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COUNTY OF ZETLAND.

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MAINLAND DISTRICT.

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REPORTS

BY

Medical Officer of Health

AND

Sanitary Inspector.


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YEAR ENDING, 31<sup>ST</sup> DECEMBER, 1924.

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T. & J. MANSON, *Shetland News* OFFICE, LERWICK.





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COUNTY OF ZETLAND.

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MAINLAND DISTRICT.

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# REPORTS

BY

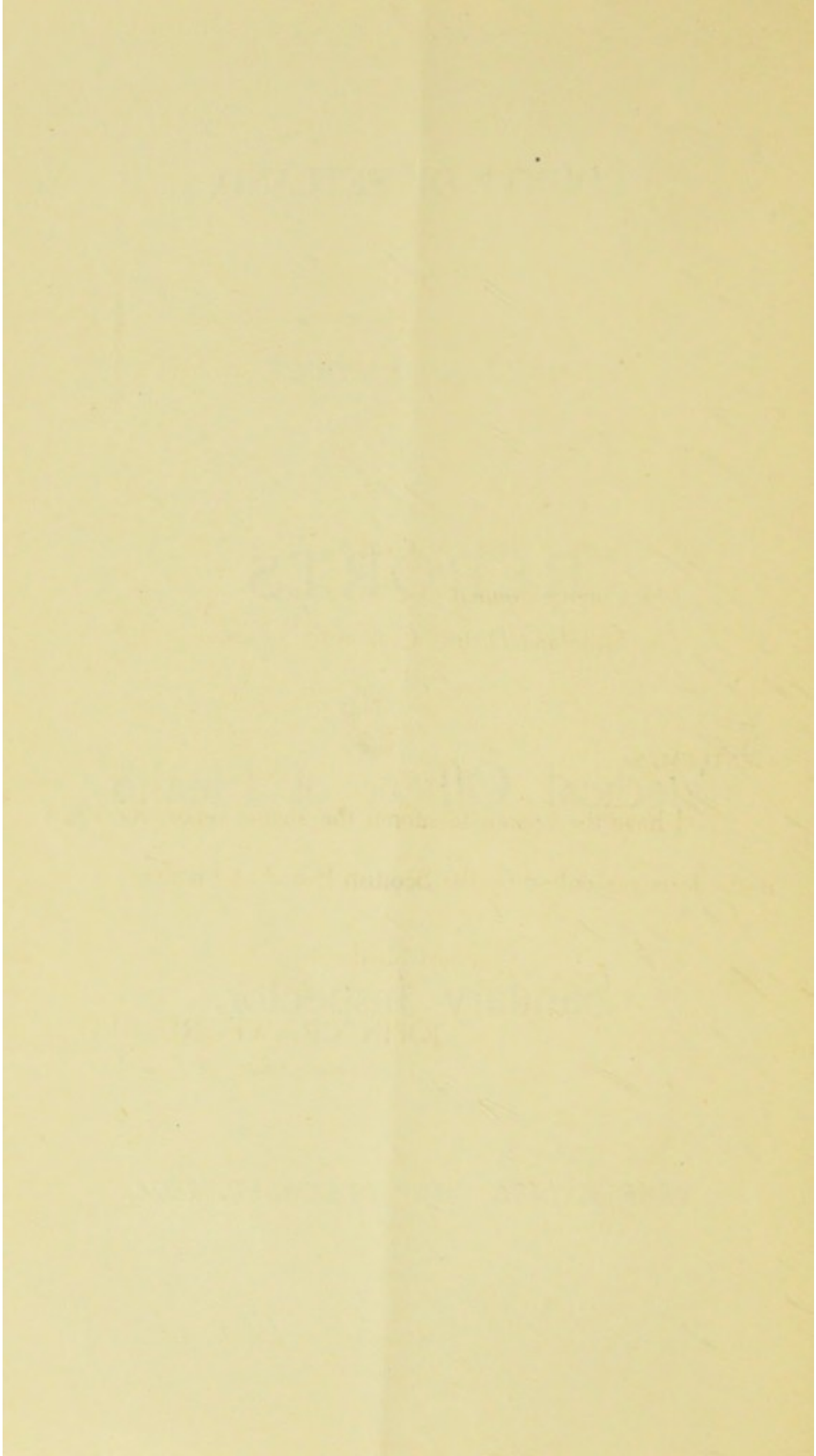
Medical Officer of Health

AND

Sanitary Inspector.

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*YEAR ENDING, 31<sup>ST</sup> DECEMBER, 1924.*



PUBLIC HEALTH OFFICE,  
BRENTHAM PLACE,  
LERWICK, *March, 1925.*

*To*

*The Scottish Board of Health,  
The County Council of Zetland, and  
The Mainland District Committee of same.*

GENTLEMEN,

I have the honour to submit the annual report for 1924  
in the form prescribed by the Scottish Board of Health.

Yours obediently,

JOHN CRAWFORD, M.D.,  
*Medical Officer of Health.*





# REPORT by the Medical Officer of Health for the year ending 31st December, 1924.

## *A, B, and C.*—General Remarks and Enquiries, and Offensive Trades.

Very little can be added to previous remarks. The Venereal Diseases Scheme is now in operation again, and a considerable amount of treatment has been carried out, as will be noted later.

The operation of the Eye-Laws under the Dairies, Cowsheds and Milkshops Order has been delayed by the Committee, in order that structural alterations may be given time.

No development has taken place in the treatment of Tuberculosis.

Thanks are due to the Officer-in-Charge at the Meteorological Station for a table summarising the weather of the past year. It will be noted that the rainfall was four inches less than in 1923, and there was much less wind. Indeed, the four summer months show only six hours of wind of gale force (in September), as compared with 49 in 1923. These months were also warmer, their mean being 51 degrees F., as compared with 48.9 degrees the previous year.

*Offensive Trades.*—The two manure factories in Bressay are well conducted, and no complaint of nuisance has been received referring to them. One of them is very secluded, but the other is so situated that complaints from Lerwick could readily occur. Probably the fact that the herring refuse used is saturated with salt accounts for their freedom from offensive effluvia.

The whaling station at Olnafirth was in full operation during the year, and the usual nuisance existed along the public road. The boiling-down of fatty matters, and the drying-off of the residues, inevitably give rise to very penetrating and persistent effluvia. And it cannot be said that the company have as yet shown any willingness to adopt methods to abate what is undoubtedly a nuisance, whether it be injurious to the health or not. Nothing can usefully be added to previous remarks on this subject.



# RAINFALL, SUNSHINE, TEMPERATURE AND WIND FOR 1924.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total rainfall for month .....	3.69	3.08	2.47	3.20	3.36	2.30	3.79	2.05	4.39	3.24	2.68	6.63
Maximum fall in one day .....	1.01	0.56	0.48	0.64	0.64	0.88	1.19	0.41	1.10	0.55	0.40	1.03
Rainless days .....	7	9	13	4	14	15	10	9	9	10	9	3
Total number of rainless days in year, 112.												
Total rainfall, 40.88 inches.												

## SUNSHINE (IN HOURS).

Total sunshine for month .....	15.0	34.1	117.9	124.0	146.5	141.8	141.1	123.8	127.2	82.4	27.6	9.9
Maximum in one day .....	4.0	5.1	9.9	12.2	14.8	13.7	15.5	11.7	13.0	9.5	5.7	3.0
Sunless days .....	20	16	7	7	7	7	5	5	4	10	18	21
Percentage of possible sunshine ...	7	13	32	28	28	25	25	26	33	27	12	5
Total number of sunless days in year, 127.												
Percentage of possible sunshine for year, 24.15.												

