduced from 34 consecutive years from 1815 to 1848, as registered at the Royal Observatory, at Greenwich, Kent.

| Мохтня. | Average quantity of Rain for each Month. | Greatest quantity of Rain recorded in one Munth. | Least quantity of Rain recorded in one Month. |
| :---: | :---: | :---: | :---: |
| January | Inches. 1.68 | Inches. $4 \cdot 83$ | Inchex 0.30 |
| February - - | 1.58 | $3 \cdot 69$ | $0 \cdot 04$ |
| March | $1 \cdot 61$ | $3 \cdot 45$ | 0.40 |
| April | $1 \cdot 73$ | $4 \cdot 79$ | 0.06 |
| May | 1.96 | $4 \cdot 16$ | $0 \cdot 50$ |
| June | 1.83 | $4 \cdot 26$ | $0 \cdot 59$ |
| July | $2 \cdot 37$ | $6 \cdot 65$ | $0 \cdot 10$ |
| August | $2 \cdot 40$ | $4 \cdot 65$ | 0.07 |
| September - | $2 \cdot 40$ | $4 \cdot 79$ | $0 \cdot 40$ |
| October | $2 \cdot 67$ | $5 \cdot 37$ | $0 \cdot 53$ |
| November | $2 \cdot 53$ | $4 \cdot 33$ | $0 \cdot 85$ |
| December - | $2 \cdot 02$ | $4 \cdot 72$ | $0 \cdot 08$ |
| Total - | 24.78 | $55 \cdot 69$ | $3 \cdot 92$ |

The figures in this table show the fallacy of averages as reliable data for waterworks.*

The mountains which divide Lancashire and Yorkshire, and which extend into Derbyshire and Cheshire, influence the climate very considerably. The vapour-laden air from the Western ocean is drifted onwards, and is condensed by the high lands which encircle the district around Manchester to the north and east, producing considerable variation in localities comparatively near together.

The following is a table of the temperature, atmospheric pressure, and quantity of rain which has fallen at Macclesfield and at Manchester during the last half of 1850 . The

[^3]latter register is taken from that kept by Messrs. Ronchetti ; the former has been kept at Macclesfield by Mr. Thomas Kelly. Manchester is about. 130 feet above the sea level; Macclesfield, or rather that part of it where the observations were made, is 430 feet above the same level; this is indicated in some measure by the barometrical register. The leading results are, that whilst the average range of the thermometer at Manchester has been from $42 \cdot 70$ to 56.33 , at Macclesfield it has been from 45.92 to 55.74 . The fall of rain in Manchester for six months has been 20.86, at Macclesfield it has been $19 \cdot 43$.

Meteorological Observations, taken by Mr. Thomas Kelly, Macclesfield.

| The week ending | Mean Atmospleric Pressurc. |  | Temperature by <br> Self-regintering <br> Thermometer. |  | $\begin{array}{\|c} \text { Weekly } \\ \text { fall } \end{array}$of Rain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $100^{\text {celock. }}$ | $40^{\prime}$ clock. |  |  |  |
|  | A.Y. | P.\%. | Max. | Min. |  |
| July 4, 1850 | $29 \cdot 36$ | $29 \cdot 34$ | 63 | 51 | $1 \cdot 12$ |
| " 11, " | $29 \cdot 57$ | $29 \cdot 58$ | 61 | 51 | $0 \cdot 63$ |
| " 18, " | 29.63 | $29 \cdot 63$ | 73 | 59 | $0 \cdot 00$ |
| " 25, " | 29.52 | $29 \cdot 47$ | 71 | 59 | $0 \cdot 31$ |
| Aug. 1, " | $29 \cdot 61$ | $29 \cdot 65$ | 65 | 55 | 1.82 |
| " 8, " | 29.45 | $29 \cdot 40$ | 73 | 55 | $0 \cdot 56$ |
| " 15, " | 29.45 | $29 \cdot 43$ | 67 | 55 | $0 \cdot 60$ |
| " 22, " | $29 \cdot 38$ | $29 \cdot 69$ | 63 | 53 | 0.96 |
| "29, " | $29 \cdot 58$ | 29.55 | 60 | 54 | $1 \cdot 29$ |
| Sept. 5, " | 29.90 | $29 \cdot 91$ | 59 | 50 | $0 \cdot 16$ |
| " 12, " | 29.98 | $29 \cdot 95$ | 59 | 45 | $0 \cdot 00$ |
| " 19, " | $29 \cdot 83$ | $29 \cdot 80$ | 61 | 49 | $0 \cdot 00$ |
| .. 26, " | $29 \cdot 33$ | $29 \cdot 75$ | 62 | 53 | $0 \cdot 37$ |
| Oct. 3, " | $29 \cdot 26$ | 29.27 | 55 | 47 | $1 \cdot 19$ |
| " 10, " | $29 \cdot 32$ | $29 \cdot 29$ | 52 | 44 | $1 \cdot 18$ |
| " 17, " | $29 \cdot 72$ | $29 \cdot 71$ | 50 | 40 | $0 \cdot 42$ |
| " 24, " | $29 \cdot 43$ | 29.42 | 59 | 42 | $0 \cdot 82$ |
| " 31, " | $29 \cdot 23$ | 29.26 | 47 | 38 | $0 \cdot 83$ |
| Nov. 7, " | $29 \cdot 64$ | $29 \cdot 51$ | 52 | 46 | $0 \cdot 73$ |
| " 14, " | $29 \cdot 69$ | $29 \cdot 71$ | 50 | 42 | $0 \cdot 99$ |
| ". 21, " | 29.27 | 29.24 | 48 | 41 | 1.37 |
| Dec. 28, " | 29.08 | $29 \cdot 10$ | 51 | 44 | $0 \cdot 81$ |
| " 5, " | $29 \cdot 76$ | $29 \cdot 76$ | 41 | 31 | $0 \cdot 50$ |
| " 12, " | $29 \cdot 80$ | $29 \cdot 77$ | 48 | 35 | 0.05 |
| " ${ }^{19}$, " | $28 \cdot 98$ | 28.91 . | 41 | 36 | 1.27 |
| \% 26, | 29.90 | $29 \cdot 72$ | 39 | 31 | 0.26 |
| Jan. 2, 1851 | 29.52 | 29-49 | 40 | 34 | $1 \cdot 19$ |
| Mean of half year | 29.52 | 29.58 | $55 \cdot 74$ | $45 \cdot 92$ | 19.48 |

Meteorological Obearvations, taken by Moerrs. Bonchetti; Manchester.

| The wrek ending | Mean Atmospberic Presure. |  | Temperature by Self-reginering Thermomoker. |  | $\begin{gathered} \text { Weekly } \\ \text { fall } \\ \text { of Rain. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $100^{\circ}$ clock. | $40^{\circ} \mathrm{clock}$. |  |  |  |
| 1850 | $\frac{1 \cdot x}{29 \cdot 62}$ | $\begin{aligned} & \text { P.M. } \\ & 29 \cdot 70 \end{aligned}$ | Max. | Min. | 1.05 |
| "11, " | 29.93 | 29.89 | 63 | 47 | 0.63 |
| " 18, " | 29.80 | 29.93 | 76 | 57 | 0.00 |
| " 25, | $29 \cdot 82$ | 29.83 | 73 | 57 | 0.93 |
| Aug. 1, " | 29.92 | 29.97 | 68 | 56 | $0 \cdot 72$ |
| " 8, " | 29.74 | $29 \cdot 72$ | 71 | 53 | 1.13 |
| " 15, " | 29.71 | $29 \cdot 74$ | 69 | 53 | 0.35 |
| " 22, " | $29 \cdot 67$ | 29.92 | 63 | 47 | $1 \cdot 16$ |
| " 29, " | $29 \cdot 86$ | 29.89 | 60 | 43 | 1.90 |
| Sept. 5, " | $30 \cdot 21$ | $30 \cdot 23$ | 60 | 47 | 0.07 |
| " 12, | $30 \cdot 28$ | $30 \cdot 29$ | 58 | 40 | 0.00 |
| " 19, | $30 \cdot 12$ | $30 \cdot 09$ | 62 | 46 | 0.00 |
| " 26, | $29 \cdot 62$ | $29 \cdot 65$ | 64 | 50 | $0 \cdot 58$ |
| Oct. 3, " | $29 \cdot 52$ | $29 \cdot 51$ | 58 | 42 | $2 \cdot 16$ |
| " 10, " | $29 \cdot 54$ | $29 \cdot 62$ | 54 | 38 | 1.39 |
| " 17, " | 29.99 | $30 \cdot 01$ | 51 | 37 | 0.27 |
| " 24, " | 29.55 | $29 \cdot 69$ | 49 | 37 | $0 \cdot 55$ |
| " 31, " | $29 \cdot 52$ | 29.54 | 47 | 34 | $0 \cdot 49$ |
| Nov. 7, " | $29 \cdot 75$ | 29.75 | 55 | 45 | 1.07 |
| " 14, " | 29.96 | 29.99 | 49 | 33 | 0.95 |
| " 21, " | $29 \cdot 47$ | $29 \cdot 45$ | 47 | 37 | $1 \cdot 11$ |
| " 28, " | $29 \cdot 12$ | 29.21 | 46 | 35 | 1.32 |
| Dec. 5, | $30 \cdot 01$ | $30 \cdot 02$ | 41 | 30 | 0. 59 |
| " 12, | $30 \cdot 07$ | 30.02 | 38 | 28 | 0.01 |
| " 19, | $29 \cdot 25$ | $29 \cdot 18$ | 40 | 32 | 1.02 |
| " 26, | $30 \cdot 12$ | 30.14 | 42 | 32 | 0.05 |
| Jan. 2, 1851 | 29.77 | 29.73 | 50 | 42 | 0.91 |
| Mean of half year | 29.77 | 29.80 | $56 \cdot 33$ | 42.70 | $20 \cdot 86$ |

The prevailing winds throughout the year are from points north-west, west, and intermediate betwixt west and south. Easterly winds generally, however, prevail in spring from the latter end of February to May.

The following table shows the velocity of the wind and its equivalent force.

Pressures of the Wind at the Velocities stated.

| Character of Wind. | Velocity in Miles per Hour. | Force in lbs. on each square Foot. | Remares. |
| :---: | :---: | :---: | :---: |
|  | Miles. |  |  |
| Gentle breeze - - | 5 | $0 \cdot 12$ |  |
| Brisk gale - - \{ | 10 | 0.49 |  |
| Brisk gale | 15 | $1 \cdot 11$ |  |
| Very brisk gale - | 20 | 1.97 |  |
| High winds - - \{ | 30 | $4 \cdot 43$ |  |
| High winds - - \{ | 35 | $6 \cdot 03$ |  |
| Very high winds | 40 | $7 \cdot 87$ |  |
| Very high wind | 45 | $9 \cdot 96$ |  |
| A storm - | 50 | $12 \cdot 30$ | Dangerous. |
| A great storm - - | 60 | $16 \cdot 71$ | $\left\{\begin{array}{c}\text { Generally does serious }\end{array}\right.$ |
| A hurricane - | 80 | 31.49 | $\left\{\begin{array}{l}\text { damage. }\end{array}\right.$ |
| A tornado (tropical) - | 800 | $31 \cdot 49$ 49 | Destroys all before it. |

Remarks.-The moist atmosphere of the district is said to be favourable to the manufacture of cotton, but it is most certainly not conducive to the health of the inhabitants, surrounded as they are by foul rivers and stagnant watercourses, polluted by the drainage of the towns so as rivers never were tainted before in any other country. It is impossible to conceive anything more disgusting than the present condition of the rivers Irk, Medlock, Cornbrook, and Irwell after they enter Manchester. They are not rivers of water, but rivers of sewage-refuse, of great value as manure, if properly applied to the land, but, festering and fermenting in the foul streams, they are most disgusting to sight and smell, and most pernicious to health. For many miles in length, there is death in the evaporation from the sluggish semi-liquid refuse. The only cheering sight connected with these rivers is bright green lines of luxurious vegetation on their banks, after they have left the towns, showing the results which might be obtained from the application of the refuse on a large scale to the purposes of agricultrre.

As the Public Health Act is applied to the townships surrounding Manchester, and works of drainage are carried out, the present foul condition of these streams
and rivers will, if possible, be made worse; and the evaporation from them will become more and more dengerous. In each report upon the townships bordering Manchester, I have urged and re-urged these or other similar arguments; but the question of an efficient remedy may probably be deferred by the local authorities of Manchester and Salford, until there is a concurrence of causes to generate excess of disease, such as will startle the most careless; when the only true remedy, namely, outlet-sewers, will be provided. It will then be discovered, that this great work (so long deferred, will, by the application of the refuse to the purposes of agriculture, be more than self-paying. The evidence recently published by your Honourable Board clearly proves this.

Table showing the Rateable Value of Property situate in the Township of Newton Heath, July 28, 1851.


Table showing the Rateable Value of Property situate in the Township of Newton Heath, July 28, 1851-continued.


