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Contributors

Caernarvonshire Combined Sanitary Districts.

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Caernarvonshire Combined Sanitary Districts.

THIRTY-FIRST
(XXXI).

WELSH BOARD OF HEALTH

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Annual Health Report

OF THE

District Medical Officers of Health.

NORTHERN DIVISION :

(As it is since April 1934).

BANGOR CITY, BETHESDA, LLANDUDNO, LLANFANFECHEAN AND PENMAENMAWR URBAN DISTRICTS ; NANT CONWAY, OGWEN, AETHWY (part), AND HIRAETHOG RURAL DISTRICTS

G. LEWIS TRAVIS, M.R.C.S., L.R.C.P., D.P.H.

SOUTHERN DIVISION :

(As it is since April 1934).

CAERNARVON AND PWLLHELI BOROUGH ; CRICCIETH AND PORTMAUDOC URBAN DISTRICTS
GWYRFAL, LLEYN, DEUDRAETH, AND AETHWY (part) RURAL DISTRICTS.

E. LLOYD OWEN, M.D., and Master in Surgery (Edin.,) D.P.H.

APPENDIX.

Districts outside the Combine, viz., :—CONWAY BOROUGH, BETTWSYCOED AND LLANRWST URBAN DISTRICTS.

For the Year 1938

CAERNARVON :

PRINTED BY W. GWENLYN EVANS AND SON, COUNTY PRINTING WORKS.

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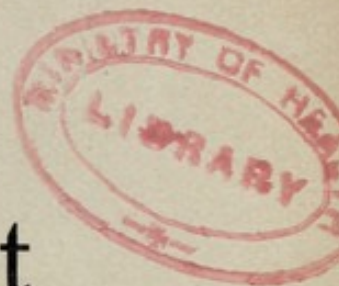
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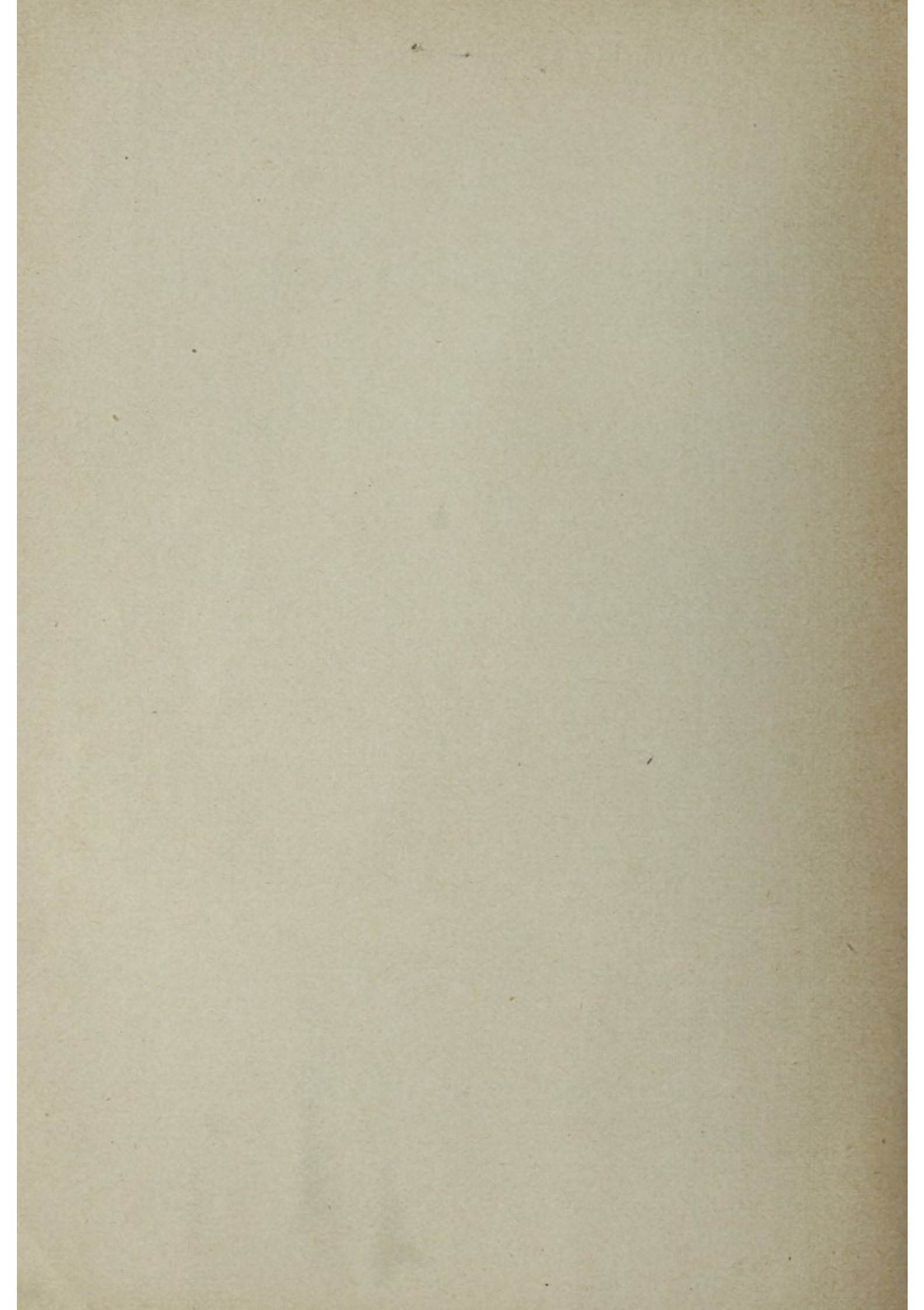
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URBAN DISTRICTS.