## TEMPERATURE (IN DEGREES FARENHEIT).

(Mean for month obtained from mean of daily maxima and minima).

Mean temperature .....	39.2	37.4	35.4	39.4	43.9	47.2	51.9	54.1	50.8	46.3	44.6	43.5
Highest daily maximum for month	47.1	46.5	49.2	49.7	58.2	61.0	64.2	61.8	62.6	57.6	51.0	51.6
Lowest daily maximum for month	32.0	34.2	32.5	32.2	41.5	44.9	49.8	54.8	47.2	40.0	43.2	39.8
Highest daily minimum for month	41.7	41.0	40.9	41.2	45.8	48.2	51.9	54.6	54.7	50.3	45.7	45.2
Lowest daily minimum for month	23.2	23.0	20.8	23.2	32.0	31.5	42.2	44.8	35.0	28.3	32.0	31.2

## WIND (IN MILES PER HOUR).

Number of hours of wind over 39 m. p. h. ....	56	15	11	8	9	0	0	0	6	4	14	80
Number of hours of wind 24-39 m. p. h. ....	233	316	106	146	41	102	6	44	160	152	227	276
Number of hours of wind under 24 m. p. h. ....	455	365	627	566	694	618	738	700	554	588	479	388
Maximum hourly wind in m. p. h. ....	60	47	44	45	43	35	30	32	40	40	50	59
Direction of max. hourly wind...	SW'S	NW'W	SW'S	E	NE'N	NE'N	SE	SW'W	SW	SE	SW'S	SW
Date of maximum hourly wind ...	12th	5th	7th	14th	8th	1st	2nd	9th	13th	6th	21st	25th
Time of maximum hourly wind ...	2000	0900	0800	1900	0700	1600	1500	1100	1200	1000	2000	1500
Velocity of highest gust m.p.h. ....	86	72	60	59	55	47	43	43	59	58	66	90

Gale force is 39 m. p. h., or over. Strong winds 24 to 39 m. p. h.  
Time is reckoned from midnight as 0 to 24 hours.



## D.—Factories and Workshops.

Two bakeries, at Voe and Sandwick, have been improved and practically rebuilt, and the others are in a satisfactory state.

In this County practically every crofter's and cottar's house is a workplace, owing to the knitting which is done by members of the household, either for general sale or for some special order. It would obviously be impossible to conduct any routine inspections, but, as has been remarked before, there is little risk to the public involved. Where infectious disease occurs in houses, inmates are warned, and any hosiery in stock can be disinfected. Very few such cases have arisen.

*Fishing Stations.*—Several visits were paid to these stations, notably one with the officials of the Scottish Board of Health on March 14, and one with the M.P. for the constituency on July 28. The first-named did not, unfortunately, see the huts in occupation.

A set of Bye-Laws for Seasonal Workers was submitted by the officials of the Board and, after some discussion, adopted by the District Committee. It is now before the Board for confirmation.

A period of five years is given the curers for structural alterations to the huts, and a period of three before facilities for ablution need to be provided for the workers. It will be interesting to observe what then may occur, but one cannot help being a little sceptical as to any marked result. In this County bye-laws have not proved a panacea for abuses, and in two instances are practically a dead letter. One hopes there may not be a third.

## E and F.—Housing.

The question of extension of the Burgh of Lerwick to include the "North Road" area seems to have been lost sight of. There is no proper sewerage or drainage in this area, and the Medical Officer of Health and the Sanitary Inspector have therefore generally advised against the erection of further dwelling-houses or buildings involving sinks or closets, as only likely to add to what is already a difficult problem. Housing in the District generally will be more fully treated by the Sanitary Inspector. It is usually unsatisfactory, but gradual attention to the most glaring faults has produced some result and will in time effect improvement.

## G.—Rivers Pollution.

There is no question of rivers pollution.



## *H and I.*—Hospital Accommodation and Disinfection.

The Fever Hospital remained at December 31 as previously reported. Any repairs were prevented by the continuous occupation of the wards, owing to the mild epidemic of scarlatina. These repairs should, however, have been undertaken three years ago or more, and there is no doubt that this delay will cause greatly increased expense.

The Smallpox Hospital at the Knab is in a fairly good condition, as was proved by its use for a varioloid suspect. The cooking and nursing arrangements are, of course, primitive, but can be made to serve the turn.

The disinfector remains in good order. The number of disinfections carried out was 66, of which the District Committee were responsible for 12, the Burgh for 24, the Gilbert Bain Hospital for 7, and the Combination Hospital and Sanatorium for 23.

## *J and K.*—Infectious Diseases.

Forty-four cases were notified, of which 4 were of paratyphoid, 10 of pneumonia, 5 of erysipelas, and 25 of scarlet fever. Three cases of para-typhoid (Virkie, Burra and Quendale) were nursed at home, and one (Sandwick) removed to hospital. None were immediately fatal, but one died of a sequela. No connection between any of these cases could be traced, but sporadic cases have tended to occur all over the south end of the District and in Burra Isle. As has previously been pointed out, the water supplies of the District, from shallow wells, will always render likely the occurrence of such cases. Every effort is made by the Sanitary Inspector to enforce the protection of such wells, but the surface character of the water cannot be altered.

The scarlet fever occurred in Whalsay (6), Levenwick (4), Cunningsburgh (1), and the environs of Lerwick, or traceable thereto (12). Two cases were cancelled after observation. The type of disease was very mild, and, indeed, in some cases scarcely diagnosable, and there can be no doubt that several persons must have been at large in complete innocence of the fact that they were capable of spreading infection. A difficulty arose in the island of Whalsay as regards removal of patients. They cannot be taken by the ordinary steamer, and it is somewhat of a responsibility for the Medical Officer of Health to advise the removal of a patient, even but slightly ill, in a small motor boat, over waters which are often rough and in weather which is usually cold. Two of the Whalsay cases were removed at the risk of the parents, but the remainder were for above reasons treated at home. At one time it seemed likely that many cases might occur in the island,



and after a special meeting the District Committee gave powers to the Medical Officer of Health to make arrangements for isolation and nursing there, which happened to be possible. Such arrangements, however, would take time, implying purchase of bedding and utensils and the engaging of a special nurse, and the question is by no means a simple one.

On May 27 a case of variola was notified, and though there was little doubt of the diagnosis being varicella, it was thought wiser to remove the patient to the Knab Hospital for observation and to keep all contacts under observation for the required period. A few of the contacts accepted vaccination.

As has been stated before, this County is by far the most conscientious in Scotland in its attitude to vaccination. There were only seven successful vaccinations in the District during 1924. It would be interesting to see whether a case or two of smallpox would alter the mental outlook.

### L.—Venereal Diseases.

It will be remembered that the Local Treatment Centre in Lerwick lapsed in August 1, 1923, owing to the opinion of the medical men concerned that the fee of 3/6 per visit was too small, if intended to cover venous injection and other operative measures. On investigation it was found that no fee had been charged for mere visits of report, and it was suggested that if the 3/6 were charged for all visits, whether any measures were taken or no, the amount might suffice. The doctors agreed to this, and the Board approved, making the approval retrospective to August 1st, 1923.