## INQUIRY.

On Monday, 28th July 1851, at 11 o'clock in the forenoon, the inquiry was commenced in the No. 1. school-room, Newton Heath; the persons named below being pre-sent:-

Messrs. William M. Ireland, Edward Nightingale ; the Rev. John Robinson, Curate; James Taylor, Silk Manufacturer ; Joseph Taylor, Surgeon ; John Webster, Solicitor ; Samuel Lancashire, John Wyatt, John Warhurst, Charles Fitton, John Welsh, William Simpson, Philip Lamb, David Booth, Garside Gradwell, John Robinson, John Ramsbottam, Abraham Taylor, Joseph Bates, John Keighley, and many others.

## Publication of Notice of Inquiry.

Mr. William Marshall Ireland proved the due publication of the notices, as the Act directs, as he had previously done to your Honourable Board by the following letter :-

[^4]
## Pridenos given at the Inquiry.

## " To the Geveral Boovd of Health.

## " My Lords and Gentlemers,

"I have the honour of acknowledging your commanication of the 4th instant, containing the legal notices, preparatory to the Superintending Inspector appointed for the township of Newton holding his court; and, in obedience with your instructions therein contained, I have caused those notices (the notices forwarded from the General Board) to be posted on the whole of the church and chapel doors and other public places throughout our township, on Saturday last the 5th instant, thereby giving twentythree clear days notice of the inspector's intention to hold his court on the 28th instant, as set forth in the same.
" I am, my Lords and Gentlemen,
" Your most obedient humble servant, " Williak M. Ireland."

## Boundary.

Messrs. John Wyatt and John Warhurst proved that the township of Newton Heath has a known and a defined boundary.

The existing boundary is that of the township,' which is shown upon the accompanying map. There is a detached portion also shown, which cannot in any way be affected by works executed within the main portion of the township ; and it is, therefore, considered advisable to confine the application of the Act to Newton Heath proper.

## Sewerage, Drainage, and Water Supply.

Mr. Edward Nightingale stated, there is no general system of sewerage, drainage, nor supply of water throughout the township.

## Burial-Grounds.

Mr.Joseph Taylor, surgeon, stated, that the principal burial-ground (the churchyard) is very full, and quite inadequate to the present requirements of the district.

Number of the Inhabitants.
The number of the inhabitants, according to the census return of 1851, is 10,802 , exclusive of Kirkmanshulme district (304), 10,462.

Sanitary Condition of the Inhabitants.
Mr. Joseph Taylor, surgeon, stated, "The sanitary concondition of the inhabitants is very defective, as eymotic diseases prevail."

## Local Acts of Parliament.

There is no Local Act in force for the general government of the township, but there is a Looal Act for the
management and disposal of certain poors land, granted 42 Geo. III., 1805; a subsequent amended Act, 4 Geo. IV. cap. 135, 17th June 1824.

## Natural Drainage Area.

The natural drainage area can only be clearly ascertained by accurate survey. The site of the township is, however, comparatively high, and the main outfall is towards Manchester.

## Local Police.

The township is watched by a portion of the rural police, a sergeant and two men being stationed in Newton Heath.

Poors Land, and State of Township.
The following letter was read and put in by William Marshall Ireland :-
"As the promoter of this measure, I would respectfully state, that the township of Newton Heath comprises about 1,584 statute acres of land; that it has a known and defined boundary, that there are no Local Acts of Parliament by which any part of it is governed, except an Act known as the Inclosure Act, granted 42 George III., 1805, by which 124,500 square yards of land were divided from the common or waste land, and allotted to certain trustees, in trust to be by them sold (upon chief) for building upon, the greatest part of which is laid out into streets, and in part covered with buildings, the trustecs making and keeping the said streets in repair, as also providing the main sewers and drainage, which are very unsatisfactory and imperfect. 46,854 square yards have been sold off (a long time ago) yielding to the overseers the amount of 354l. 15s. $2 \frac{1}{2} d$., less 471 . 1s. 11d. loss per annum, owing to the trustees not complying with the Act, or conveying the land without the security thereby required, which has proved a serious loss to the ratepayers. The proceeds from the ground-rents go to the relief of the poor rate. No land has been sold since March 14th 1836, owing to the high prices now demanded by the trustees, some of whom are not resident ratepayers, and have therefore no interest in the matter. Were the sales of the land properly conducted, and the whole sold off, the nett annual income in aid of the poor rate would be, upon the average of $2 d$. per square yard for the land unsold, (and in some cases the trustees are asking $6 d$. ,) no less a sum than 1,001 . $16 s .2$. $d_{\text {, }}$, less the 47l. 1s. 11d. loss, and 31l., let off from year to year for farming purposes; a part of this sum in our present condition would be of much service if applied in aid of sanitary improvements within this township.
"But the above allotment forms a very small portion of the 1,584 acres of similar land contained in the township, about four fifths of which are the property of the Dean and Canons of the Collegiate Church of Manchester, who are also the lords of the
manor, and who hold two courts leet in every year within the township, which are renowned for good eating and drinking, at the expense of the ratepayers, and loss of time to the jurors; and yet it is notorious, that although at every court which is beld, some presentments never fail to be made, frequently of obstructions to natural watercourses, either through neglect of the lessees to cleanse some portion which is immediately connected with dwellings, or the said lessees are found guilty of wilfully making obstructions on certain allotments, which causes backflooding. There are also certain portions of occupation roads, which are public thorouglifares, and which, according to covenants in certain leases, are to be kept in good repair, the lessces neglecting to do this are regularly amerced in various sums, yet in no case has the court further interfered to levy these fines, whether the evil has been remedied or not.
"There is not a public light in the township. The drainage is exceedingly deficient. The supply of water, such as it is, is very insufficient, and, in many cases, the poor people have a long way to fetch it. The graveyard is very much overcrowded, and is considered very dangerous to those around it. According to the present census (1851) the number of inhabitants in the township is 10,802 .

(Signeũ) " Whliny M. Ireland."

## Remarks and Evidence.

Mr. James Taylor wished the paragraph relative to " eating and drinking" struck out.

Mr. Samuel Lancashire objected to the paragraph relating to the court leet, as also the statement relating to loss of rent in letting the poors land. He did not consider the price at which it was let too high.

As the statements were made in open court and were not disproved, though objected to, I have considered it right to insert the evidence as it was given.

Mr. John Webster, solicitor, described the boundaries of the township, and stated that there was a detached portion. He also described the agricultural character of the greater portion of it. The land in Gagg's Fields he stated is let for building purposes upon lease for 99 years, and he states that there are clauses inserted in all the deeds as to drainage.

Mr. John Wyatt read preamble of petition against the application of the Act, and put the same in.

Mr. Joshua Wyatt of Newton read preamble of petition from himself against the application of the Act, and put the same in.

Mr. John Wyatt read preamble of other petitions against, and put the same in. (See preambles of petitions, as given at pp. 9-13.)

Mr. John Wyatt stated :-"I am an overseer of the
poor ; have served three years." "Rate is 18 . in the pound; 1d. in the pound is expended upon the highways. 18. in the pound produces from $1,300 l$. to $1,400 l$.". "There is not any general system of sewerage within the township." "Trustees of poors land are selfelected." "The several local officers under the Poor Law have advanced money of their own to defray current charges." $\dagger$

Mr. Charles Fitton is an overseer of the poor. States that " the guardians have been compelled to have a new valuation of the township; this has not yet been completed." "There are seven slaughter-houses at Gagg's Fields, the filth from which passes out on to and stagnates over the surface; has applied to the Guardians to have it removed; they cannot under existing circumstances remove it. Has tried to get some of the streets paved and lighted, but could not accomplish it." "The clauses in the deeds alluded to by Mr. Ireland and Mr. Webster are ineffective." "There is no existing power to get an outlet level, or to perform the covenants in the deeds. There is a considerable breadth of streets to pave and to sewer, but at present these cannot be done properly." "There are two streets which have been sewered at the cost of private parties out of seven streets similarly situated. There is no township in the county in which the rates are more easily collected than in Newton Heath."

Mr. Samuel Lancashire considers the township is well sewered. "Owns property, house property, in several parts of the township." "Does not know in any instance that there is one house deficient in drainage." "There are streets in which he owns houses, which streets are not paved because there is no power to do this." "Certain parties refuse to pave, because they have clauses of exemption in their leases." "Water is supplied to a portion of the township from Manchester, from the Manchester waterworks." "Gas is also brought into the township from the Manchester works, but there are no public lights. The price charged for the gas is 58 . per 1,000 cubic feet." "The roads are excellent in Newton Heath." "Considers them about the best in England." "Have better roads than any in London, or anywhere near it." "Do not want any person to be sent by Government to teach us what to do, either in making roads or in making sewers." $\ddagger$

[^5]Township Roads.-There are four surveyors elected annually, and one working surveyor is appointed, and is paid 20l. per annum. The surveyor so paid also collects the poor and highway rates.

Shooter's Brook is used as a main sewer.

Evidence-Mr. John Thomason stated that he owns house property near the Turn Bridge, but for want of general powers and a proper system of sewers he cannot drain it.

Mr. Joseph Gornall stated that in Droylsden-road he owns house property, but that he cannot at present sewer nor drain it.

Mr. Philip Lamb read the preamble of a petition against the application of the Act, and put the same in. As to the water supply, he stated, "In Monsel-lane there is a private well, which would supply much of the township with water. There are private wells in the immediate neighbourhood, as also private pumps. There are public and private sewers and drains all over the township."

Mr. Joseph Norbury stated: "I reside at a house at the corner of Albion-street. The cellars are frequently flooded, and it costs me some $3 l$. per annum to get this water out. There is also a nuisance of the worst kind near me, namely, a bone-boiling establishment; the stink from this is pernicious to health. There is also a very foul ditch, which has been indicted; but it still remains as foul and as offensive as ever."

The following evidence shows clearly that much of the existing disease amongst the poor is of that class termed "preventible."

Mr. Richard Parker, relieving officer, stated: "The places where I find most disease are damp cellars, and those places in the worst sanitary condition. In all such places fever is common, and by far the largest amount of relief has to be given. If there was not so much disease, there would not be so much relief required. In Church-street there is one cellar in which 18 persons have resided at one time ; have had several cases of fever here." Read the following statement, and put the same in.

[^6]
## Preatwich Union．

Return showing the number of nuisances reported to the Guar－ dians of this Union；the number of cases relieved，and amount expended．Number of new applications in the townships of Blackley，Cheetham，Newton，and Prestwich，and the amount expended by those townships in settled，casual，and irremovable relief；the number of sick applications relieved with in－door and out－door relief in the township of Newton；and the number of applications on the Manchester side of the toll bar，Newton， from the 24th June 1850 to the 24th June 1851.

|  | 迸若 | \|㛯 | The Amount expended． |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 |  | Settled <br> Poor． | Casual <br> Poor． | Irremovable Poor． |  | dal． |
| Blackley | 1 | － | $\begin{array}{ccc}2 & s & d . \\ 169 & 8 & 0\end{array}$ |  | $\begin{array}{lll}\text { \＆} & s . & \text { d } \\ 43 & 0 & 6\end{array}$ | ${ }_{213}^{ \pm}$ | s． |
| Bradford | 3 | － | － | － | － |  |  |
| Cheetham | － | － | $45 \quad 0 \quad 4$ | 151210 | $\begin{array}{lll}37 & 15 & 3\end{array}$ | 98 | 8 |
| Crumpsall | 30 | 4 | － | － | － |  |  |
| Failsworth | 20 | － | － | － | － |  |  |
| Harpurhey－ | 3 | － | － | － |  |  |  |
| Heaton，Great | － | － |  | － | － |  |  |
| Heaton，Little | 11 | 1 | － | － | － |  |  |
| Moston | ${ }^{6}$ | － | － | － | － |  |  |
| Newton | 86 | 7 | $\begin{array}{lll}113 & 2 & 5\end{array}$ | 3510 | 18160 | 329 | 9 |
| Prestwich | 75 | 3 | $164 \quad 0 \quad 10$ | $14 \quad 56$ | 491410 | 228 |  |
| Total－ | 235 | 15 |  |  |  |  |  |


| Number of cases of out relief relieved in 12 months | 492 |
| :---: | :---: |
| Number of individuals relieved in 12 months | 1，178 |
| Total amount expended in Prestwich Union during 12 months | £1，318 |
| Various descriptions of Nuisances in Newton ：－ |  |
| Foul and offensive drains，\＆c． |  |
| Accumulation of dung，manure，\＆c． | － 23 |
| Privy，ashpit，cesspool－ | － 13 |
| Pigsties，swine，\＆c． |  |
| Slaughter－houses，\＆c． |  |
| Total | 86 |
| Applications in cases of sickness in Newton |  |
| Number of cases relieved on the Manchester side Newton toll bar | $189$ |
| Total number of cases relieved in－door and out－door for the whole of the Union for 12 months | $\left.\begin{array}{r} \mathbf{r} \\ \cdot \end{array}\right\} 1,092$ |

Total number of new applications for 12 months in the following four townships, viz. :-


Number of casc3 relieved week ended July 26, 1851 : -
Number on Manchester side of toll bar, Newton - - 18
Number in Church-stroet, Droylsden-road, and Factory-
yard
22
Number in other parts of Newton - - - - 14

Townsher or Newton.