For the Year 1938

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Introduction.

To the Chairman and Members of the Caernarvonshire Joint Sanitary Authority.

GENTLEMEN,

We beg to submit to you our Annual Health Report for the year 1938.

This is our THIRTY-FIRST Annual Report.

Our Area covers the whole of Caernarvonshire (practically), and parts of Anglesey, Denbighshire and Merionethshire, so we have, between us, the opportunity of coming into touch with the County Medical Officers and Tuberculosis Physicians and other officers of *four* out of the six Counties of North Wales (all except Flintshire and Montgomeryshire).

We take leave here to recapitulate some of the problems that for the most part seem to confront us from year to year. Most of these matters may be found discussed in a previous Introductory Report.

- (1) *Cancer*.—The Appeal Fund (for Radium and other Treatment): Annual Medical Examinations. Prevention and Early-Treatment Clinics. Treatment in Hospitals with full modern equipment. Should Cancer be made notifiable? Is it infectious? Should disinfection take place after external, or all forms of Cancer? Certainly after external (and semi-external) septic or discharging types.
- (2) *Venereal Diseases*.—Should they be made compulsorily notifiable? The feeling of previous Annual Meetings was against this. The question of Sex Instruction in Schools and Maternity Clinics.
- (3) *Milk (also Cream, Butter and Cheese)*.—Should Sanitary Inspectors of every Council in addition to the Inspector of Food and Drugs and the County Council, take samples of Milk? This is done in most Districts to test Cleanliness, Richness, &c. which are so important to Infants, Invalids and everybody. A resolution was passed at a previous Annual Meeting in favour of this. There should be more sampling of Butter also, to check uncleanly methods. Should full jurisdiction extend over "occasional surplus" milk and butter through an Amending Act of Parliament? How to encourage more Designated or Graded Milk production (Certified Tuberculin-Tested, Pasteurised, Accredited, &c.). Should commercial milk be Pasteurised at least until more reliable methods of Milk-production have been established? (See Tuberculosis below). The question of "Milk for School Children." Veterinary Inspection of Milch Cows and other Cattle, and thorough testing of Milk, Cream, Butter, &c. The question of Cream, Preserved Cream, Confectioners' Cream, Ice Cream, &c. Should Landlords be made responsible for repairs to Cowsheds as they are to houses? and for providing proper Dairies (separate from pantries)?
- (4) *Housing*.—Should the Government be more generous, and the Councils be more courageous in the matter of building? Do the Councils advertise sufficiently the Government or County Council subsidy to owners towards re-conditioning houses for rural workers? How many Rural Councils availed themselves of the Two Million Pounds Supplementary Grant (1931)? A great opportunity lost by some Councils. Housing and Tuberculosis. A Quota of Council Houses should be allocated to families of Tubercular persons. There should be a Special Government Grant towards the erection of roomy houses for Tubercular families, independently from Slum-clearance, Overcrowding, and Agricultural Grants.