This Centre is in a somewhat anomalous position. There was some difficulty at the start in getting any premises where it could be held. All doctors refused the use of their houses for the purpose, and it was only when two who were in partnership took consulting rooms in a separate position that the Centre came into being there. But these gentlemen dissolved the partnership, one of them retaining the rooms. The other then applied to have his house recognised as part of the Centre, and the Board, after some enquiries, approved this course. This latter practitioner then took a partner and successor who now conducts his share of the work. Hence a centre which really consists of two centres. Now arrives a third practitioner who also wishes to conduct V.D. work on the Board's scale, from which it seems unfair to exclude him. It would seem that the whole matter needs re-consideration, but there is little doubt that for the sake of efficiency and simplicity, the work should be carried on by one only.

With regard to work done the most accurate figures are



obtained from the official return, which, however, closes with the financial year at May 15,, 1924.

At the beginning of the year there were under treatment or observation 7 cases of syphilis and 5 of gonorrhoea—all males, but one case of syphilis. Treatment was commenced during the year in 12 cases of syphilis (of whom 7 were females), and 14 of gonorrhoea, of whom 1 was a female. There were 4 cases other than venereal.

This gives a total of 33 males and 9 females under treatment. Of the 42 persons concerned—

Left before completing a course of treatment ...	...	18
Left after, but before final tests ...	...	4
Left after completion and observation ...	...	11
Transferred ...	...	1
Under treatment at end of year ...	...	8
		—
		42

The number of attendances was 530, of which 12 were those of persons from places outside Scotland, 355 of the attendances being at the consulting rooms previously mentioned, and 175 at the doctor's house. Of the 42 patients, 8 were 15-25 years of age, and the remainder over 25. No congenital syphilis was treated during the year. Advertisement was made in the local papers during the busy part of the season of the facilities for free treatment, but no application was received at this office.

### M.—Vital Statistics.

The population of the District, as estimated to the middle of 1924 by the Registrar-General, was 15,389. There were 273 deaths during the year, giving a rate (corrected for transfers only) of 17.7 per 1000. There were 224 births (of which 4, or 1.8 per cent., were illegitimate), giving a corrected rate of 14.6. The infantile mortality rate (deaths under 1 year per 1000 births), was 45.

Tuberculosis was the main cause of death, with 40 cases. Apoplexy claimed 30, heart disease 23, and malignant diseases 19. All respiratory diseases accounted for 24 deaths, and influenza for 18. Of the 273 deaths registered, about 16 per cent. were uncertified, the death in most cases being stated as due to old age.

For the last two years, as in 1921, the number of births is much below the number of deaths.

### N.—Tuberculosis. (Submitted by County Medical Officer).

*Prevalence.*—The actual number of deaths and of notifications



is higher than last year. In the following table the distribution of cases is shown :—

1924.	Mainland. District.	North. Isles.	Burgh of Lerwick.	Total.
Notifications .....	54	29	34	117
Deaths (including) transfers)	40	11	7	58

Of the total deaths 27 were of males and 28 of females, and 12 of these were due to non-pulmonary causes. Of the notified cases 16 were notified as non-pulmonary, (abdomen, glands, kidney, meninges, and joints). Twelve cases were notified as both pulmonary and otherwise, (abdomen, glands, and larynx). Disease of the pleura is included in the term "pulmonary."

The second table shows the cases referred to County Registration Districts. It will be noted that cases have now been notified from Foula and Fetlar, but Fair Isle still remains apparently immune.

Registration District.	Popula- tion. 1921.	Total deaths T.B. 1924.	Deaths of notified persons.	Total notifica- tions 1924.
<b>NORTH ISLES—</b>				
Unst .....	1817	8	6	12
North Yell .....	590	1	1	4
Mid and South Yell .....	1543	2	1	10
Fetlar .....	224	0	0	3
<b>LERWICK (Burgh)</b> .....	<b>4792</b>	<b>7</b>	<b>7</b>	<b>34</b>
<b>MAINLAND DISTRICT—</b>				
Bressay .....	589	0	0	2
Burra .....	808	5	5	4
Delting .....	1136	0	0	1
Dunrossness .....	1234	3	2	1
Lerwick (Landward) .....	2156	1	1	9
Lunnasting .....	466	1	0	0
Nesting .....	519	2	1	1
Northmavine .....	1635	7	5	7
Sandsting and Aithsting .....	1871	4	3	8
Sandwick and Cunningsburgh .....	1919	4	4	9
Skerries .....	127	1	0	1
Sandness .....	404	2	2	2
Tingwall .....	1185	7	6	7
Whalsay .....	855	1	1	0
Whiteness and Weisdale ...	581	1	1	1
Walls .....	674	0	0	2
Papa Stour .....	119	1	1	0
<b>Totals</b> .....		<b>58</b>	<b>47</b>	<b>117</b>
The totals for 1921 were .....		55	29	89
.. 1922 ..		50	39	89
.. 1923 ..		34	26	100



As stated in the Tabular Return to the Scottish Board of Health, the known cases of Tuberculosis in the County at the end of the year total 301, distributed as follows:—Mainland District, 148, North Isles, 37, and Buigh of Lerwick, 116.

Reviewing the reports of the last four years, one is met by the fact that 197 persons died of Tuberculosis, an average of about 50 per annum, in an average population of 25,520 (1921 census). Five years' experience of tuberculosis work in this County leads one to the conclusion that several of these deaths might have been prevented by proper treatment. By energetic action of the Local Authorities in the direction of housing and sanitation, some of the contributory causes of infection might have been removed. But this disease seems to be accepted, both by the people and most of their rulers, with resignation, and, though there is much fear of actual contact with it, when it occurs at a distance from the individual concerned there may be compassion, but no action seems to be considered necessary.

A contrast of a striking kind is furnished by a mild epidemic of Scarlatina which visited the County last year. There were no deaths, and no case gave rise even to anxiety. Yet popular indignation seemed great; special meetings of Local Authorities were held, letters were written to the Scottish Board of Health condemning the supine attitude of the health officials, and reflections were uttered on the ignorance of the medical profession. No comment was made on the fifty deaths occurring from Tuberculosis. The notification of cases of Scarlatina was received by the Local Authorities with something approaching indignation, but notification of Tuberculosis accompanying these received no tribute.

One is forced again to conclude that until the people themselves show some interest in the subject, and some determination to reach the root of the matter, it will be vain to expect action from their representatives.

Year after year, in these Reports, the gravity of the position of the County Council with regard to Tuberculosis has been emphasised in the most definite terms. Little comment has been elicited, and possibly the Council have become used to such statements from the Tuberculosis Officer and regard them as of little importance. It is, therefore, fortunate that this year it is possible to include here a statement by Mr Rose-Innes, County Surgeon, which is to be submitted to the Hospital Services (Scotland) Committee now sitting. It will be seen that he agrees with the attitude of the Tuberculosis Officer and regards the present position as most unsatisfactory.

Mr Rose-Innes's statement is in the following terms:—



“*Tuberculosis*.—When we come to Tuberculosis, we at once realise that it is by far the most prevalent and deadly disease in these Islands, and on this part of the Report I wish to lay the greatest emphasis.

“Glancing over the Death Returns for Shetland (Mainland) and Lerwick Burgh, one is at once struck by the extraordinary number of yearly deaths from Tuberculosis. Here are a few figures :—

“*Shetland (Mainland)*.—In 1918 one out of every eight deaths was from Tuberculosis; in 1920, one out of every six; in 1924, one out of every seven.