July 26, 1851.

## Richard Parker, <br> Relieving Officer.

Remarks.-In these accounts it is shown that the greatest numbers of nuisances are in Newton; and that the largest amount, in money, is there expended in relief.

Evidence as to the Roads, Slaughter-houses, Privies and Cesspools, and as to the Churchyard. - With respect to the roads, the want. of drainage, and the want of local power to regulate slaughter-houses, \&c., Mr. John Wilson, of Geörge-street, Holland-street, Gagg's Fields, said, "The roads are in bid order." "There are cellars in Boardman-street where the water is two feet deep." "There are cesspools attached to the privies, and the refuse on being thrown out remains on the surface several days." "In Gagg's Fields there are some slaughter-houses where diseased cattle are killed." " They are afterwards disposed of in the neighbourhood, a large portion being taken to Manchester."

Mr. Joseph Taylor, surgeon, confirmed Mr. Wilson's statement as to the slaughter-houses, at which he had seen the curcases of diseased cattle. "Much of the meat is disposed of by the butchers, called 'slink' butchers, to the sausagemakers, and to the pie and stew shops in Manchester.

There is no drainage to these slaughter-houses. The refuse runs off over the surface. The natural brooks of the district are in a most abominable condition. There is no regular cleaning out of the brooks, yet they receive the drainage of the whole of Newton. There is no township which offers greater facilities for drainage than Newtca, but the inhabitants have nothing but ditches to drain inta. The effect is, that out of an average population of 9,330 persons in Newton Heath proper, for the last five years, 1,031 deaths had occurred during the same period, thus averaging 206 deaths per annum, or $22 \cdot 1$ per 1,000 of the inhabitants, exclusive of inquests."

The churchyard, Mr. Taylor stated, is a public nuisance. He further stated, that on one occasion he had seen a grave at the eastern side of the yard prepared for the reception of another coffin, the grave being already full to within two feet of the surface of the soil.

One of the churchwardens stated that it was customary to bury within 18 inches of the surface, the subsoil being a very stiff clay.

It was also stated that in many cases the grave-stone actually rested on the uppermost coffin; and that on one occasion, when a mason was wheeling a barrow across a common grave, the wheel went through into a coffin.

## Medical Evidence against the Act.

Mr. Peter Brown, surgeon, stated, "I have known the township for thirteen years." "It possesses great natural drainage facilities, being bounded by two deep valleys nearly the whole of its length." "The drainage on the eastern side is good, and that on the western side not to be complained of." "No part of the township is densely inhabited." "The inhabitants generally are cleanly, and as healthy as those of any similar township in the neighbourhood of Manchester. Disease indicative of a marshy soil is scarcely to be met with." "I have seen no case of intermittent fever for the last ten years. There is no disease which can be called local." "Typhus gravior is seldom seen. The principal diseases prevalent in the township are colds, diarrhoea, inflammatory fevers, eruptive and otherwise, and affections of the chest-diseases attributable to the coldness and dampness of the climate." "So frequently, and in such torrents, does it rain, that, however dirty the inhabitants might be, it gives animal and vegetable matter but little chance of accumulating." "In my opinion, there is no necessity for the introduction of the Public Health

Act, the working of the law at present in existeace being quite sufficient to obtain all the desired ends."

## Medical Evidence in favour of fhe Act.

The following evidence in favour of the Act was given hy Mr. John Pegge, Union surgeon, who stated, that amongst the poor Irish there was a great deal of disease. He further stated, that " two cellars in Church-street, one of which had been referred to by the relieving officer, were very dirty, and there was so much disease in them that he was scarcely ever out of them. Lamb-lane was in a most deplorable condition. He generally found that if he visited a house, the relieving officer had speedily to follow him."

## Qualification necessary to be elected a Member of the Local Board.

The question was raised as to the qualification to be required for members of the Local Board, in case the Act should be applied. Mr. Nightingale proposed that the quadification should be 10l. rental, or 250l. property, which was seconded by Mr. D. Bootl. An amendment was proposed by Mr. P. Lamb, seconded by Mr. W. Booth, and was carried by a majority then present, that it should only be 7 ll .108 . rental, or $150 l$. property. The public inquiry then terminated.

Remarks.-This low qualification was subsequently remonstrated against; and I. beg respectfully to direct the especial attention of your Honourable Board to the subject. I have recommended the highest qualification allowed by the Act.

Remarks on the Inquiry.-During the whole of the day the room was filled by a large number of persons, principally of the working classes, some of whom were favourable, but the greater portion hostile, to the introduction of the Public Health Act. The proceedings were characterised by great disorder throughout, very frequently several persons endeavoured to obtain a hearing at the same time, and they fiercely disputed as to their several claims to priority of audience. There were also many angry personal altercations between the members of the opposing party, few of whom appeared to consider themselves bound to act with ordinary courtesy towards the promoters.

During the inquiry there was an eclipse of the sun; the sky was overcast by thunder-clouds, and a very heavy fall of rain took place. Many of the opponents, as will be seen
by this evidence, had asserted that the whole township was "well sewered and drained;" but, a sudden irruption of females, some of them being the wives of opposing parties, entered the room and set up a confused cry of many voices. "We are flooded out of our houses;" "Do come and look, Sir, at the state we are in;" "It is always the way during rain;" "If any body says the township does not require draining, it is a falsehood, as the streets and our houses are now flooded with filthy water and mud."-This was evidence none present undertook to gainsay. As I rode down from the inquiry into Manchester, I observed to the driver, "The roads appear to be dirty in this part ;" his exclamation was, "They are the worst and filthiest roads in all England through Newton Heath;" and certainly the horses, the carriage, and the driver were covered with mud.

Personal Inspection.-In company with Messrs. Edward Nightingale, William Ireland, David Booth, John Welsh, Abraham Taylor, Samuel Lancashire, Richard Parker. Thomas Chatterton, Joseph Taylor, Esq.s surgeon, and cchers, I proceeded to make an inspection of the township; and the following remarks are extracts from my note-book, or are the suggestions incidental upon the several facts which were presented to me.

The township of Newton Heath, as previously stated, abuts upon the boundary of the municipal borough of Manahester, and is included within the parliamentary borough. For the most part, the present population of Newton Heath is scattered over a comparatively wide area; houses line each side of the turnpike road from Manchester to Oldham, and, for short distances, there are a few streets built up with houses on both sides. There are, however, many single rows of cottages open front and back, hence the present healthiness of the population as compared with that of crowded towns, such as Manchester and Salford ; but even in Newton Heath the ammual loss of life from preventible causes amounts to $66-243$ deaths per annum, on an average for the last five years; and the number of cases of preventible sickness annually is not less than 1,987 . The condition of the property in Gagg's Fields, and much of it is new, is wretched in the extreme.

Pop Gardens.-This is a very dirty district, in which a number of "squatters" have erected huts, huddled together without regularity or order. The inhabitants are surrounded by filth, and have no proper form of water supply; suchwater as they use is obtained from the canal, from stagnant pits, or from the inhabitants of distant streets.

Gagg's Fields. The dintrict so named consists of a comsiderable breadth of land, forming the western portion of the township, which abuts on Manchester. Here there is a numerous population, and many new houses are in progress. The streets, however, are neither sewered nor paved, the mud in some of them is axle deep, and houses are built irrespective of any proper line or general level; and in the cellars of some cottages, for the want of sewers and drains, water stands and stagnates several inches deep. Many of these houses have been erected by persons who obtain money for the purpose from building clubs; a bonus varying from 40 to 50 per cent. is paid in the first instance for the use of a certain sum, and 5 per cent. afterwards.

## Nutsances in Gagg's Fields. Evils arising froy Building Clubs.

The fullowing letter describes the condition of a portion of this district; it also details some of the peculiaxities which have led to the active opposition shown to the attempted introduction of the Aet.
(From Mr. S. Neal, Chief Constable of Salford.*)

## " Police Office, Town Hall, Salford, ." 29th July 1851.

" Drar Sir,
"I was at Newton sohootroom shortly after 3 o'olock to-day, when I found that you and a number of geatlemen had gone to inspect the township; this being the case, I wended way way through the south-westerly part of the township to Butlerstreet, Manchester, making such observations as the present defective sanitary condition of the respective premises which came under my observation seemed to require, particularly those situate about Vickers's-works and Gagg's Fields. Indeed, it may be said that the whole of that part of the township situated and lying between the boundary from Butler-street to Oldham-romd, and extending to a distance beyond the steahworke, boxe-boilingwoorks, 8ce., is one dense colony of nuisances, all of which are. easily remediable, as there is plenty of fall for drainage, \&cc. I hear that the greatest opposition is from perenos who bave bought land from, and have built out of building clubs, who allege that they are struggling to meet their club, and other liabilities upon their lands and premises; that when auch liabilities are got rid of, or very greatly reduced, they would then nut object to the introduction of the Public Health Act. Now, this mode of argument is very fallacious, for any one acquainted with the description of property built out of clubs, knows very well, that as one cleas of

[^7]persons amerges from building club difficulties, another, and perhaps a more numerous class, becomes entangled with almost insurmountable trouble, and many a hard-working man has, by designing landowners and builders, been cleared out. Consequently, delay only increases difficulties. Therefore these obstructionists ought to be compelled to come in. The slaughterhouse question of itself is of sufficient importance to justify the introduction of the Act.

"I remain, dear Sir,<br>" Yours very truly, "S. Neal."

Water Supply.-There is no general supply of water within the township, but, as is stated in evidence, the wealthier inhabitants obtain water from private wells, and from private pumps, whilst many of the poor obtain theirs from the canal, and from stagnant pits, and some of them beg or steal it from the nearest private well or pump to which they can gain access.' A portion of the township in Clagg's Fields is supplied from the Manchester waterworks, but the mode of supply is by external stand-pipes-the most inconvenient system for the tenants, and the most expensive to the corporation. It has been proved by actual gaugings, that more water is wasted from stand-pipes than is properly used. The lead pipe is burst by accident, or is. wilfully damaged ; or the tap is out of order, and there is. a constant leakage taking place; to repair the damage is not the tenant's business; and so the waste of water goes on, and to such an extent, that this form of supply has been described as a system of turning water into the mains for the purpose of keeping the courts, foot walks, and house walls permanently damp.

Analyses of Water-The following analyses by Thomas Spencer; Esq., cheurist; of London, gives the qualities of the local water :-

## "Sir, 1851.

"On the 21st ultimo, I proceeded to Newton Heath; and in company with Dr. Taylor collected a number of samples of water from several of the wells in the township. I selected thowe for examination which I found on inquiry were the most used, and which, from their position, would afford an average estimate of the general quality of that of the district.
"The following are the results given by the water of four wells which I have aubjected to chemical examination.
" 1st. Botany Bay Pump.-On evaporation to dryness, the water of this well yielded at the rate of 34.89 grains of solid residue to the imperial gallen.
"Its hardness, according to Clarke"s standard, is $18 \cdot 50$ degrees. It contains a slight trace of organic matter.
"2d. Factory Yard Pump. - On evaporating the water of this well to dryness, it yielded at the rate of 34.89 grains of solid residue to the imperial gallon.
"Its hardness, according to Clarke's standard, is 17.75 degrees. It gave a slight trace of organic matter.
"As the water of this well (Factory Yard) seemed to be pretty largely used by those persons resident in its neighbourhood, I made a more detailed quantitative analysis of its solid contenta The following are the results :-

" 3d. Duke of York Inn Pump.-On evaporating the water of this well to dryness, it yielded at the rate of $\mathbf{4 0 - 4 2}$ grains of solid residue to the imperial gallon.
"Its hardness, according to Clarke's standard, is 17.75 degrees. It gave a slight trace of organic matter.
"4th. Manor Inn Pump.-On evaporating the water of this well to dryness, it yielded at the rate of $35 \cdot 40$ grains of solid residue to the imperial gallon.
"Hardness, according to Clarke's standard, $19 \cdot 20$ degrees. It gave a slight trace of organic matter.
" On making an average of the results of these four wells, we find that an imperial gallon yields a fractional part over 36 grains (36.69) of solid residue, while the average hardness, according to the scale, may be set down at 19 degrees. These figures will fairly represent the quality of the water of the township. As compared with that of other sandstone districts, they show a pretty large amount of mineral impurity, with a high degree of hardaces.
"From what I observed during my visit, I should say, that water is not very plentiful at Newton Heath; most or nearly all the wells being private property, consequently it is obtained on the suffersnce of the owners. It is not a bright or sparkling water, nor is its flavour so agreeable as I have found water to be from other sandstone districts. This last, however, arises from the large proportion of magnesia, and the sulphates, which are found amongst its mineral constituents.
(Subscribed) "Thome Sparicir."