Slum Clearance.—Have all the Councils—Rural and Urban—risen to the occasion, and decided to build the necessary alternative accommodation? Similarly with regard to Individual Unfit Houses and Overcrowded Houses (the Overcrowding Act, 1935)—will the Councils act determinedly? And again with the proposed new Agricultural houses?
- (5) *Tuberculosis*.—Long overdue Reforms: The question of an After-care Committee for each of the four Counties, coupled with the essential question of providing several trained Female Health Visitors. Annual Medical Examinations (Tuberculin-testing for Humans?). Testing Milk and

Cattle for Tubercular infection : Dr. Wade's Report on the High Mortality among Quarrymen. A Later Investigation by Drs. Sutherland and Bryson. A third Investigation by Dr. Chalke for the Welsh (Memorial) Tuberculosis Association. A combination of methods necessary to fight Tuberculosis. Dual notification (Provisional and Positive) suggested, in order to secure early information. Tuberculosis and Housing (see above). See below—Disinfection.

The Clement Davies Inquiry.—The Government Committee of Inquiry (Mr. Clement Davies, M.P., K.C., and Dr. Coutts), which held sittings in the spring of the past year (1938) in various parts of Wales, including an extra sitting at Caernarvon (on the suggestion, in the first instance of your Southern Medical Officer—E. Lloyd Owen), should find a prominent place in this list of Investigations into the abnormal incidence of Tuberculosis in the Gwyrfaï Rural District, as well as in other Welsh Districts and Counties, all through the years.

P.S.1.—Not care “*after*”—*after* the patient has returned from the Sanatorium—will be the only work of the “After-Care Committee,” but care from the beginning of the illness, and if possible, from the Pre-tubercular stage. Therefore a “Dual-care Committee” would be the better term—care *before* and care *after*—in other words, *Preventive* care and *Curative* (or Remedial) care.

If it be feared to lose the word “After” from the title, the Committee could be called the “After and Dual Care Committee.”

- (6) *Disinfection in Tuberculosis and Fevers.*—(a) Of Premises. (b) Of Articles of Bedding, Clothing, &c. Steam Disinfectors in existing Institutions can only be used to a very limited extent for outside cases—5, 10, 15, 20, 30, &c., miles away. How can *intermediate*, let alone distant districts like the South Caernarvonshire Districts, Deudraeth, Hiraethog, Geirionydd, &c., be served? The question of Portable Disinfectors and extra Disinfecting Stations. The question of a special Disinfecting Officer or Officers for disinfecting after Fever, for Tuberculosis (periodically during *life*, as well as after departure to Sanatorium and after Death), for disinfecting Schools, Halls, &c. The King Edward Memorial Association have mooted the question of Travelling Disinfecting Vans, with Disinfecting Officer, for disinfecting premises and bedding, &c.

P.S.2.—The question of Disinfection in connection with Tuberculosis cases bristles with difficulties, and raises the matter of disinfecting carpets (where the use of them has not been discarded), of mats and of unwashable and in some cases, expensive articles of personal clothing, &c. As also the question of stripping the walls (and making good the perished plaster), and repapering or colouring the walls and ceilings, and perhaps repainting and revarnishing woodwork, &c.

Who is to bear the expense—tenant, landlord, or Sanitary Authority?

Also the question of disinfecting articles from infected houses prior to their exposure for sale at public auctions, jumble sales, including also articles purchased on the hire-purchase system and claimed back by the dealer owing to stopping of payment.

Also the question of how to temporarily house the patient and family (in some cases) during the process of disinfection.

Also how to overcome the natural disinclination there might be on the part of the patient and his family to have the house (or bedroom) disinfected periodically during life.