“*Lerwick (Burgh)*.—In 1918, one out of every seven; in 1920, one out of every five; in 1922, one out of every six.

“These figures—which embrace deaths from all causes, including infant mortality and old age—speak for themselves. If infant mortality and deaths from old age were deducted, one would get a nearer indication of the ravages of this disease, and the percentage of deaths from Tuberculosis would appear considerably higher.

“Furthermore, there are one or two peculiarities about Tuberculosis in Shetland: *Firstly*.—Under good conditions the most advanced cases will often make the most startling recoveries. Indeed, cases of Tuberculosis occur in Shetland to which in the south one would give a hopeless prognosis, but which, in spite of one’s fears, improve rapidly under good conditions and in some cases seem to clear right up. This is, at any rate, an indication that institutional treatment in Shetland is worth while. *Secondly*—The housing of the country folk is so bad, ventilation, light, and good feeding all being at a premium, while most of the houses are so damp and unhealthy, that some form of institutional treatment is almost essential for cases occurring under these conditions.

“*Surgical Tuberculosis*.—There are a great many cases of surgical tuberculosis in the Islands. These generally go from bad to worse, in spite of the gallant efforts of the local doctors to fight the disease.

“*Conclusions*.—That in reviewing the health of the Islands, Tuberculosis in its various forms is by far the most important—the most prevalent and the most deadly disease in Shetland. The provision for the treatment of Tuberculosis is quite inadequate, there being no provision for open-air treatment of any kind. The provision for surgical tuberculosis is *nil*, while that for pulmonary tuberculosis does not supply half the needs of the Islands.



*Suggestions.*—That first of all the public should be made to realise the danger and prevalence of this disease; and that most of the public funds set aside for health purposes should be directed against Tuberculosis.

*Accommodation for Cases.*—Plans have been submitted to the Board for the erection of a glass open-air balcony, as an extension to the Gilbert Bain Hospital, Lerwick. This will, if erected, supply a certain demand for the treatment of surgical Tuberculosis, where patients can be fitted and educated to apparatus and the healing process at any rate commenced.

“This will not, however, help the pulmonary cases.

*Service.*—If any suggestion can be entertained, it is that, if an extra trained nurse is engaged for the Gilbert Bain Hospital—as will probably be the case when the open-air balcony is completed—she shall be a qualified orthopaedic nurse who understands massage and plaster work. That she will be maintained partly by the Tuberculosis Committee, and shall have duties which include visiting patients who are in apparatus after their departure from hospital. She would also be extremely valuable for the after-treatment of the great number of accident cases that occur here.

“The nursing of patients in plaster, and patients in apparatus such as spinal frames, is a highly specialised work, and good results can be obtained only when the patients are made absolutely comfortable.

“A woman of this kind would be of inestimable value in keeping these patients comfortable, and in generally supervising their activities and condition during the long enforced convalescence.

*Further Developments.*—A great need in the Islands is a small Pathological Laboratory to enable the surgeon to do some of the simpler pathological work, *e.g.*, pus examination, sputum, blood counts, sections, blood estimations, etc. There is no provision at all for pathological investigations, and the surgeon finds himself at a great handicap in having to rely in every case on a purely clinical diagnosis.

“In conclusion I would say that the service in the Islands for general medical and surgical conditions, as given by the local practitioners, is excellent until it comes to Tuberculosis. Here, with the housing and the climate, the local men can do little or nothing without some well-equipped institution to help them.”

*Treatment.* (1) *Institutional.*—To Sanatoria in Scotland, seven patients were admitted during the year, and five remained at December 31. Five patients were admitted to the Gilbert Bain Hospital, but none remained at 31st December. At the Sanatorium Wards of the Combination Hospital, treatment was again interfered with by the mild outbreak of scarlet fever, principally in Lerwick Burgh.



The following concise report by Dr Campbell, Medical Superintendent, shows the actual position:—

“For the first five weeks of 1924, the Sanatorium was closed to tuberculosis patients, the accommodation being required for scarlet fever cases. Between 6th February and 7th April, three males were admitted. On 7th April the building had again to be held in readiness for scarlet fever. On 10th June it was re-opened for Tuberculosis cases, and has remained open.

“Since that date there have been admitted—9 males and 15 females.

There have been two deaths—One infant died 7 days after admission; one male patient, aged 23, died 9 days after admission. Both these cases were hopeless.

“Two cases—both women—were discharged not improved. The remaining discharged cases—4 males and 7 females—had all improved.

“There were left under treatment on 31st December, 4 males and 5 females, all improving.”

It is gratifying to be able to state that these wards, in spite of the obvious inconveniences both to patients and staff, are doing a valuable and successful work, for which the Medical Superintendent and the Nurse-in-Charge deserve the Council's congratulations.

(2) *Domiciliary*.—The number of patients receiving domiciliary benefit at 1st January, 1924, was 16. During the year, 35 cases were placed on the list, and there remained at 31st December, 34. Reviewing the cases receiving this allowance, one can state that in general it has been of the greatest assistance to the patient, and the additions to a poor dietary furnished by it must in several cases, especially of young people, have turned the scale favourably.

The total cost to the Council of sanatorium and domiciliary treatment was about £2147 for the calendar year.

District nurses at Bressay, Cunningsburgh, Sandwick, Dunrossness, Burra, Scalloway, Whiteness and Sandsting made a total of 830 visits to about 50 tubercular patients. It must be regarded as most unfortunate that there is no movement at all for supplying District Nurses in parishes where they are not existent. Especially is this the case in Yell, where two nurses would be of the utmost benefit to the prevention and treatment of tuberculosis and other diseases. During the year District Nurses were acquired for Whiteness and Fetlar, and it is to be hoped that when the people of Yell have a chance of studying a nurse's work at closer quarters, they may take the question up with more energy.



The Tuberculosis Officer paid about 140 visits to patients throughout the County and in the Burgh of Lerwick; and about 210 visits in the Burgh and its environs were made by Nurse Shearer, part-time Tuberculosis Nurse.

About 30 specimens of sputa were examined at the office.

### *O and P.*—Child Welfare and Notification of Births.

Nothing further can be added to remarks of previous years. Schemes of Child Welfare do not appear practicable, though much might be done in Scalloway and Lerwick Landward. The subject was before the District Committee, who seemed to be under the impression only too common in Shetland, that Child Welfare Schemes are not necessary.

The usual report forwarded to the Central Midwives Board show that there were 224 births and 10 deaths under one year. Of these deaths 6 were due to probable congenital causes, 2 to pneumonia, one influenza, and one tubercular meningitis.

### *Q.*—Milk and Dairies.

The actual conditions reported on in previous years remain unchanged. The bye-laws made under the Dairies, Cowsheds, and Milkshops Orders were confirmed by the Board and came into operation in December, 1923. The District Committee proposed a time limit for the necessary structural alterations to be carried out, which expires at April 30, 1926. After that date it will be necessary for the sanitary officials to make a re-survey of all registered premises and report to the Committee those which do not comply.

### *R.*—*Food.*

There are five slaughter-houses, all private, on the register in the District. These are generally well conducted, but there is a tendency on the part of owners to neglect the small precautions so necessary for absolute cleanliness. Hooks and knives are often seen rusty and rough, and particles of fat, etc., adhering to benches and walls.