The following analyses by Daniel Stone, Esq., was handed in at the inquiry. Mr. Stone shows that in certain portions of the township water is very scarce, and he also states that much of it is unfit for use.

## " On the Waters of Newton Heath.

"I personally visited the usual sources of water supply at Newton Heath, with a view to collect specimens for chemical analyses, and that I might also notice how far the purity of any of the waters might be interfered with by local causes. The general results of this inquiry I now beg to detail. My investigation was mainly confined to five waters obtained from pumps situated as follows:-

> No. 1. The Church Inn.
> " 2. Botany Bay.
> " 3. Factory Yard.
> " 4. Behind the Duke of York.
> " 5. Pump on the premises of Mr. Nimmo.

These waters are mainly characterised by their hardness, furring kettles and boilers with rapidity. The hardness is due to sulphate and carbonate of lime. All the waters contain a large quantity of magnesian salts. The water from Botany Bay was very clear and sparkling, and had much free carbonic acid. The Factory Yard pump was also bright, but a slight amount of organic matter could be seen in a state of suspension. The water collected from the pump at the Church Inn was turbid and milky, and far from pleasant to the eye; this pump was out of order. The water from the pump behind the Duke of York was tainted by infiltration of the foul water from a surface-drain near to it; the chlorine amounted to $1 \cdot 01$ grains per gallon. The water from Mr. Nimmo's pamp had more organic matter suspended in it than any other well water I examined; the inorganic matter was 36.7 grains per gallon. Specimens of water from the Shears Inn and the Manor Inn, which were furnished me, were wholly unfit for drinking waters. The water of the well in Monsall-lane was bright and pleasant tasted, and of more than average quality.
"The little pits of surface water, which yield so inefficient a supply to the huts and cottages in the Pop Gardens, were, so far ais my personal observation extended, liable to pollution from a variety of causes, as nearness to the house-drains, refuse garden stuff, \&o. The water I found in wet weather to be clay-coloured, and the cottagers had to allow it to settle in mugs or cans before using it. One woman, at whose cot I called, said, ' A lump of alum kept in the water-mug cleared the water and made it fit to drink.' In dry weather much distress is experienced by the failure of the well-pit, more particularly 'for the children's sake.' I found the shallow surface-drains and lodgments of water round these cottages to give off disagreeable smells, from gases liberated by the action of the alkalies and earthy salts on the decaying organic matter. I need not, however, lengthen my Report by repulsive details which are matters of notoriety in the neighbourhood.
" In the progress of collecting the waters for examination, I had many proofs of the inconveniences which a large population mast necessarily sustain where the wells and pumps are on private property, and subject to be locked up at certain times of the day. The fatigue and loss of time cossequent on baving to fetch water a long way are among the minor evils of a deficient water supply.
"The total amount of inorganic matter contained in $2 n$ imperial gallon of each of the five waters is as follows:-

| No. 1. The Church Inn - | -29.6 | grains |
| :---: | :--- | :--- | :--- |
| " 2. Botany Bay | $-35 \cdot 76$ | " |
| " 3. Factory Yard | -36.4 | " |
| " 4. Duke of York - | -38.6 | ", |
| " 5. Mr. Nimmo's pump | -36.7 | " |

"The water of the Factory Yard pump, which is much used by the large population around, gires with Clarke's soap test 17.5 degrees of hardness and $15^{\circ}$ of alkalinity; the organic matter was nearly 2 per cent. per imperial gallon. The water from the Church Inn pump gave 3 grains of organic matter to the gallon; the chlorine was estimated at $1 \cdot 23$. The waters from the Botany Bay and Factory Yard pumps were the best of the five or six waters which I have examined from Newton Heath, but their hardness is very objectionable for culinary purposes.

> (Subscribed) "Daniel Stone, F.C.S., "Lecturer on Chemistry, "Chatham-street School of Medicine, Manchester."
> "August 20th 1851." . . . .

Remarks on Water Supply.-The economy of a full service of water, contaiming only four degrees of hardness, would be very great as compared with the present supply, and the advantage of having it within each house would soon be appreciated. The saving in money by the use of soft water would be much more than the rent which the Corporation of Manchester can afford to charge for their water. The annual charge to each cottage below $7 l$. annual rental need not exceed 48. 4d., or 1 s . 1 d . per quarter.

Streets and Highways.-Many of the streets and highways are in a very dirty condition. The highways are formed and maintained by rate. New streets frequently remain unpaved until they become impassable by wheeled vehicles. "The surveyors will not put them on the township's books until they have been formed and paved to their satisfaction;" this the owners of the land and houses will seldom agree to do, and there is no local governing body having power to compel that which is so necessary to the welfare and prosperity of the individual as to the public.

Returm of the Lenoth of Hiohways under tite Care of the Survetorb of Newton Heath. Cost of MannTENANCE; \&c.

The following statement details certain particulars relative to the ronds and highways within the township.
" Str,
"Newton Heath, 11th August 1851.
" Agreeable to your request, I beg to hand you a statement of the highways (now under the care of the surveyors of Newton Heath), the length of which is about 1,829 yards 2 feet 6 inches.

"The above highways were (together with about 24 acres of land) allotted to the poor in trust, under the Epclonure Act, about the year 1804 ; the land adjoining was all common. The cost of the above highways have been :-

, "In the year ending 25th March 1851 there are a few items that wero incurred is resisting eaeroachments on a part of the high-
ways, which together amount to 600, 100. 6d, thereby redacing the ordinary expense of that year to 1881.1 s .101 d , which, boing added to the previous four years, gives an average of 1381.16 p .14 f d per annum, instead of $152 l .148$. 10 $d$, as shown above.

> (Subecribed) "THoxns CHATTMERTon, "Assistant Surveyor of Figheogys, " Newton Heath."

Burial Grounds.-There is one principal burial-ground, the churchyard; this is completely filled with bodies. The area of the entire ground is as under-


So small an area of ground is quite inadequate to the use of a population of 10,462 , and the evidence shows that it is very much overcrowded at present.

Specification of Works required to place the Township of Newton Heath in a proper Sanitary Condition.

Main Outlet Sewers.-From the position of the township, the main outlets will be into or through the sewers of Manchester, or into the natural streums bounding the district. The question, therefore, as regards outlet sewers, must ultimataly. be settled with the corporation of Manchester; at present there is no public body in Newton Heath capable of entering into such a negotiation.
$\because$ Sewkrs and Drains - One generad bystem of sewers and drains is required for the whole township; so that each street may have its proper sewer, and each yard, court, alley, and houses, its drain. The sewers and drains should be impervious, not liable to speedy ruin or decay; and, above all, should be sewers of transmission, and not ot deposit. The rubble drains now made are worse in their effects than if no sewers existed; as poisonous gases are generated within them, to be passed into the streets and houses.

In using the present imperfect sewers and drains, I would especially caution the inhabitants against putting down mechanical stench-traps on foul sewers of deposit. These contrivances do not improve any sewer or drain; but if they act as intended, they make it more dangerous, by concen-
trating the foul gases, which then pass into the houses. Mechanical traps of all descriptions are either useless, of are worse in their effects than if they were so. It will be safer to give a foul sewer profuse ventilation at the higheat points, and in those parts furthest from any houses, than to attempt to close them with so-called " mechanical traps."

Waterworks.-One general system of water supply is required for the whole of the township. The water may probably be supplied by the corporation of Manchester. Each house should have a pipe and tap fixed within it; the water should be constantly on, and should be at high pressure; such a supply, at a moderate charge, that is, not exceeding 18. $1 d$. per quarter for all cottages below 7l. annual rental, will be alike a boon to the owners of property as to the tenants. The annual repairs to a pump, if each cottage had one, would equal or exceed this sum; besides which, the local well water is impure, hard, and consequently wasteful to wash with, and unwholesome to drink or cook with. The Manchester water from the new works will be soft and comparatively pure.

Highways.-An educated surveyor is required to superintend the highways and streets. To make and maintain roads and streets in the best and cheapest manner requires an amount of practical knowledge which education and experience alone can give. Surveyors, or way-wardens as they are called in some places, are chosen annually from amongst the ratepayjers, to make and manage the roads of a parish or township, as the case may be. There is no previous knowledge of the subject; it is not pretended that the individual or individuals have any peculiar fitness for the task, but it is simply their turn to essay the labours of a Telford and a Macadam. The appointment may have been made to annoy, as the individual's consent is not always asked. The duties must, however, be fulfilled in some way, and as there is a general understanding that each surveyor is to look after his interests first, the road or street opposite his own house or property is repaired ; and here his duties begin, and, very frequently, end also. The whole system is a simple absurdity, as it is quite impossible that good roads should be made by accident. If some man of intelligence happen to be appointed, willing to do the best in his power, he finds that the necessary rate is grumbled at ; and, as all the roads cannot be repaired simultaneously, he is accused of partiality, if he repairs any ; and, earning neither credit nor profit, at the end of his year of office
he gladly gives up the thankless teak; sad so from your to year rates are levied, the results being an improper expenditure of money, bad roads, extreme filth, and reach ill-will

Clbansing.-Regular and efficient cleansing is requigite to the preservation and comfortable use of roads and streets Dirt, unremoved, creates dirt; wet, and mud, if retained on the surface, soften the road beneath, rendering it more easily ground to pieces by the traffic Dirty roads and streets are also very cootly to the inhabitants, directly and indirectly; shoes are more rapidly worn out, clothes are spoiled, and there is general discomfort without and within the houses. In wet weather all is soiled with mud; in dry weather, all is covered by dust.

Lighting.-Public lights are not only a great convenience, but they are also a sousce of true economy, as public lamps perform the duty of police in the safety they afford to passengers, and the protection they give to property. Public lights are essentiaHly necessary so near Manchester, where vagrants, tramps, and thieves easily pass from the lighted and watched streets of that town into the dark streets, roads, and lanes of Newton Heath. The recent numerous attacks upon persons and property in the suburbs of Manchester must have shown the great necessity which exists for more efficient lighting in the suburban districts.

Comanon Lodging Houses.-Power is required to regulate common lodging houses. These places are forcing-houses of vice in all its worst and most dangeroue forms; their regulation is of most vital importance. Oaols and workhouses are, in a great measure, peopled by the frequenters of common lodging houses. In these dens of iniquity the old vitiate the young, and the implare inoculate the innocent. If either male or female is, by misfortune, or by any other eause, led for shelter into a common lodging-house, it must be to suffer both morally dnd physically. One unregulated common lodging-house is capable of doing more harm to society than many ragged schools; juvenile reformatories, or model prisons, will do good. The only practicable way to check or control vice is to prevent, as much as possible, its first growth; one shilling so laid out will be of more avail than twenty times the amount expended in striving to undo the mischief, to the birth and growth of which society tacitly assented.

A wise agriculturist strives to "prevent" the growth of
weeds; he certainly does not transplant them when developed, and then, at much cost, endeavour to change their nature. Those persons who look for any decided change in the morals and habits of a people, as the result of their individual labour, will, most probably, be grievously disappointed. The present evil is the result of eenturies of neglect; generation after generation have been suffered to wallow in sensuality, filth has been allowed to produce. disease, and civilization has only advanced, in knowledge, so far as to tax the honest for the maintenance of the dishonest, the industrious for the maintenance of the idle. The sanitary condition of the poor man has not, hitherto, been regarded until he has become a criminal or a pauper; and, once either, society must, in most cases, maintain him to the end of his life.

Slaughter-houses.-Power to regulate slaughter-houses is required. This is peculiarly needed in. Newton Heath, as the "slink butchers" of the district have settled down in Gagg's Fields, and there they cut up and dress all the diseased cattle, sheep, and pigs, which they can purchase. The regulations of Manchester have driven this trade from that town, to be carried on with concentrated activity in the township of Newton Heath. The evidence of Dr. Taylor is very clear and strong upon this subject.

Public slaughter-houses may be established as a selfpaying speculation, and no persons will be more benefited by them than honest butchers.

Cemetery.-A new cemetery is required, as the evidence shows that the present grave-yards are most unduly overcrowded. A cemetery may be construeted so as to be selfsupporting.

Poors Land.-The management of the poors land is at present deputed, by Aot of Parliament, to certain parties who are supposed to act for the advantage of the ratepayers. It is a question as to whether this estate should not be placed in the hands of the ratepayers, to be managed for their benefit by a Local Board, which, if the Public Health Act is applied, must be elected by them. This power ean, however, only be granted by Parliament; but if a Local Board existed within the townskip; it night be enabled to treat successfully so as to have this land better managed than it has been hitherto.

## SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS.

## Conclusions :-

1. That the sanitary condition of the township of Newton Heath is very defective.
2. That to ensure health in the highest degree, the land requires to be drained, the rivers and streams of the district and neighbourhood require also to be freed from pollation.
3. That the existing expedients for obtaining water for domestic and other purposes are exceedingly defective, and very costly.
4. That there is no effective house-drainage; that the cesspools, privies, and existing appurtenances to houses are, as stated in the medical evidence, injurious to health; and that there are no proper arrangements for the removal of decomposing refuse from the vicinity of the population.
5. That great advantage will accrue if a full supply of water is obtained, if proper sewers and drains are formed, and if the township is fully lighted and otherwise properly regulated.
6. That common lodging-houses require to be regulated.
7. That slaughter-houses require to be placed under inspection.
8. That the highways and streets may, with advantage, be placed under proper superintendence.
9. That a public cemetery is needed.
10. That the management of the poors land may, with much advantage, be placed in the hands of a Local Board, to be elected by the ratepayers.
11. And, that it is not advisable to connect the detached portion of the township of Newton Heath, situate at Kirkmanshulme, for any purpose contemplated by the Act.

## RECOMMENDATIONS.

## Whereupon I beg respictrully to Recomornd :-

1. That the Public Health Act (1848), except the section numbered 50 in the copies of that Act printed by Her Majesty's Printers, should be applied to that part of the township of Newton Heath, in the county palatine of Lancaster, described in this Report, and as shown on the accompanying plan.
2. That the Local Board of Health, to be elected under the said Public Health Act, shall consist of nine persons,
and that the entire number shall be elected for that part of the said township or district to which the Act is applied.
3. That the annual elections shall take place on the second Monday in March ; and that one third in number of the said Local Board shall go out of office each year, as provided in the Act.
4. That every person, at the time of his election as member of the said Local Board, and so long as he shall continue in office by virtue of such election, shall be resident, as in the said Public Health Act (1848) is required, and be seised and possessed of real or personal estate, or both, to the value or amount of not less than $1,000 l$.; or shall be so resident, and rated to the relief of the poor in the said township upon an annual value of not less than $30 l$.

> I have the honour to be, My Lords and Gentlemen,
> Your very obedient servant,

Robert Rawlinson, Superintending Inspector.

> The General Board of Health, \&cc. \&c. \&c.
P.S.-The proposed number of the Local Board (nine) may be increased to twelve, eighteen, or twenty-one, if thought desirable. It is not, however, to numbers, but to individual intelligence, singleness of purpose, and willingness to work, that the ratepayers must look for wise and beneficial improvements. A large Board seldom works well. The members of any Board must have the necessary time to spare, or the public business will be neglected.

## APPENDICES.

The following letters and descriptions of the township are of much value, being the independent evidence of gentlemen capable of forming correct opinions as to the state of the district. It is a circumstance peculiarly gratifying to find, that, as a rule, medical gentlemen are ever foremost in advocating the adoption of such works and regulations as shall prevent sickness; they see the vast sum of disease and human misery which exists in connexion with damp tenements, filthy lanes, crowded courts, and undrained streets, and they know that much of this suffering and degradation may be prevented by proper works and by efficient regulations; and they also know that in neglect there is even pecuniary extravagance, and that in judicious forethought and care there will be true economy; and, therefore, from motives of pure humanity, and to benefit the public, they advocate sanitary measures. If ever men can be said to act disinterestedly it must be in such cases, as medical men have nothing to gain by sanitary improvements other than the reward of a good conscience. Their business is with disease, and their income arises from contact with it; but the nobler part of human nature rises superior to the consideration of pounds, shillings, and pence. In all my inquiries I have ever received the largest share of assistance from medical gentlemen, and personally I shall ever feel grateful for it. In the midst of a factious, violent, and grossly ignorant opposition some medical gentleman has spoken words of encouragement, has furnished valuable evidence, has accompanied me in my inspection, has pointed out the seats of typhus, and has dared insult to tender his evidence in public, in favour of a measure, at the time, extremely unpopular amongst the owners of disease-generating property. I have reason to conclude that some of the medical gentlemen who have so rendered their assistance have subsequently suffered in their practice, been insulted in public, and otherwise annoyed; but I have never received one word of regret that they had been induced to speak that which they knew to be the truth.

There was an opposition of the most violent character at this inquiry, and insults were offered to the medical gentlemen which cannot be repeated; I trust, however, that a better feeling now prevails.

The following letter from Mr. Taylor contains much valuable information on the subject of the inquiry :-

" Newton Heath, Manchester, " 13th August 1851.

" Dear Sir,
"With this you will receive my Report on the sanitary condition of Newton Heath.
"I intended to have made a tabular statement of the prevailing diseases of the township from the registrar's books, to which I have had access, but found that it was impracticable to do $s 0$, for out of 1,031 deaths which had occurred (exclusive of inquests on suicides, and accidental deaths) at Newton Heath Proper during the five years ending March 31, 1851, no less than 584 were 'not certified,' viz., 280 persons over 3 years of age, and 304 infants undet that age. Besides which many deaths that were entered as 'certified' bore internal evidence of their not having been so certified by any regularly educated medical man. And it is notorious that the great bulk of people living in the Gagg's Fields division of the township, if they have any attendance at all, are generally attended during their illness by druggists* or other such persons from Manchester, who do not hesitate to certify the cause of death with all the confident boldness which ignorance admits of. However, it was manifest that diseases of the respiratory organs and of the alimentary canal, together with fever of various designations, predominate iu this place. Multitudes of infants are recorded under 'debility,' 'wasting,' 'marasmus,' 'teething, 'scarlet fever,' 'measles,' 'smallpox,' \&cc. When I again call your attention to the fact, that out of the 1,031 natural deaths occurring in this district for the five years already named, not fewer than 304 are of infants under 3 years of age who have been registered without a medical certificate, you will perhaps think with me, that there is something wrong here also as well as in the sanitary condition of the township. The object of the registry is thus practically defeated, and there is a wide margin for, and a loop-hole sadly too wide to prevent, the extensive practice of foul deeds such as now and then come to light in populous places. Registrars should be medical men, and have power to insist on having certificates of death from regular practitioners, or whenever that were reported to be impossible, then it should become their imperative duty to visit and view the dead body in all cases. This would be more troublesome and expensive it is true, but it would act as a wholesome check to the numerous infantile deaths that are brought about for the salre of the money to be obtained from burial clube.

(Subscribed) "Josepr Taylor,<br>> " To R. Rawlinson, Esq.<br>> " Superintending Inspector."

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## Drgcipption of the Township of Newton Heatr:

" Sis,
" Is compliance with your request, I forward to you in writing a statement embodying the substance of my evidence given before you at the preliminary inquiry into the sanitary condition of Newton, in the parish of Manchester, on Monday, the 28th day of July 1851.
" Newton Heath comprehends a district which admits of ready and complete drainage over its entire surface, for on every side from the church, whether towards the north, or the south, or the east, or the west, there is a considerable fall for its waters into the brooks and rivulets which constitute the greater part of its natural boundaries.
" Notwithstanding the advantages which such a position presents, the inbabitants of Newton Heath may be said to have made no effort to benefit themselves thereby. For no system of sewerage whatever has been established in the township, and only here and there can be found some abortive, because isolated, attempt at local drainage ; the consequence of which is, that with a rapidly increasing population there is a proportionate accumulation of nuisances on all hands, which are alike as injurious to the health as they are derogatory to the intellect and disgraceful to the morality of the community.
"The quasi brooks, the natural outlets for the surface watersShooter's Brook for example-are, properly speaking, neither brooks nor drains, but tortuous ditches with shelving banks of mud, utterly inadequate in their present condition to the purposes for which unaided nature has provided them.
"Thus, from the want of systematic sewerage and the neglected state of the brooks, house-drainage is necessarily very imperfect, and filth of all kinds, in a state of decomposition, is allowed to remain on the surface which otherwise, and with a bountiful supply of water, would seldom be found thus contaminating the atmosphere.
"In some instances persons requiring cellars to their houses, and having no escape whatever for their drainage, have sunk wells of from 15 to 25 feet deep, or more, on their premises, for the parpose of receiving all their refuse water. This water has to be drawn up from time to time and poured into the public street while in a disgusting state of putridity. Such is the case, amongst others, at Mr. Norbury's house, corner of Albion-street, and at Mr. Royle's, the Dog and Partridge inn, corner of Hulme Halllane, both in Oldham-road.
"The water used for domestic purposes on the eastern, or rural, division of the district, has been obtained, hitherto, from private and isolated wells or pumps sunk through the clay into the sand, or from springs or runs of water on the declivities. From these the inhabitants, often resident at great distances, have to fetch it in all weathers ; and, moreover, its hardness is such as to render it not only inconvenient but expensive for all culinary purposes. At the western extremity of the township, which forms a part of the suburbs of Manchester, water has been supplied for some time
principally, if not entirely, by the Manchester and Salford Waterworks Company, as far as their levels would permit. But there is one intermediate district, commonly known by the name of the Pop-gardens, where a considerable number of squatters' huts are haddled together in promiscuous disorder, and where the inhabitants for almost the entire year have no water whatever for any purpose, except what they may obtain clandestinely from the canal or waterworks.
"The western division of the township goes by the name of Gagg's Fields, and is already in possession of a numerous population. New cottage houses are springing up on all sides, totally irrespective of any general level, or of mutual advantage to the owners or to the occupiers thereof. Those houses are built chiefly by persons who provide the means by loans from building clubs, for which, in the first instance, they pay a heavy bonus, and subsequently 5 per cent. interest per annum on the amount of money purchased. As it not unfrequently happens that landlords of this class have no means of their own to fall back upon, beyond their wages of from perhaps 14s. to 30 s. per week, it becomes a matter of necessity with them, in order to meet their onerous liabilities, and to secure the only possible chance of redemption therefrom, to resort to every expedient in avoiding or evading expense in the construction of their buildings. Hence it is that foundations are put in at any level so that they just touch the clay, that the streets and alleys are set out narrow, that the houses are built with the lowest quality of material and labour, in some instances back to back, and without privies or ashpits attached to them. Hence it is also that the sanitary measures of draining, sewering, paving, and flagging have not been resorted to, and that the owners of such property, assisted by others who have a 'vested interest' in the nuisances, have raised up a violent cry of alarm and misrepresentation against the introduction of the Public Health Act into the township of Newton Heath.
"Gagg's Fields penetrates by a tongue of land into, and is therefore bounded on two of its three sides by the borough of Manchester. Not being subject to any local government, nor indeed to any control that is efficient, it has become the haunt and the refuge of some who are driven out of Manchester and Salford by the vigilance of their respective officers, amongst whom stands pre-eminently in an offensive light the slink-butcher, who purchases and kills diseased cows, calves, sheep, lambs, \&c., and buys the carcases of those animals which have died of disease of any kind, no matter what, the whole of which, this class of butcher dresses up for human food, and disposes of by wholesale for the Manchester and Salford markets (or rather to the proprictors of stew and pie-shops of those boroughs), or by retail to the poor at about $1 \frac{1}{2} d$. per lb. That this foul business of the slink-butcher has become an evil and a nuisance of great magnitude may be known from the circumstance that there are now in Gagg's Fields maxy slaughter-houses where, at each place, from five to twenty diseased cows, besides other diseased animale, are dressed weekly for the food of man. $\downarrow$
"On Wednesday the 23d of July last (1851) I accompanied the guardians of the poor on their official visit of inspection to Gagg's Fields, and succeeded in gaining access to three of those slaughterhouses. We found therein $5 \frac{3}{4}$ carcases of cows in a revolting state from previous disease, hung up and dressed secundum artem, -one bull then being killed, together with two living diseased cows, and two calves, "staggering Bobs,"* ready for slaughter. Notwithstanding the trouble which had been taken in dressing the dead carrion as seemly as might be, we were told by one man, in reply to a question put to him, that the beef referred to was for dogs meat.
"From those slaughter-houses the blood and other fluids have no means of escape, except over the surfaces of the adjoining streets, so that from the want of drainage the ground in the neighbourhood is continuously surchargod with putrifying animal matter. In addition to this, these slaughter-houses are productive of another source of offence in the putrefactive fermentation which arises from the entrails and their vegetable contents, which are permitted to accumulate in large quantities from time to time therein. In Gagg's Fields also, and in like manner to the slaughter-houses, the piggeries and privies, from the want of adequate drainage, become, in many instances, just so many public nuisances, which, coupled with the circumstance that night soil is laid down and permitted to remain exposed openly in the streets for many days together, show that the time is fully come when those Augean abominations should be cleansed away from the district by the means of a constant and ample supply of water, an efficient system of sewerage, and a governing power that shall have paramount authority to carry all proper regulations into effect. The district of Gagg's Fields, as it exists at the present time, may be justly considered as the seat of many demoralizing influences ; and there can be no question, that whatever tends to the demoralization of a community tends also to the creation and extension of want and pauperism.
" The eastern or rural division of the township, having a more scattered population than the other parts already spoken of, has not participated hitberto to the same extent in those evils to which the inhabitants in Gagg's Fields have been exposed ; nevertheless, as the population and the number of houses have been and are now rapidly increasing in the rural division also, it has become necessary already that it should be placed under the control of the Public Health Act, not so much perhaps, generally speaking, as a means of correcting existing abuses as of preventing their multiplying in the future. Still it has public nuisances, peculiarly its own, which imperatively demand immediate attention, and which must not be passed over from any feeling of delicacy towards any one, nor from overweening reverence for customs of any kind, however antiquated. In thus referring to the church and chapel yards especially, I beg to say that, free from party spirit and from