- (7) *Fevers.*—(a) Councils who have not yet made provision for Smallpox Isolation; (b) Councils who have not yet made provision for other Fever Isolation; (c) Immunisation against Smallpox, Diphtheria, &c. Caernarvonshire has had the courage to decide in favour of General Immunisation of Children of all ages against Diphtheria. The work is going on in a thorough manner. The heavy Diphtheria Epidemic of 1937—38 prompted the County Council to take this step. (d) Should Measles, Whooping Cough, Chicken Pox, &c., be made notifiable? (e) See Disinfection above.

- (8) *Meat*.—Establishment of additional Public Abattoirs; further adoption of Humane Methods; should not the Government insist on uniformity in the method of slaughtering, and on treating sheep and lambs and pigs like other animals? Registration of Slaughtermen. Meat certificates for Sanitary Inspectors. Farmers slaughtering on unlicensed premises. Farmers' and Butchers' opposing view-points. Government should take control in the interest of Consumers.
- (9) *Water Supplies*.—Privately and Publicly-owned Water Undertakings should be kept under observation and Analyses (chemical and bacteriological) be called for at sufficiently frequent intervals. Every Sanitary Authority (alone or in combination with one or more others) should have a qualified Water Engineer in their Service.
- All hamlets, as far as possible, and smaller collections of houses, without a piped water supply, should have schemes of such provided for them, both for the sake of pure drinking water and for hosts of other purposes, including acting as a necessary preliminary to a Drainage System.
- (10) *Drainage and Sewerage*.—Following on, or concurrently with, a Water Scheme, such districts should be provided with a Drainage System, and all Dry Closets be converted into Water Closets.
- (11) *Public Scavenging*.—Similarly, Public Scavenging Schemes should be universally extended to every hamlet, and, as far as possible, to every smaller collection of houses.
- (12) *The question of a Public Health Laboratory for North Wales*.—(See Report on Caernarvon Borough).

By the way, the Ministry of Health have announced that the Medical Research Council, under the War Emergency Public Health Laboratory Scheme, have established a Laboratory (subsidiary in a sense to the Cardiff Laboratory), at the Fisheries Experiment Station, Conway, under Dr. D. T. Robinson.

It may be hoped that this will become a permanent institution, to continue at Conway, or be transferred to Bangor perhaps.

- (13) *Isolated Houses (or Blocks of Houses), Cowsheds and other Establishments*.—Failing Public Water Supply, Public Drainage and Public Scavenging, adequate private facilities should be insisted upon from the start, and "here and now" in the absence of such provision having been made at the beginning.
- (14) *Where to draw the line?*—It must be considered that it is often a very difficult matter to decide when Public facilities in the way of Water Supply, Sewerage and Scavenging should be extended to, or withheld from a dwelling house or collection of houses. Similarly with farms and other establishments.

It would be well if certain principles could be agreed upon. We presume it is partly, at any rate, an actuarial question.

- (15) *Maternal Mortality and Infant (including New-born) Mortality*.—Also Still-born Mortality; how shall we lesser Sanitary Authorities help to reduce these? At least, by seeking to raise the Standard of Housing and Sanitation generally.
- (16) *Vital Statistics*.—For comparative purposes it may be mentioned that the Live Birth-rate, Death-rate and Infant Mortality for England and Wales in 1938 were 15.1, 11.6, and 53.0, as compared with 14.9, 12.4, and 58.0 in 1937, and therefore slightly higher as regards Birth-rate, appreciably lower as regards Death-rate and slightly lower as regards Infant Mortality.

We have the honour to be, Gentlemen,

Your obedient Servants,

G. LEWIS TRAVIS.
E. LLOYD OWEN,

Re The Clement Davies Tuberculosis Report.

In the Public Health sphere, the year 1938 will always be associated with the Government Commission or "Committee of Inquiry into the Anti-Tuberculosis Service in Wales (including Monmouthshire)." both with the numerous sittings of the Committee held in the early part of the year at Cardiff, Swansea, Shrewsbury, Colwyn Bay, and Caernarvon (not to mention visits to Tuberculosis Hospitals, Sanatoria, Dispensaries, Settlements, Laboratories, Sanitary Works, Schools, and, of course, actual homes, and with the ample Report or Blue Book issued by the Commissioners on October 13th, 1938.