The new meat regulations came into force on August 15, and the M.O.H. was appointed Meat Inspector, and the Sanitary Inspector Detention Officer. A great deal of extra work and travelling is thrown upon the latter. For the period from August 15 to December 31, 1 ox, 67 cows, 4 calves, 48 sheep and 5 pigs' car-

cases were inspected. No whole carcasses were seized, but parts of 4 cows and 1 pig for tuberculosis, and 59 cows for parasites were condemned, and parts of 31 sheep for parasites.

#### U.—Tabular Statement.

*Infectious Disease.*—This may be summed up as follows:— There were 98 cases notified of which 55 were tuberculosis, 7 of these being non-pulmonary. Of the remaining 43 notified (non-tubercular) cases 4 were typhoid, 25 scarlatina, 5 erysipelas, and 9 pneumonia.

Thirty cases in all were removed to hospitals; 14 of these being tubercular, 15 scarlatina, and one typhoid. It is calculated there were 148 cases of tuberculosis in the District at December 31, of which 29 were non-pulmonary.



County Sanitary Office,  
LERWICK, *March, 1925.*

To

*The Scottish Board of Health,  
The County Council of Zetland, and  
The Local Authority of the Mainland District of the  
County.*

GENTLEMEN,

In terms of Section 15 of the Public Health (Scotland) Act, 1897, I beg to submit the following Report on the general Sanitary Conditions of the County for the year ended 31st December, 1924.

I have the honour to be,

Gentlemen,

Your obedient Servant,

WILLIAM ALEXR. WATT,

*County Sanitary Inspector,  
Chief District Sanitary Inspector  
for the Mainland District.*

# REPORT by the Sanitary Inspector for the year ending 31st December, 1924.

## WATER SUPPLIES.

*Lerwick Special District.*—During the year the supply in this area appeared to be plentiful for all purposes, and no reports were received as to any actual scarcity.

With the introduction, however, later on of sinks or wash-tubs for personal ablution and washing clothes in connection with Bye-Laws for Seasonal Workers, the resources of the service will probably not be equal to the increased demands which these conveniences will require, and it may be necessary to consider the question of having the water supply augmented for this purpose.

*Scalloway Special District.*—The additional water supply introduced into this District has, unfortunately, had to be discontinued as, owing to its peaty content, the original supply of spring water was thereby discoloured.

The matter of augmenting the service has again been raised by the Local Authority, and, meantime, further action for the provision of sinks and W.C.'s into the dwelling-houses under the Housing, Town Planning, etc. (Scotland) Act, 1919, has been suspended. With the present supply, however, the needs of the district as it stands at present seem to be fairly well met, although in the higher parts of the area, the supply is usually greatly diminished when shipping water is being drawn off.

The re-opening of the curing station at Port Arthur, where it is proposed to extend the water main, will also necessitate an additional demand for water, and with the possibility of other stations being opened, no time should be lost in procuring an increased supply.

During the winter and spring months of the year, there is always a considerable overflow of water from the present reservoir running to waste, and if provision were made to conserve it, either by enlarging the existing storage or by an additional reser-



voir, the available water would probably meet all requirements.

An examination of the existing reservoir might also be made in order to ascertain whether it is water-tight, as, owing to the fact of its being underground, any leakage there may be is not very readily detected. In the absence of duplicate storage, however, such an examination could only be made by emptying the reservoir, and in the event of repairs being necessary, it would be a difficult matter, if not impossible, to supply any water to the district during the time that the work was being carried out.

If, however, it were decided to construct an extra reservoir, this difficulty could be overcome by leaving the present supply intact, until such time as the new works were completed, after which the water service would be maintained from the additional supply, and thus allow for a proper inspection and overhaul of the existing reservoir, if required. The two reservoirs could then be connected up, and the inlet and outlet pipes arranged so that the system could be worked with a duplicate supply, or, when necessary for inspection or other purposes, from one reservoir only.

During the year sinks with water supplies laid on and also W.C.'s were provided in five dwelling-houses in Scalloway.

In the Mainland District, apart from the Lerwick and Scalloway Special Areas, 34 wells were protected, and in one case a pump was fitted up. Where open wells are found to exist, opportunity is taken to enlighten those using the wells as to the ever-present and unseen danger of parasitic infection from this source, and how it arises, and as most of the people in the rural areas are familiar with "Watery blebs" (Hydatid cysts), as they call them, in the viscera of the domestic animals they kill for their own use, a reminder that human beings themselves are equally subject to the same disease, acts as a stimulus in having the water supplies safeguarded.

## DRAINAGE.

*Lerwick (Landward).*—The condition of the drainage in this area calls for no further comment than what has been stated in preceding reports. Owing to the flooding of certain premises situated at the lowest point of the drainage system, steps are to be taken to provide additional street gullies to deal with the excess water, which it is hoped will remove any further cause for complaint in this respect.

*Scalloway District.*—As mentioned last year, the drainage system is now completed so as to afford facilities for practically allowing all the premises in the area to get the service of same, but until the water supply is augmented, it is not likely that further



connections will be made meantime, except any one does so voluntarily.

Apart from the districts mentioned, the drainage from other premises in the Mainland was on the whole satisfactory. At nine dwelling-houses improvements were effected, by either having the drains properly trapped so as to avoid the emission of offensive smells, or the outlets extended to prevent the pollution of the ground in too close proximity to the dwelling-houses.

A belief that the emptying of dirty soapy water "blots," or waste water from boiled vegetables, or anything else apart from bedroom slops, poured down an untrapped drain opening inside the porch of a dwelling-house, cannot be productive of offensive smells, is current with some people living in houses where such conditions were found to exist, but in each case the provision of a suitable trap was sufficient to dispel that belief. The presence of drain air in a house is readily detected by the initiated, but as the smell through time becomes the recognised odour of the atmosphere of the house to those who are accustomed to living in it, the occupants get used to it, and it is only when someone develops a bad throat, or other illness which might be attributable to defective drainage, that the danger is brought to light.

#### SCAVENGING.

The arrangements for scavenging in the two Special Districts of Lerwick (Landward) and Scalloway are the same as last year, and there are no new developments to record with regard to same. Mr Crocks, Inspector of Cleansing under the Board of Health, visited the districts and suggested improvements which were duly submitted to the Local Authority. The difficulty in both districts is the disposal of the night soil, owing to the want of water-closet accommodation. In the Lerwick District the absence of these conveniences, and the circumstances which render the introduction of same impossible, in the meantime at anyrate, have been commented on in previous reports.

With regard to the Scalloway District, it was hoped that the provision of water-closets would have overcome the difficulty, and while the new W.C.'s that have been provided are an advance to this end, the question of the water supply will hold up any further improvement until additional water is obtained.

Considering these circumstances, however, the scavenging, such as it is, is very creditable to those who carry it out, more especially to the scavenger in charge of the Lerwick District.

#### NUISANCES.

The number of complaints received during the year under re-



view amounted to twenty-nine, and had reference to closed drains, offensive matter, structural defects, animals being kept in an insanitary condition, dirty houses, defective wells, dilapidated houses, accumulations of sewage, defective cesspool, etc.

One hundred and sixty-eight intimations were served, and nine statutory notices, and the nuisances abated totalled one hundred and sixty-three, including workshop nuisances.