[^9]party purpose, and at the hazard of my private interest, I have taken up the matter from a clear sense of public duty, founded on my long knowledge of the direful effects on the public bealth, arising frotn the poisonous effluvia engendered in and spread abroad from ill-conducted burial-grounds, as well as on the fact that on one occasion I lost nearly the whole of my own family by death during the course of thirteen months continued sickness, brought on by a disturbance among the coffins in a neighbouring graveyard, and that I rescued the remnant only by removing them away from the source of contamination.
" The burial-grounds at Newton Heath are two in number, vir., the churchyard and a piece of land attached to the Wesleyan Chapel fronting the turnpike road to Oldham. They are both very small, considering the population of the place. The area available for interments in the chapelyard being only about 250 square yards, while the net area of the churchyard is but 4,587 square yards, or 253 square yards less than 1 statute acre. Both places are situate near to the eastern extremity of the township at about its highest level.
"A considerable portion of the present churchyard was the burial-ground for the ancient chapelry, comprising the townships of Newton, Moston, Failsworth, and Droylsden, and even yet many of the inhabitants of the three latter townships, as well as of Manchester and elsewhere, beside the resident inhabitants of the plece, have here their family graves. Hence, from the want of room, practices have crept in with regard to the mode of interment which constitute in themselves an insufferable public nuisanoe and scandal. Coffins are deposited in graves of any depth, so long as they can be covered up. I have measured graves previous to interment, and found them less than two feet deep, and have taken occasion to call the attention of the incumbent to the subject by the following note, which I addressed to him :-
' Dear Sir, 'Newton Heath, July 24, 1850.
'Therb is a grave now open for the reception of a corpse close to the palisades on the eastern boundary of the churchyard at Newton Heath, which is, I find, scarcely two feet deep. Being full already up to that level with coffins, it cannot be sunk deeper, therefore the next deposit of mortality must be within a few inches of the surface.
'Without intending any intrusion, I cannot refrain from reminding you that to bury the dead in graves not two feet deep is an evil but too frequently of terrible magnitude to those who live in and breathe the air of the immediate neighbourhood.
'I am, dear Sir, ' Yours most respectfully, 'Josmph Taflor, "To the Rev. W. Hutchison, B.D. 'Surgeon, \&re.'
"I tendered to you proof when here, and am ready to prove at any time by magone and others who have worked in the charehyard, and by persons who have ralative buried at Nowton; shat
coffins, in some instances, have been covared in with a thickness of from two to four inches of soil only; that in other cases the graves have been so shallow as to admit of nothing more than the mere grave-stones being laid horizontally on the naked coffins; that grave-stones laid in this manner, in direct contact with the coffins, have been more or less raised and brought to a level subse-quently with the adjoining grave-stones in the yard, by the workmen merely inserting pieces of brick of the necessary dimensions under each of the corners, thereby giving frec exit to the poisonous exlalations from the coffins underneath ; that on a recent occasion, viz., in December last, when a corpse was taken to the grave for interment, it was found impossible to bury it in that grave, and the body had to be removed into the church, where it remained until another grave had been prepared for its reception by the following day; that the barrow-wheels of men, when at work in the yard, have burst through coffin lids, which were barely covered with earth; and that the spare soil which is thrown, out of a re-opened grave is spread over the surface for the purposa. of levelling the yard, saturated as it is with all the deadly gases of previous human putrefaction.
"When graves are filled to the top with bodies in burial-grounds situated on strong clay in districts devoid of drainage, they retain. their solid and liquid contents nearly up to the surface, and may be likened to as many pits in a tan-yard; save only as to the vast difference in the processes carried on therein, and the consequent effect on the health of the neighbouring population. Graves in this condition throw out, direct, large quantities of gaseous matter into the atmosphere, while the accumulated water, surcharged with and holding in solution the products of human decomposition, on reaching the disturbed soil above, spreads itself out in all directions, and passing along the surface impregnates the earth with its impurities until meeting with some adjoining well or pump, it finds an inlet thereinto, and thus establishes another loathsome and destructive nuisance.
"A drain runs from the churchyard down to Culcheth Gates (a distance, perhaps, of 200 yards), where it delivers its water into an open ditch, which is often extremely offensive. It is the outlet for the drainage of the churchyard, a plan of which is with the incumbent. A drain runs froan the north-east corner of the churchyard, under the north boundary wall, to the north-west corner, another drain under the south-east corner, under the south boundary wall, to the south-west corner, and a third drain from east to west, across the middle of the yard, by the ancient south boundary line. The whole of these empty themselves into the drain already named as running to Culcheth Gates. These draina are from six to seven feet deep, and are made with single bricks on their edge at each side, resting on slates, and covered with flags. Graves have had to be baled out in order to admit of another occupant. Mrs. Mills of Culcheth, mother-in-law of Mr. Brown of Failsworth, surgeon, on speaking to me the other day of the funeral of her son who was buried in their family grave about two years ago, said, ' Oh, that poor lad of mine was drowned as well as buried
in that bole; we had to bule the suater oue before we coold put him in; and wee had to bale it out again when my nephow was aterwards buried on the top of him. It made me ill to see it. Oh, it did smell so bad!'
"I have endearoured to get a return of the namber of burials at Newton, bat withont success.
"Fortunately for the inhabitants of the immediate neighbourhood; the churchyard at Newton Heath has been exposed, until recently, to the uninterrupted sweep of the ensterly and the westerly winds, which prevail through the greater portion of the year. In consequence, its exhalations have not been so apparent to the senses, nor so destructive to life, as they otherwise would have been. But, as the land in both these directions is now either being built upon, or is on sale for building purposes, the day of impunity is passing away, and a time of mischief approaching.
"The public know that life begets life, but little think that death begets death. They are aware that the living of to-day procreate the living of to-morrow, but never imagine that death itself, by assimilation, is sowing busily on all sides of them the seeds of death for the future.
" In 1841 the population of the entire township of Newton was 6,127, and in $1851,10,802$. In the latter year the inhabitants of that part of the township called Kirkmanshulme numbered 340, which being deducted from 10,802 , leaves 10,462 as the number in Newton Heath proper for the present year. The average population in the latter district, for the five years ending March 31 1851, was 9,330 , and the annual average of natural deaths for the same time and place 206. Hence the annual average proportion of deaths to the population is $22 \cdot 1$ in 1,000 . Now, as the annual average of deaths in an average healthy district does not exceed 15 in 1,000 of the inhabitants, it follows that at Newton Heath there has been for the last five years an annual excess of $7 \cdot 1$ deaths in 1,000, or of 66.243 deaths in the whole population, which, being multiplied by the five years, show that there have been in that time no less than 331 persons sent unnecessarily to an untimely grave from the general unhealthiness of the district. A fact such as this is surely sufficient to stimulate even the mort apathetic of the resident inhabitants to adopt and apply a speedy and efficient remedy. Were it that 66 of their neighbours had been annually sacrificed, for the last five years, by the falling of an ill-constructed factory, would they not call aloud for a prompt and decisive remedy for such a calamitous circumstance? But such a result as that even is by no means a parallel to the destruction of $\mathbf{6 6}$ human beings by unnecessary, lingering, and painful disease, for to the same loss of life is to be superadded all the expense of sustenance, medical, and other attendance, and the loss of wages during the continuance of sickness. And, when it is borne in mind that there is on an average two years of sickness to each death in the community, it will be evident that the 331 untecessary and preventible deaths, and their attendant 662 years of unnecessary and preventible sickness, which have occurred on the aggregate at Newton Heath, within the last five years, have
been a terrible loss and a solf-inflicted puwiskment to its inhabitants.
"But if the condition of this township be compared with the most healthy districts of the kingdom, where the mortality does not exceed 11 per 1,000 of the inhabitants, then it becomes obvious at once that one half of the sickness and the deaths which occur in this place are preventible and unnecessary, and that for the present year there may be anticipated no less than 115 deaths, accompanied by 3,450 cases of sickness, more than under the ordinary laws of nature ought to take place amongst us.
"Just in proportion as the number of the population increases in an ill drained district, so does the ratio of sickness and mortality increase also. Before the evil influences of such districts the tender infant especially droops and dies. So truly is this a law of nature, that the relative destruction of infant life may be taken as a test for the unhealthiness of any given neighbourhood. Thus it was foretold that the district of Gagg's Fields, in its present condition, is more destructive to children under three years of age, in proportion to the population, than the rural division of the township; and here is the proof that it is so.
" Within the five years ending March 31, 1851, there died in the rural division, over 3 years of age, 439; under 3 years of age, 296-the Gagg's Fields division, over 3 years of age, 131; under 3 years of age, 165: which show that the proportion of deaths is, for the rural division, in persons over 3 years of age, to infants under 3 years of age, as 12 to 8-the Gagg's Fields division, in persons over 3 years of age, to infants under 3 years of age, as 12 to 15 . Here the deaths of infants, under 3 are compared with the deaths over 3 , in the same district; but were the deaths under 3 in the Gagg's Fields division compared with the deaths over 3 in the rural division, it would prove a higher ratio than as 15 to 12, by far. This cannot be done, however, with sufficient accuracy for a statistical table, from a want of the precise number of residents in Gagg's Fields prior to March 1851.
"Thus, it is clear, that the destruction of infunt life in that part of Newton Heath which is the most densely inhabited, the worst drained, and the most exposed to accumulated nuisances of all kinds, is double to the loss of life sustained by the infants among the more scattered inhabitants of the rural division of the township.
" In conclusion I submit, that whether the sewerage, the brooks, the house drainage, the water, the construction of new houses and streets, the slaughter-houses, the slink butcher, the nuisances, the burial.grounds, or the sickness and mortality at Newton Heath be referred to the state and condition of each and all, is such as to demand a prompt and efficient remedy.
(Subscribed) " Joseph Taflor,

[^10]The following letter detnite certrin particulars molative to the great facility for fraud which now exista in the non-regintration of still-born infante, ere:-
" Drar Str,
"I recrived your note of the 15 th instant acknowledging the receipt of my commanication, and inviting me to further comment on the sanitary condition of this place if anything worthy of notice should occur to me.
"You also intimate your intention to use the contents of my letter in your Report, as the subject of Registration is 'ome of the most important questions connected with sanitary matters;' and call my attention to some remarks by Dr. Robinson of Newcastle-upon-Tyne on still-born children, in the Report on extramural sepulture.
"On referring to that Report, I find that he confines his observations to the non-registrations of still-born infante, and says nothing about the register as it is, and to which $I$, in my letter to you, had limited my complaint. I have been long sensible of the defect of which he speaks, and should have mentioned it bad it come within my argument, and had I supposed it to be within the range of your inquiry.
" Dr. Robinson draws four general conclusions from the facts he has accumulated on the interment of still-born infants, viz. :-
"' 1 . That the present mode of conducting the interment of still-born children favours and facilitates the crime of infanticide and the misdemeanour constituted by the concealment of birth.
" ' 2 . That it also facilitates frauds upon burial-clubs.
"، 3. That it tends to vitiate the registration returns for this kingdom, and renders them medically of less value.
"'4. That it substitutes an uncertain and variable charge, levied at the discretion of the sexton, for a fixed and uniform scale of payment.'
"The faot as stated by Dr. Robinson is incontrovertible, and the first of his general conclusions is quite in accordance with may views on the subject as well as the third. But the second is a very carious error, for he says 'that it also facilitates frasds upon burial clubs.' He is here speaking of still-born infants, which, of course, have never been entered as members of any such club, as the name, age, and sex of a child can only be entered in the books, after personal inspection, to ascertain that it is a living and a healthy child, by the officer appointed for that purpose, and it must continue a paying member for some given time before it can be entitled to benefit from the club.
" Now the practice of interring registered infants ' uncertified,' whether those infants be under or over the age of three years, not only facilitates frauds of that kind, bat acts as a sareen to childmurder, it may be feared, in many cases. My objection, however, does not rest here; I am not content with protesting against the noi-registration of still-born infants or the registration of uncertified children, I say that the whole system of registration, as now conducted, is a delusion, for it-is neither a reliable record of

Wiath, nor of death, nor of disease. For there can be no doubt that many children now living have never been registered-that numbers, of whom some were born dead and some were born living, have been disposed of, undisputed, under that most acconmodsting term 'still-born'-that many deaths, and at all ages, are registered without certificates from regularly educated medical men, and that some deaths are registered as certified when no such medical men have been in attendance. Moreover, the real cause of death is not made apparent, occasionally from the circumstances of the medical attendant refusing or neglecting to sign a proper certificate. For these reasons statistical records of great national importance, which, if kept with strict accuracy and precision, would tend materially to benefit the health and to preserve the lives of Her Majesty's subjects, are rendered comparatively of very little value.
"The registration of births, whether living or still-born, should be compulsory. The registrar of births and deaths should be a medical man. He should have power to compel the medical attendant of deceased to furnish him with a certificate of the cause of death, or, in the event of there being no medical attendant, then is all cases it should be his imperative duty to examine into the cause of death by a personal inspection of the body, \&cc. Unremitting vigilance of the law, combined with an inevitable and rigid scrutiny by the medical registrar, would deter many from committing an act the consequences of which, from laxity of the law, they risk now with a tolerable chance of escape.
(Subscribed) "Joseph Taylor,
" R. Rawolinson, Esq." "Surgeon."