This Report, with the typed transcript (in several folios) of the official shorthand notes of the proceedings of the Committee during their public sittings of 36 days, will be quoted for many a long year, and cannot be ignored in any Annual Report by Health Medical Officers.

A number of quotations from the said Report, in which references are made to Caernarvonshire County and to 8 of its 13 Sanitary Districts, are given in this present report.

As may be gathered from the following account of the Committee proceedings, the Chairman (Mr. Clement Davies) was particularly sympathetic and gracious to me, but I must not let this deter me from expressing my keen disappointment that he and Dr. Coutts have allowed certain wild and incorrect statements about certain houses to appear uncontradicted in their Final Report, which will go down the centuries. And this in spite of the fact that after further careful inspection of the said houses I had sent them a sworn statement flatly contradicting the said observations, accompanied by a solemn, statutory Declaration made before a Commissioner of Oaths, and demanding that these observations should be expunged from the evidence or at least that my sworn statement of contradiction should also appear in the Final Report. Further details will be found further down in my report.

QUOTATIONS

from the Official Report of the Committee of Inquiry into the Anti-Tuberculosis Service in Wales (including Monmouthshire). (Commissioners: Mr. Clement Davies and Dr. Coutts).

re Caernarvonshire.

"Administration is difficult in this mountainous county, which consists of 11 Borough or Urban Districts, and 5 Rural Districts, and which has a very extensive seaboard with a number of Health Resorts, an Industrial Area engaged in Slate-quarrying (also Granite-quarrying) and a large Agricultural Area, with Small Holdings, Medium-sized Farms, and large Sheep-walks.

"Under arrangements dating from 1876, certain Sanitary Authorities in Anglesey, Caernarvonshire, Denbighshire and Merionethshire combined in the Caernarvonshire Joint Sanitary Authority to provide two full-time Medical Officers of Health (2 at present, 1 at one time, and 3 at one time). Each Officer covers a tremendous area. Dr. Lloyd Owen's district includes not only the Gwyrfai and Lleyn Rural District, 2 Boroughs, and 2 Urban Districts in Caernarvonshire, but also the Deudraeth Rural District of Merionethshire, and half of the Aethwy Rural District of Anglesey.

|| "He complained to us, not without good reason, that he was not allowed any Travel-||
ling Expenses over and above his salary, nor any clerical assistance.

"His Annual Reports on Housing and Sanitary Conditions are very full, and he has obviously been continuously urging on the Councils the need for more houses and better sanitary conditions.

The County as a Whole.

"The Local Authorities of Wales in general have not taken the advantage that they should have done of the powers and assistance given to them by Parliament. The best use of the said powers and assistance has been made in Flintshire, Swansea, Denbigh-

shire, Newport, Cardiff, Carmarthenshire, Monmouthshire, Caernarvonshire and Glamorganshire. There is consistent falling off in the efforts made in the remaining 8 Counties and County Boroughs. In Caernarvonshire the number of houses built by Local Authorities, or private enterprise with assistance from the Exchequer, since the Great War, is 2,229. the number under construction by Local Authorities with grant assistance was on the 31st May, 1938, 521, making a total of 2,750.

" Building without State Assistance has been considerable in this County. 4,405 houses have been so built (including 97 by Local Authorities) since the War. The record of building by the Local Authorities looks better on paper than in fact it is.

" Considering the great number of old and thoroughly bad houses, and considering the unenviable record of Mortality from Tuberculosis, the District Councils should have been much more active than they have been, and the County Council should have been much more vigorous and thorough in its supervision.

[" On the other hand, the County Council were very slow on their own account, as well, for example, in making the Housing (Rural Workers) Act effective. They have also been very slow in launching an After-care Scheme, with a staff of Female Health Visitors, trained in Tuberculosis work. E. Ll. Owen].

Caernarvon Borough.

" A number of uninhabited houses (following upon 3 Slum Clearance Inquiries. E. Ll. Owen) in this town are still standing, and are a source of danger. We were given to understand that some of them belong to the Office of Works.

" They should be removed as soon as possible.

" The Council seem to be alive to the needs of their town, and are making considerable progress with their Housing Schemes. (447 Council Houses owned in July, 1939. E. Ll. Owen).

Bangor Borough.