The principal nuisances remedied were as follows:—

Water supplies protected .....	34
Drainage systems improved .....	9
New opening windows provided to dwelling-houses .....	11
Existing windows made to open ...	6
New floors of wood or cement concrete laid down or repaired .....	19
Roof coverings renewed or repaired ...	6
Choked drains cleared out .....	5
Accumulations of offensive matter removed .....	2
Damp houses improved .....	1

The workshop nuisances consisted mostly of the repairing and lime-washing of privies, and a few structural defects in the huts for employees.

### GENERAL INSPECTIONS.

The above inspections embraced systematic visits to dwelling-houses with regard to protection of wells, drainage disposal, structural condition of the houses, dampness, means of ventilation and lighting, disposal of refuse and offensive matter, sanitary condition of surroundings of premises, and, in addition, the routine inspection of factories and workshops, dairies, cowsheds, schools, and burial grounds.

### SPECIAL INSPECTIONS OR INQUIRIES.

Special inspections were made in connection with complaints received, and in cases of notifiable infectious diseases. The infectious cases visited were as follows:—Tuberculosis 25, Scarlet Fever 22, Para-typhoid 5, Measles 5, and Smallpox suspect 1. Twenty-nine cases, mostly Scarlet Fever, were removed to hospital, the remainder being left at home.



Disinfectants were supplied to the home cases, and also the usual instructions regarding precautionary measures to be taken and the penalties for infringements of the infectious disease sections of the Public Health Act.

### SLAUGHTER-HOUSES AND OFFENSIVE TRADES.

There are five licensed slaughter-houses in the Mainland District, and three offensive trades other than slaughter-houses, *i.e.*, the whaling station at Olnafirth, and two fish manure and oil factories at Bressay.

Periodic inspections were made from time to time, and on the whole the premises were found to be structurally in passable repair, and due attention paid to keeping the walls, floors, etc., in a reasonably clean condition.

The Local Authority, in terms of the Meat Regulations, have now adopted Bye-Laws for Slaughter-Houses, which will enable better supervision and control of this class of offensive trades.

There is no change in the condition of affairs at the whaling station. The ex-Secretary for Scotland, the Rt. Hon. W. Adamson, M.P., visited the premises last year, and met representatives of the Local Authority and the Herring Trade, with reference to the effect of whaling on the herring fishing, and also in connection with the question of the equipment of the premises for prevention or mitigation of nuisances, etc., arising from the process of converting the whales into marketable products.

The arguments against whaling, on both the issues raised, were very ably and lucidly represented by those whose intimate knowledge of the matter could not be otherwise than convincing, but at the end of the discussion Mr Adamson stated that it was a difficult matter to decide, and would require to be carefully and fully investigated in all its aspects before coming to a final decision either way. The subsequent change of Government has, however, brought the matter back to the *status quo*.

### UN SOUND FOOD.

During the year 335 inspections were made in connection with unsound food, under Section 43 of the Public Health (Scotland) Act, 1897, and 137 articles of food were condemned and destroyed. The various inspections were made up as follows:—Slaughter-



houses 93,\* Butchers' shops 167, and Grocers' shops 75; and undernoted are details of the seizures:—

No.	Food Article.	Weight.	Disease or other reasons for seizure.
1	Forequarter of beef (Imported dead)	74 lb.	Tuberculosis.
3	Thoracic Viscera, with Mesentery (bovine)	242 do.	do.
2	Beef Offal (except head, tongue, and kidneys)	230 do.	do.
39	Beef Livers	376 do.	Hydatids (E. Veter.)
14	do.	148 do.	Flukes (Dis. Hep.)
1	Carcase of Mutton	45 do.	Decomposition.
1	do.	40 do.	Strangulation.
2	Beef kidneys	2½ do.	Nephritis.
5	do.	6½ do.	Hydatids.
1	Carcase of Veal	20 do.	Decomposition.
9	Tins Meat Paste	1 lb. 2 oz.	Damaged Container.
3	„ Swiss Milk	3 do.	do.
11	„ Soup	8 do.	Rusty Containers.
1	„ Stewed Beef	2 do.	do.
1	„ Salmon	1 do.	do.
1	„ Minced Collops	1 do.	do.
22	„ Milk and Cocoa	22 do.	Blown containers, due to fermentation.
15	Glass Jars Lemon Curd	2 do.	Rusted Capsules, causing discolouration of contents.
3	Jars of Jam	6 do.	Broken covers, and dust on jam.
1	Tin Roast Beef	2 do.	Damaged container.
1	Pork Fat and Kidneys	5 do.	Decomposition.

The total weight of all the “unsound food” amounts to 1236 lb., and all the seizures were made with consent of parties in whose possession the articles were found.

As in former years, the cause of so many livers being condemned is, as will be seen, due to parasitic infection—Hydatids (E. Veter.) and Flukes (Dis. Hep.) The question of dealing with the first-named, in connection with the number of dogs in the County, was mentioned last year, as was also the other suggestions for taking measures to combat the disease, but the matter practically remains where it was.

The elimination of the cause which produces the fluke is also a difficult if not impossible matter in this County, since it involves the question of efficient drainage of all grazing ground where the

\* The number of slaughter-house inspections include only those made between 1st January and 14th August. For the remaining inspections and seizures of unsound food found in slaughter-houses from 18th August to 31st December, see separate returns made up in accordance with the Public Health (Meat) Regulations (Scotland), 1924.



particular water snail that propagates the disease finds a lodgment.

It is again gratifying to record that the percentage of seizures for Tuberculosis is so small, compared with the other diseases mentioned. With the exception of the forequarter of beef which was found in a butcher's shop and had been imported from the south, the only seizures for this disease were confined to the offals.

What is of more vital importance, however, from a tubercle-free milk standpoint, is the fact that no animals showing deposits in the glands of other parts of the viscera had any traces of the disease in the udders or mammary glands. Taken all over, therefore, this particular disease, which is so prevalent and so much in evidence at the great majority of other places in Great Britain, is not by any means general in this County, at least judging from the animals slaughtered; and although it may be contended that the animals slaughtered probably bear a small proportion to the number exported from the Islands, and slaughtered elsewhere, of which no records can be had bearing on this point, it is fairly reasonable to assume that if the disease were common the animals killed here would be more frequently found affected, since the various classes of bovines slaughtered in the Mainland District are drawn from all parts of the County.

With reference to the conditions under which the perishable food supplies are kept and sold, there is still in a number of cases considerable room for improvement. Taken all over, however, a fair standard of cleanliness was found in the various premises inspected, but there is still a want of proper protection against dust and flies where perishables such as butter, margarine, etc., are sold. There are also in some instances shops which are directly connected with the shop-keeper's dwelling-house, and although there is no specific legislation against this, it is a highly objectionable, if not a dangerous principle, from a public health aspect. Another objectionable feature, in some places where food is lying about in an exposed condition, is the practice of allowing customers to smoke and spit while on the premises, and all shop-keepers should hang up a notice prohibiting such a thing taking place.

The attainment of these ideals may to some people savour somewhat of an interference with the liberties of the subject, or the fastidiousness of the official mind, but as the origin of many diseases from which humanity suffers is not known, it is only right and proper that every fair and reasonable means should be adopted to ensure that human food is sold under hygienic conditions.

## SCHOOLS.

During the year the Education Authority effected various re-



pairs at different schools, and alterations are in progress in connection with others.