Letter detailing Particulars as to Poors Land, and other matters connected with the Township of Newton Heath.
" Sir,
"Newton Heath, 7th November 1851.
"The total number of new houses now in course of erection
is 328, and nearly the whole of them upon land belonging to the Dean and Canons of Manchester upon short leases; upwards of 100 of them are being built upon land immediately surrousding the poors land of which I gave you a plan, and yet, singular as it may appear, not an inch of the poors land has been sold for upwards of fifteen years. The Dean and Canons, as the Act will show, are perpetual trustees, as is also the incumbent of Newton Heath, who receives the gift of the living from the Dean and Canons. The charchwarden, who is appointed by the incumbent, is also a perpetual trustee, and this body creates all the rest, making their selection, of course, discreetly ; this is too bad, and in my mind at once furmishes the reason the ratepayers are 80 long kept back from enjoying the benefit of that which the Act of Parliament fully intended they should be put in possession of; and, so long as there is any church land in a second or third rate situation in the market, there can be little hope of farther sales under this Act, as managed by the present constituted body, beanse the Dean and Canons elvays conld, and at this moment
do possess, by their dependento, the power to turn any meeting of trustees to their own account. They are responsible to nobody but themselves-they are 24 in number; 27 are allowed by the Act; out of the 24, 8 of them reside at a distance from the township; 7 out of the 24 are not ratepayers; 4 or 5 of thene are supposed to have no qualification; 7 are directly or indirectly interested in asking prices for the poors land which is above its value, and thereby driving the applicants for poors land to build upon church land, of which there is abundance in the market, immediately attached to the poors land, belong. ing to the Dean and Canons, or their lessees. The total number of square yards given by the Act of Parliament for the maintenance of the poor, and managed by the before named trustees, is 124,500 ; out of this, 46,854 have been sold, leaving 77,646 to sell ; out of the 46,854 sold, an area of 9,837 square yards stands without a building of any kind upon it as security for the ground-rent, and which the Act of Parliament directs shall be covered to secure the ground-rent, although more than 15 years have elapsed since the sale and conveyance of the deeds; out of the 9,837 not secured as above stated, 6,099 representing an annual income of 47 l . 1s. 11d. has proved a total loss to the ratepayers for many years past, owing to the inability, through deaths and bankruptcy, of the contracting parties to pay any longer, so that the land can neither be resold nor any procceds be derived therefrom. The total loss arising out of the above-named 6,099 square yards, and representing an annual income of 47 l . 1s. 11d., is, up to June 1851, 327l. 8s. 5 . These are facts I bind myself liable to answer for.

(Subscribed) "W. M. Ireland."

" Robert Rawlinsom, Esq., London."

Remarks on memorial, signed David Booth, requesting that inquiry may not be made into the sanitary state of the town, as petitioned for by certain of the inhabitants, which petition has been duly received by your Honourable Board.

## To the General Board of Health.

My Lords and Gentlexben,
London, 19th June 1851.
A petition having been forwarded from Newton Heath to your Honourable Board, praying that inquiry may be made into the sewerage, drainage, and supply of water, and the sanitary condition of the inhabitants, and a memorial having been signed and forwarded against such inquiry, I beg to offer the following reasons why the inquiry should take place.
i Newton Heath is situate about two miles north-east of Mancheoter. A considerable extent of trade is carried on in the township, and it is affected by the vagrant and criminal population of the district; and as there is no local governing body at present in the township of Newton Heath possessing the requisite power to grapple with the evile attendent apon unchecked and uncontrolled

Fagrancy, \&c., I conchude that the Public Health Act 1848, if applied, will be of the utmost value and importance.

In my various inquiries I have found that many educated, benevolent, and well-intentioned men totally misunderatand the purpose and powers of the Public Health Act, and, comsequently, the most inconsistent opposition is offered to it. The Act has been framed and made law by Parliament to confer the necessary powers for local government on such townships and districts as Newton Heath, at the least money cost ; but, although it provides the machinery for devising now works of drainage and water supply, the power to project them rests with the Local Board, which must be elected by the ratepayers. The Act also confers powers to frame byelaws and to regulate common lodging-houses, as also to put in force the several regulations connected with the removal of refuse from slaughter-houses and other disease-producing places, to compel proper ventilation where fever is ever present, and to open out confined courts and passages, in many of which places there is more of the ratepayers money expended in parish relief than would pay the rent of the property several times over.

One common form of objection to the application of the Act is, that it may be required in larger towns and more populous districts, but that in a place principally agricultural it cannot be of the same use. There is no greater mistake than this: the Act may be applied to the metropolis, as to the most rural village, with many and singular advantages. There is power conferred to devise and execute certain works, to appoint certain officers, and to levy certain rates, all of which works, \&c. must, however, be in reduction of existing charges, either directly or indirectly. The Act does not make it imperative to execute useless works, or even any of a doubtful character, but has been expressly framed for the purpose of preventing any such from being undertaken. Neither does the Act require the Local Boards to appoint useless officers, but, on the contrary, only such are recommended and as experience has proved to be absolutely necessary. These appointments rest with the Local Boards.

As to the uses of the Act in a rural district they are, first, to establish a representative Local Board within a defined area, and to place under one establishment the sewerage, drainage, supply of water, lighting, cleansing, street and road formation and repairing, and the general regulation of the district. The surveyor for the town will be surveyor of highways also, and it is a well-ascertained fact, that by an educated and intelligent superintendence there may be better roads maintained at a less cost than under the existing Highway Act, when a surveyor is elected annually, who most frequently knows nothing about a road other than that by some sort of means it is to be made with stone, and that he thinks it may be maintained with anything the readiest at hand, for instance with dried mud. In Newton Heath there may be more knowledge than is here indicated, but I have had it giren in evidence that farmer-surveyors considered any refuse fit to fill into a rat, such as material gleaned from the land, including stones unbroken into form, rubbish of all sorts, and even weeds. I have

## now the rate if : a read hrolled up with the dried scenpinge of.a

 Sow weeks old.It han been proved by experivace that material may. be eaved to the extent of one third, where oven proper stome is aued, by chucated management.

Then, as to the planning and execution of sewers, drains, asd waterworks, a vast amount of money has been uselessly expended oa badly-devised works of this character. Sewers and drains of depocit, and cesspools, create nuisances of the worst and rasest daagerous kind. To lay out the most economical and efficient class of works requires that especial attention shall have been paid to the rales laid down and expounded from time to time by Your Honourable Board; this knowledge any Local Board will obtain (if they think proper to ask for it) at a minimum charge through the intervention of the General Board, where the Public Health Act is applied.

There is, however, another feature of the case as applicable to Newton Heath. The Public Health Act will soon be in force in many places in the district, regulating common lodging-honses and vagrants, \&c.; and the inevitable result will be, that such places as Newton cannot remain stationary even in their imperfect condition. The outcasts of society, removed from their present residences, will overrun and settle down where there is no locel power to interfere with them, and thus add to the present amoant of discase and pauperism.

For these, and for other reasons which might be advanced, I beg therefore to recommend that the requisite notices may be issued, and that inquiry may be made as to the present sanitary condition of Newton Heath. It may then be decided as to whether the Act sball, or not, be applied to the district.

Notices will shortly be issued for ana inquiry at Barton-uponIrwell, which is within a few miles of Newton Heath, so that if notices are simaltaneously issued for both places, the inquiries may be made at a minimum cost to each. I beg therefore to recommend that such a course be adopted.

> I am, my Lords and Gentlemen, Your most obedient servant, Robart Rawhesson.

Copies of the petitions drawn up and presented before the Commissioners praying that Newton Heath might not be incorporated with Manchester.
"To the Queen's most Excellent Majesty in Council.
"The petition of the trustees of the poors land in Newton, in the partiamentary borough of Manchester, in the county palatine of Lancaster,

- Humbly sheweth, $\rightarrow$
"That your petitioners are the trustees acting under an - Act of Parliament passed in the fifth year of the reign of his late Majesty King George the Fourth, for meouring certain waste lends
siturite in Newton undor their makagemant, to be firom times to time disposed of for building upon, subject to yearly feo-firm rents, which are directed to be applied in relief of the poor rato in Newton ; and in case of its full extinction, to the repair of the public highways within the township of Newton, or for any other public purposes within the said township as the said trustees may think fit and determine.
"That the situation of these lands near to the chief focus of activity in the district, and the low rate of public burdens to which builders of property become liable, resulting from the above and other causes, have of late especially encouraged the sale of many plots for building purposes on profitable rents, the aggregate of which arready forms a considerable fund, suited (after temporary expenses shall have been discharged) to counteract the usaal poor rate; and the growth of which fund promises within itself the means of supporting all municipal arrangements of local institution and local benefit.
"That your petitioners, like the owners of other estates in this township, exposed to new and aggravated incumbrances from sharing in future the liability to borough-rates, under the incorporation proposed with the town of Manchester, contemplate with dread the detraction consequent thereon from the value of the trust lands yet remaining to be sold, without finding it compensated by any plans of improvement called for by a district of chiefly an agricultural character, or for which ample provision does not subsist in the application of the reserved rents to public purposes within the township, directed by the above-mentioned Act of Parliament.
"That your petitioners, recognizing their pablic duty as guatdians of the local revenues, and deeming all foreign regulations to ensue from the proposed incorporation of this township with Manchester needless to property fostered by the above provisions, which are designed by Parliament for the general relief of the inhabitants and occupiers in Newton only, regard as an act of spoliation on them the admission to a share in those revenues of persons, other than those contemplated by the Act of Parliament; and would hold themselves chargeable with a breach of trust, if they did not deprecate their being so diverted.
"Your petitioners therefore urgently entreat that no charter of incorporation may be granted to Manchester, which would include the township of Newton as part of the borough, and that they may be heard by their counsel, agents, and witnesses, or others, against the granting of such charter.
"And your petitioners shall ever pray, \&c."

At the adjourned meeting of the Trustees of the poors land, holden at Newton school on Wednesday the 7th March 1838, at 10 A. M , -
The clerk having read the adjournment of the last meettrig called to consider the effect of the proposed incorporation of the
borough of Mapchouter, and aboo the resolution paseed at a pablic meeting of the householders and owners of property in Newton, bolden by the constables, on Wednesday the 14th February last, in the following words:-
"That this meeting views with alarm the proposed incorporation of the borough of Manchester, tending to fasten unprecedented exactions on the occupiers of property in this township, the lands of which form the most distant extremities of the borough, and possess no features of congruity with Manchester beyond the accidental relation to it in the parliamentary franchise, which this meeting does not consider worth the secrifice to be made in the burdens to be imposed on them, without any return of benefit applicable to this chiefly agricultural district ; that they therefure pledge themselves to oppose the including of this township in any charter of incorporation, and authorize the gentlemen now proposed as a committee (with power to add to their number) to further such opposition by petition or otherwise, any five of whom shall be competent to act."

It was resolved, -
"That the obvious increase of annual burdens on property in this township, which will inevitably ensue on its being joined in a charter of incorporation with Manchester, is calculated to depreciate the lands the subject of this trust, and to postpone the sale of them on terms as advantageous as heretofore, and thus to hinder the object of the Act of Parliament, devoting the rents of them to the general relief of the inhabitants and occupiers of Newton.
"That inasmuch as the mode of application directed by the Act extends to all purposes by which the new plan of municipal government could affect to benefit this township, such plan evidently presents no advantage to the holders of lands and buildings in Newton to compensate for the accompanying burdens; while such an amalgamation with the rates of Manchester would act as a spoliation on this trust, and admit to a participation in its revenues others than those to whom they are secured by Parlimment.
" That, therefore, a petition to the Queen in Council against such incorporation in the form now read, be ingrossed and signed by the clerk, on the behalf of the Trustees, and presented along with the petition from Newton."