" Bangor Council seem to be dealing with their Housing problems effectively. When they have completed their present schemes, they will not only have done away with their Slum houses, but also have got rid of their Overcrowding.

Llandudno Urban District.

" Llandudno is of course a new and flourishing seaside resort. There can be no complaint against the Council. We did, however, hear a complaint with regard to overcrowding during the summer months, and a complaint with regard to high rents, but we accept the explanation which was given to us on behalf of the Council.

Pwllheli Borough.

" The conditions in this old town were made the subject of special investigation by Dr. Chalke. We ourselves also visited the town.

" In the old part of the town the conditions are far from satisfactory, but the Council have built a number of houses, both of the Parlour and Non-Parlour type, and have a programme which, when carried out, ought to, make conditions more satisfactory within the area.

" The Council should have been more vigorous in the past, considering the bad Tuberculosis record and the fact that the town attracts many visitors during the summer. (122 Council Houses owned in July, 1939. E. Ll. Owen).

Portmadoc Urban District.

" Dr. Lloyd Owen says that, —in spite of the erection of a number of new houses, there are individual unfit houses and overcrowded houses in this old port, and also that there are a number of houses in great need of repair. (23 Council Houses owned in July, 1939.—E. Ll. Owen).

Gwyrfai Rural District.

" Dr. Chalke records that, as long ago as 1913, a letter was received by the Council from the Local Government Board stating that the Board intended issuing an Order requiring the Council to erect dwelling houses (to be completed within 9 months from the date of the Order), in the neighbourhood of Ebenezer and Clwtybont.

" This was never carried into effect (was the Order issued, or was it held over because of the Great War ? E. Ll. Owen), and between this date and June, 1933, when Dr. Chalke's Report was issued, only 6 houses (at Clwtybont) had been erected by the Local Authority. (504 Council Houses owned in June, 1939. E. Ll. Owen).

" As a result of Dr. Chalke's Report, a conference was called at Caernarvon of the representatives of all Local Authorities and Insurance Committees. Arising out of this Conference, a number of Recommendations were made and approved.

" These recommendations, together with the observations of the County Council thereon, were considered at a meeting of the Health Committee of the County Council on the 21st July, 1934, and following upon that meeting, a communication was sent by the County Council to the Gwyrfai R. D. Council. But in our opinion much more vigorous action should have been taken immediately (by the County Council or the Gwyrfai Council, or both ? E. Ll. Owen).

" Undoubtedly, since 1936, the Gwyrfai Council has been deeply concerned about Housing, Sewerage, and Water, and there is an awakening throughout the District as to the needs of the people.

" The Council has erected a large number of new houses, and a large number are in course of erection, while tenders have been invited for many more. The Council are also negotiating for Housing Sites in many of the villages, and we believe they are determined, as soon as they reasonably can, to rectify the conditions which they themselves described to us as appalling. We believe also that the County Council will exercise a vigilant supervision over the Rural District Council, [without neglecting their own district.—E. Ll. Owen].

" In his reports on Gwyrfai, Dr. Lloyd Owen has called attention to the shortage of houses, with resultant Overcrowding, and he also states that there are a great number of dwellings which might have been, but for the shortage, condemned as unfit. He has also reminded the Gwyrfai R. D. Council of their failure in the past to take advantage of the Housing Acts and Exchequer Subsidies (page 154).

" Since January, 1935, in the Gwyrfai District, the cost of both Water and Sewerage Schemes is borne on the General Rate instead of by the individual Parishes, and, as a result, useful and necessary schemes have been carried out. It is the policy of the Gwyrfai Council to prepare Schemes for the benefit of smaller outlying hamlets in their District.

" Between January, 1935, and March, 1938, 10 Sewage-disposal Works were constructed in the villages, and 15 new Sewers and Extensions of Sewers have been laid, while other Schemes are in course of being undertaken. Further, quite a number of Water Schemes have been completed. (504 Council Houses owned in July, 1939. E. Ll. Owen).

Lleyn Rural District.

" Dr. Lloyd Owen, in his Report for 1935, called attention to the acute shortage of healthy houses, of the working-class type to meet the needs of new tenants, and to replace insanitary dwellings.