Gravitation water supplies have been laid down at Cunningsburgh and Quarff Schools, and it is to be hoped that the Authority will continue their efforts in this direction wherever it is practicable to do so. A sample of the water supplying Mid Isle School, Burra Isle, was sent for analysis, and, being found satisfactory, work is in hand for laying it into the school premises. The question has also been discussed of putting the School privies into a proper sanitary condition, and it is hoped that it may be possible to adopt some form of latrine which could be flushed by a cistern supplied from the new water main.

A new Side School has been erected for the Lochend District, North Roe, with suitable privy accommodation for the use of the scholars, and is a great improvement on the old building previously used for school purposes.

Five schools were disinfected, owing to infectious diseases notifiable and otherwise, and altogether twenty-eight general inspections were carried out during the year.

## WORKSHOPS.

Seventy-six workshop inspections were made during the year, and intimations for the removal of 54 nuisances were served, which were all attended to. The nuisances consisted principally of privies to limewash and repair, dirty floors and seats of privies, choked drains, and accumulations of ashes and other refuse matter.

Three privies were fitted up, and special attention was given to all conveniences being properly screened in accordance with the Sanitary Provisions of the Factory and Workshops Act.

The question of the water supply at the herring yards at Bressay, referred to in last year's report, was investigated during the fishing season, and a large reservoir has been built on the site of what appears to be the outlet of a deep spring, believed to have a fairly constant flow of water all the year round. This supply is intended to provide water for five stations, and if the spring gives the anticipated yield, all requirements for potable purposes, personal ablution, and washing clothes should be met.

The spring, however, is some little distance from the stations, and as the site of the reservoir does not permit of gravitation to the different premises, a pump has been fitted up for drawing water. There may, however, be a possibility of leading the water nearer to the stations, and if it is practicable to do so, and all parties interested are agreeable, this arrangement will likely be carried out during the next fishing season.



The amended Bye-Laws for Seasonal Workers, having been considered by the local curers, and approved by the Local Authority, have been forwarded to the Board of Health for confirmation, and, when they come fully into operation, will greatly improve the sanitary conditions under which the employees in the herring trade have to live and work.

Three factory bake-houses are in course of extension and alteration, and when the work is completed these premises will be in a very satisfactory state.

### COMMON LODGING HOUSES.

There are no common lodging houses in the district.

### DAIRIES, COWSHEDS, AND MILKSHOPS.

Although the Regulations relating to above came into force on 13th December, 1923, no certificates of registration have so far been issued, as the Local Authority agreed to a transition period ending April, 1925, so as to allow all persons intending to carry on the trade to have their premises put into order.

One hundred and twenty-eight inspections were carried out, attention being given to secure periodic limewashing and such other precautions as could be effected under existing conditions, so as to secure some measure of protection to the milk supply.

It will probably take some time, however, to effect at most premises even the modest requirements laid down in the Regulations, as the season for doing such alterations is so short, and agricultural and other work occupies so much of the available time at disposal, but where improvements are in progress at the expiry of the period allowed, and an honest endeavour is being made to carry them to completion, consideration might be given to allowing a further extension of time to finish the alterations.

### BURIAL GROUNDS.

Little requires to be added to what has already been reported regarding the condition of the graveyards. Eight inspections were made, and, with the exception of Tingwall Churchyard, there was no apparent overcrowding or other conditions that would have warranted any action being taken.

The premises at Tingwall were inspected while an interment was taking place, and, before the earth was filled in, a considerable quantity of human remains, which had been thrown out when the grave was dug, were first re-deposited round the sides of



the coffin. On enquiries being made of one or two of the funeral party and also the gravedigger, it was admitted that the disinterment of human remains was of common occurrence when digging graves, and it was stated that on one occasion human bones, with the flesh still adhering to them, had been disinterred to allow of a fresh burial taking place.

These circumstances were brought to the notice of the Session Clerk of the Church, and after the whole matter had been discussed with parties interested, it was agreed to have the churchyard enlarged.

### BURIALS.

No burials were carried out during the year.

### BYE-LAWS.

*Buildings.*—Six plans and specifications were submitted for erections and additions in the Lerwick Special District, and five of these were approved of by the Local Authority.

The plans referred to a garage, additions to three dwelling-houses, and extensions to a shop.

The premises for which sanction was refused were proposed to be erected for seasonal workers on a site where there was no service of sewers or water mains, and in consideration that the premises would become a nuisance in consequence, the report of the Medical Officer and the Sanitary Inspector was against permission being granted.

Thirty inspections, including those made in connection with the introduction of sinks and W.C.'s at Scalloway, were carried out, and the work where completed was found to be satisfactory.

*Pig-Stys.*—Five pig-stys were inspected, but pigs were found in only two of the premises visited. As these last were being kept in unsuitable premises near dwelling-houses, the owners were notified to have the pigs disposed of, and to cease keeping same.

The other pig-stys are not structurally in accordance with the Bye-Laws, but in view of the fact that they are situated well away from any public place or dwelling-house, it was not considered necessary to take any action regarding the matter.

### HOUSING AND TOWN PLANNING.

As already mentioned in the returns under the Housing, Town Planning, etc. (Scotland) Act, 1919, one hundred and sixty-seven



dwelling-houses were inspected during the year, and where necessary were dealt with under the Public Health (Scotland) Act, 1897.

The districts inspected were Lerwick (Landward), Cunningsburgh, Virkie, Boddam, Bridge-of-Walls, Levenwick, Aith, (Aithsting), Ollaberry, Scalloway, Trondra, Burra Isle, Mid Walls, South Whiteness, Girsta, Olnafirth, Hillswick, Sandwick, and Whalsay.

Five houses were vacated owing to the impossibility of rendering them habitable, and in three cases new houses were erected instead. In the other two cases the occupiers were old age pensioners, who, on account of their inability to work the crofts and put the houses in order, removed to cottar houses.

With regard to the houses inspected, little requires to be added to what has already been stated in previous reports about housing generally in the district. Where structural defects were found to exist, intimations of nuisances were served on parties responsible, and taken all over these were fairly well attended to, considering the conditions which obtain here in getting improvements carried out. In most cases the desire for better housing accommodation is not wanting by those who stand in greatest need of such, but the attainment of this will depend pretty much upon the prosperity of the local industries and the price of building materials.

A fair standard of cleanliness was found all over. Two complaints were lodged regarding dirty dwelling-houses, and notice of same was sent to parties responsible. In one case the house was cleaned up, but in the other nothing was done, and the matter was reported to the Parish Council, as the individual in question (a man living alone) appeared to be unable to realise the fact that he was living in an insanitary condition. As already reported 94 sanitary conveniences were erected at various dwelling-houses in the district.

#### HOUSING ACCOMMODATION AND FINANCIAL ASSISTANCE BY LOCAL AUTHORITY.

A scheme under the Housing etc., Act, 1923, was formulated by the Local Authority *re* financial assistance to those desirous of building houses, and several applications are under consideration. It is to be hoped that the assistance now offered under the Scheme will stimulate a greater interest in the matter of providing new houses by all who are in a position to avail themselves of the facilities mentioned.