## "To the Queen's most Excellent Majesty in Council.

"The petition of the inhabitant householders, and rated occupiers and proprietors, in Newton, within the parliamentary borough of Manchester, in the county palatine of Lancaster.
" Humbly sheweth, -
"That your petitioners are nearly all of the inhabitant householders, occupiers, and owners of property in the manor of Newton, a township joined (among others) with the town of Mancheeter in the privilege of returning members to Parliament, but
some parts of which are three miles distant from that town; and that they are chiefly of the operative class of persons, engaged in weaving or in the labours of agriculture.
" That the district they inhabit is mainly agricultural, containing about 1,200 acres of cultivated land, 45 farms, and 900 householders, but not more than six mills or factories, and five streets.
"That their local affairs have been hitherto conducted, and the peace preserved, at a very trifling expense, estimated in an assessment on the average, of but one fifth of the yearly value of property ; and that certain lands lying in and belonging to Newton, have been settled by Act of Parliament, under the management of trustees, the rents of which, after discharging the poor rate, are devoted to all other public purposes in the township, and secure to your petitioners a light proportion of public burdens, which an annexation to the adjoining town could not fail greatly to aggravate.
"'That, at a public meeting of the inhabitant householders, convened and holden by the civil authorities of Newton, on the 14th day of February instant, and very numerously attended, the following resolution was unanimously passed :-
" "That this meeting views with alarm the proposed incorporation of the borough of Manchester, tending to fasten unprecedented exactions on the occupiers of property in this township, the lands of which form the most distant extremities of the borough, and possess no features of congruity with Manchester beyond the accidental relation to it in the parliamentary franchise, which this meeting does not consider worth the sacrifice to be made in the burdens to be imposed on them, without any return of benefit applicable to this chiefly agricultural district ; that they therefore pl zdge themselves to oppose the including of this township in any charter of incorporation, and authorize the gentlemen now proposed as a committee, (with power to add to their number) to Further such opposition, by petition or otherwise, any fire of whom shall be competent to act.'
"That most of the provisions of the Act of Parliament, passed in the 5 th and 6th years of the reign of his late Majesty, intituled - An Act to provide for the Regulation of Municipal Corporations in 'England and Wales,' are inapplicable to an outlying district situated as Newton ; and that the connecting of it by community of rates with a crowded town like Manchester would greatly increase the burdens of the occupiers, and depreciate property, without any equivalent advantage; while, from the general poverty of its inhabitants, however numerous and widely spread, no adequate weight of votes or influence would be obtained in the town council, suited to protect its local interests.
"Your petitioners therefore earnestly entreat; that no charter of incorporation may be granted to Manchester, which would include the township of Newton as part of the borough : and that they may be heard by their counsel, agents, and witnesses, or others, against the granting of such charter.
"And your petitioners shall ever pray, \&c."

Remarks.-The evidence given in this Report proves that the township of Newton Heath cannot much longer continue in its present condition ; either there must be some form of local government to pave, sewer, drain, and regulate the district, or the Town Council of Manchester will be compelled to effect the incorporation of it, as much property in the township of Manchester, near the boundaries, is ruinously depreciated by the neglected state of Gagg's Fields; and the health of the inhabitants is affected by the sale of carrion, taken from the unregulated slaughter-houses of the "slink-butchers" in Newton Heath. The ratepayers have at present the choice whether they will govern themselves or be governed by the Town Council of Manchester.

## Act relating to Poors Land.

Abstract from the preamble of an Act, 5 Geo. IV. Sess. 1824. Royal assent 17th June 1824.-" An Act for confirming certain Leases and a Conveyance in Fee of certain Plots of Land allotted by an Act made in the Forty-second Year of the Reign of King George the Third for dividing, allotting, and inclosing the Common or Waste situate in the Manor of Neroton, in the County Palatine of Lancaster, to the Overseers of the Poor of the Township of Newton, and for enabling the said Overscers to sell and convey in Fee other Plots of Land, all formerly Part of the said Waste, for building upon, in consideration of Yearly Chief or Ground Rents to be reserved for the same."

Preamble recites Act of 42 Geo. III. Act to be carried out by Trustees.

Area and Value of Land named in the Schedule referred to by the Act.

> Quantity in statute meacure. Annual ralue.

Land bounded on the northerly side by
A. R. P. $\boldsymbol{f}$ s. $d$. the Rochdale canal ; easterly side by Droylsden highway; southerly side a garden belonging to Newton school; westerly side in part by chapel highway
Other land, bounded on the northerly side by the said canal; on easterly side by inclosed lands belonging to John Birch and Edward Greaves, esquires ; on the southerly side by lands allotted to the executors of John Lowe deceased, and on westerly side by the said Droylsden

Other land, bounded on the easterly side by the said chapel highway; on the northerly side by the said canal; and on the westerly side by a private way or


Prestwich Union. - Statement of Account, showing the Receipts, Expenditure, and Balances, for the Quarter ended 29th September 1850.

| Parishes. |  | 1-door. |  | Out-door. |  |  |  | Amounts received from overseers of townships during the quarter. | Outrelief and paupers board repaid. | Total <br> receipts. | Declaredaveragesfor 3 yearsended $25 t \mathrm{th}$March1850. | Proportionof in-main-tenanee,equarterended 29thSeptember1850. |  | Relief to <br> out-door <br> irremovable <br> poor. | Proportionof esta-blishmentcharges forthe quarterended 29 thSeptember1850. | Maintenance of lunatics in asylums. | Extramedicalfeeschargedto thetown-ships. | Vaccination fees. | $\begin{gathered} \text { Registra- } \\ \text { tion fees. } \end{gathered}$ | County <br> rates. | ExpensesendertheNai-sancesRemovalAct. | Collectors salaries. | Total. | Balance due to the townships, | Balance due from the townships. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Adu |  |  | Adu <br> 采 |  |  | $\begin{gathered} \stackrel{\rightharpoonup}{5} \\ \stackrel{\rightharpoonup}{\circ} \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Blackley - | - | - | - | 15 | 22 | 2 | 39 | $\begin{array}{ccc} £ & s . d . \\ 358 & 0 \end{array}$ | \& s. d. | $\begin{array}{cccc} £ & s . & d . \\ 358 & 0 & 0 \end{array}$ | $\begin{array}{ccc} \mathcal{E} & \text { s. } \\ 311 & d . \end{array}$ | $\begin{array}{lll} \text { f s. } & d . \end{array}$ | $\begin{array}{ccc} \mathcal{L} & \text { s. } \\ 38 & 15 & 0 \end{array}$ | $\begin{array}{ccc} \text { \& } & \text { s. } \\ 18 \\ 18 & 6 & 3 \end{array}$ | $\begin{array}{ccc} \& & s . d . \\ 25 & 6 & 0 \end{array}$ | $\& \quad s . d .$ | \& s. d. | \& s. d. | $\begin{array}{cccc} \& & \text { s. } & \text { d. } \\ 2 & 8 & 0 \end{array}$ | $\begin{array}{ccc} £ & s . & d . \\ 62 & 12 & 1 \end{array}$ | £ s. $d$. | \& s. d. | $\begin{array}{ccc} £ & \text { s. } & d . \\ 147 & 7 & 4 \end{array}$ | $\left\|\begin{array}{ccc} £ & s . & d . \\ 210 & 12 & 8 \end{array}\right\|$ | $\mathcal{L} \quad s, \quad d .$ |
| Bradford - | - | - | - | - | 2 | - | 2 | 4200 |  | 4200 | 3800 | - - | 0160 | 271 | 309 | - - | - - | - | 1110 | $25 \quad 9 \quad 4$ | - - |  | $\begin{array}{llll}33 & 4 & 2\end{array}$ | 81510 | - |
| Cheetham | - | - | - | 1 | 11 | 9 | 21 | 27000 |  | 27000 | 24100 | - - | 1296 | 14194 | 19122 | 2116 | -. | - | 6190 |  |  | - | 56116 | 21386 | - |
| Crumpsall | - | - | - | 6 | 3 | - | 9 | 12600 |  | 12600 | 10800 | - - | 680 | 6141 | 8159 |  | - - |  | 230 | 108 0 1 | - - |  | 132011 |  | $6 \quad 011$ |
| Failsworth - | - | - | - | 11 | 17 | 16 | 44 | 17000 |  | 17000 | 38600 | - - | $29 \quad 34$ | $24 \quad 21$ | 3181 |  | - | - | 3 5 6 | $69 \quad 98$ | - - | - - | 15788 | 12114 | - |
| Harpurhey - | - | - | - | - | - | - | - | 1200 |  | 1200 | 800 | - - |  | 0104 | 0131 |  |  |  | 076 | 1488 | - |  | 15198 |  | 3198 |
| Heaton, Great | - | - | - | 2 | 1 | 4 | 7 | 2000 |  | 2000 | 4500 |  | 406 | 2183 | 3146 |  |  |  | 010 | 23911 | - - |  | $\begin{array}{llll}34 & 4 & 2\end{array}$ | - - | $14 \quad 4$ |
| Heaton, Little | - | - | - | 3 | 2 | - | 5 | 3000 |  | 3000 | 5000 | - | 5100 | 389 | 466 |  | - - |  | 080 | $16 \quad 5 \quad 3$ | - |  | 29186 | $\begin{array}{llll}0 & 1 & 6\end{array}$ | - |
| Moston - | - | - | - | 6 | 4 | - | 10 | 13400 |  | 13400 | 15700 |  | 1130 | $10 \quad 06$ | 12100 | 0106 |  |  | 050 | $4617 \quad 4$ |  |  | $\begin{array}{llll}81 & 6 & 4\end{array}$ | 52138 | - |
| Newton - | - | - | - | 9 | 28 | 22 | 59 | 37000 |  | 37000 | 51400 |  | 33163 | 31184. | 41165 | 2860 |  |  | 7120 | 1792 | - - |  | $32211 \quad 6$ | 4788 | - |
| Prestwich - | - | - | - | 17 | 19 | 17 | 53 | 59000 |  | 59000 | 52600 |  | $48 \quad 26$ | 32156 | 42160 | 0106 |  |  | 600 | $94 \quad 7$ |  |  | 2241111 | 3658 | - |
| Irremovable - | - | - | - | 52 | 108 | 118 | 278 | - | - | - | - |  | - |  | - | - | - |  | - | - | - |  | - | - | - |
|  |  |  |  | 122 | 217 | 188 | 527 | 2,122 00 | - - | 2,12200 | 2,38400 | - - | $190 \quad 41$ | $148 \quad 06$ | 193193 | 31186 | - - | - - | 3100 | $640 \quad 2 \quad 4$ | - - | - - | 1,235 4 | 9110 | $24 \quad 49$ |

By order of the Board,
Ner Gardiner, Clerk.


[^0]:    * There are about one hundred places in England and Wales haring the name of "Newtos."

[^1]:    * For further remarks on this subject, see the evidence of Joseph Taylor, Esq., Surgeon, pages 56, 57.

[^2]:    * During this month (February 1852), extraordinary falls of rain have taken place in the weat and north of England. In the month of January, 17 inches of rain fell at Coniston Waterhead; but on the 2d of February, the gange at the same place registered $3 \cdot 9$ inches, as the rain-fall of twenty-four hours. Many lives have been lost at Holmfirth, in Yorkshire, through the bursting of a reservoir, and lives have been lost in other places which have been deeply flooded.

[^3]:    *The actual yield from the ground of a minimum fall of rain is $n i l$; and the greater portion of an excessive fall must be allowed to waste, even where there are reservoirs of the capacity of those which have been provided for the water capply of Manchester and the surrounding district.

[^4]:    *There are two school-rooms at Newton Heath attached to the church, which are designated as No. 1. school and No. 2. school.

[^5]:    *The rateable value is $\mathbf{3 0 , 7 7 7 L}$. 38. 9 d ., which, at 1 s . in the pound, produces 1,538L. 17s. 2 d .; add 307L. 13s. $3 \frac{1}{2} \mathrm{~d}$., the net produce of the poors land, and the present arvilable rate is $1,8461.10 \mathrm{~s}$. $5 \frac{1}{2} \mathrm{~d}$.
    $\dagger$ Mr. Wyatt on one occasion, the week before the inquiry, advanced 7 s .
    In my inspection I found several houses in Holland-street, Gagg's Fielde, belonging to Mr. Samuel Lancashire, the cellars of which were several inches

[^6]:    deep in water for want of sewers and drains. When this fact was pointed out to Mr. Lancashire as not agreeing with his evidence, he merely said, "I was not previounly aware of it,"

[^7]:    - Mr. S. Neal for a great number of years was chief inspector of nuinances for the borragh of Manchester, and therefore he is intimately acquainted with the minasces in, and emanatiog from, the sarroanding townehipos

[^8]:    * On accompanying Mr. Stone over the township to obtain samples and inquire into the supply of water, we called at a cottage in the Pop Gardens, near to the residence of Mr. Charlos Ellia, one of the guardians of the poor, and were told that "the woman of the house was dead in child-bed of twins;" and that "she had been delivered by a druggist from Manchester, who, having finished his business, took away the dead body of one of the infants."

[^9]:    * Btaggering Bob.-A calf newly calven, and hardly able to stand, is by the stink butcher technically termed "a staggering Bob."

[^10]:    "Surgeon, \&c."
    "To R. Rawlinson, Esq. " Superintending Inspector."