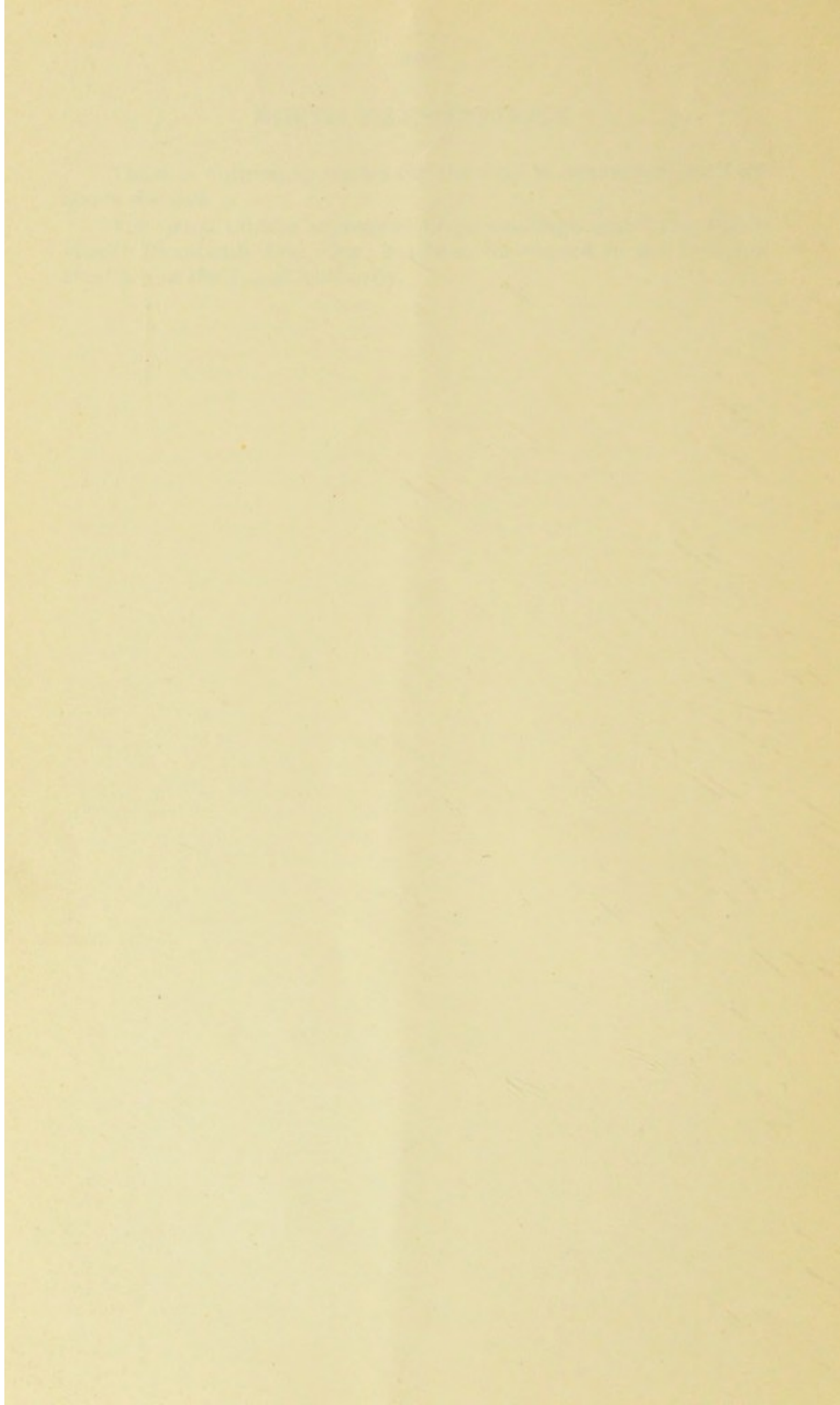
## NORTH ISLES DISTRICT.

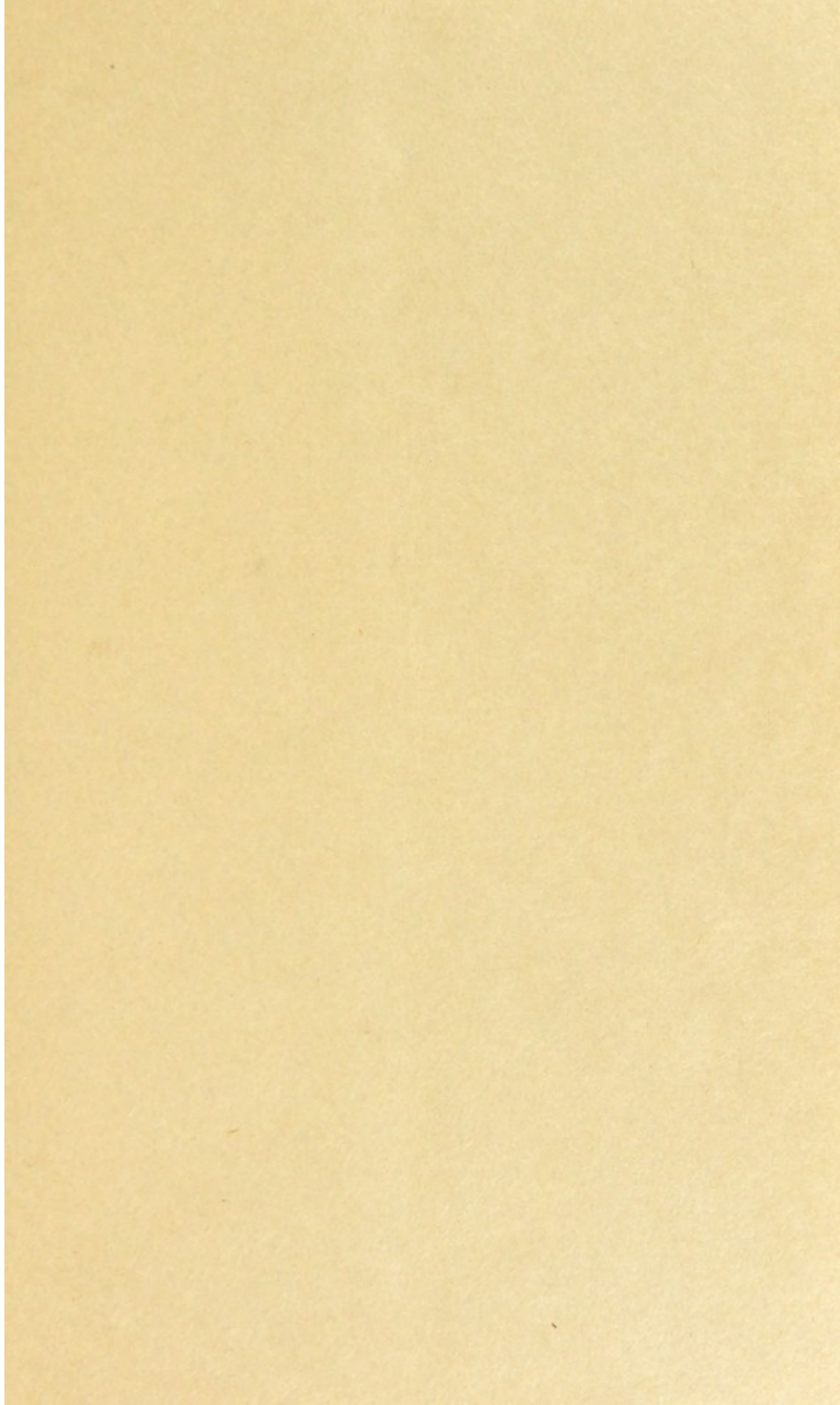
There is nothing to report for the year in connection with the above district.

The usual tabular statement of proceedings under the Public Health (Scotland) Act, 1897, has been forwarded to the Board of Health and the Local Authority.











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