" He states that not a single Council House had been built, nor had any applications been made under the Housing (Rural Workers) Act, 1931.

" " In spite of hard pleading on my part, the Council declined to make a claim ' until it was too late for the Supplementary Grants under the Housing (Rural Authorities), Act, 1931. These grants would have been in addition to the ordinary grant ' available under the Wheatley Act, 1924), and would have enabled the houses to be ' let for about 2s. 6d. a week, including the rates.

“ ‘The Council later contemplated building a number of workmen’s dwellings on the strength of the Wheatley Grant alone, and appointed a Committee for each of the divisions of the District to prepare a Scheme. The Fourcrosses division was very slow to move, and the Sarn division also ceased to move the moment the Wheatley Grant was withdrawn.’

“ Dr. Lloyd Owen also pointed out that there were Individual Unfit Houses which could not be rendered habitable at reasonable expense. (82 Council Houses owned by Council July 1. 1939. E. Ll. Owen).

Criccieth Urban District.

“ The conditions in this small seaside town are not satisfactory, and this has been pointed out to the Council by Dr. Lloyd Owen.

“ In his Annual Report he stated that for several years, not a single workingclass house was built, and consequently, it was impossible to make Closing Orders. He stated also that there were a number of inferior and defective cottages. In what he called an unhealthy area of 10 houses near the sea, a storm so destroyed the houses that all but 3 had to be vacated immediately.

“ The Council then bought these 3 houses, and the remains of the others for the purpose of roadwidening. They also pulled another down, for the same purpose, and bought another inferior house for demolition.

“ In this way 12 houses were demolished.

“ 16 new houses were then erected in 2 lots by the Council. In spite of the erection of new houses there was still Overcrowding, and still a shortage, and Dr. Lloyd Owen added that more new Workmen’s dwellings were wanted to raise the standard of health and housing.” (30 Council Houses owned by the Council in July, 1939.—E. Ll. Owen).

COMMITTEE OF INQUIRY INTO THE TUBERCULOSIS SERVICE IN WALES
(INCLUDING MONMOUTHSHIRE).

BEFORE

CLEMENT E. DAVIES, ESQ., K.C., M.P., AND

DR. F. J. H. COUTTS, C.B., M.D.

Secretary—D. J. WILDGOOSE, ESQ.

REPORT ISSUED 13TH OCTOBER, 1938.

EVIDENCE-IN-CHIEF (AT CAERNARVON ON 17TH MARCH, 1938)

OF E. LLOYD OWEN, M.D., D.P.H., (M.O.H. FOR 8 DISTRICTS IN SOUTH CAERNARVONSHIRE AND ADJACENT COUNTIES.)

By the way, Mr. Clement Davies and Dr. Coutts in their Report (page 157) write as follows with respect to the Annual Report of Dr. Ernest Jones, of Aberystwyth :—

“ We note that in his 1937 Report, he has rightly set out in full the Memorandum of Evidence which he sent to us. We wish that other Medical Officers of Health who prepared Memorandums for us had followed the excellent example set by him, and by one or two others.”

On the strength of this example of Dr. Ernest Jones, your Southern M.O.H. (Dr. Lloyd Owen) has ventured to incorporate the Memorandum of Evidence given by him at the Caernarvon Inquiry in the present Annual Report.

HEADS OF EVIDENCE.

- A.— Print : Methods of Fighting Tuberculosis.
- B.— Extracts from Annual Reports.
- C.— Myself and The Welsh Memorial Association :
 - C (1) A Tribute.
 - C (2) A Criticism.
- D.— The Place of Tuberculosis among Infectious and other Diseases : Unity of Command Necessary.
- E.— A Different Approach Justified.
- F.— Some Recommendations or Suggestions.
- G.— A Welsh Parliament, Government and Health Ministry wanted.
- H.— Copy of Notice of Motion given at a Conference.
- I.— An Intended Notice of Motion.
- J.— Procedure After Notification.
- K.— Minutes of Criccieth Health Committee.
- L.— Tabular Statement as to Disinfection Facilities and Health Visitors.
- M.— Reply to a Query re Disinfection from Pwllheli Town Clerk.
- N.— Statements as to Personnel (Private and Staff).
- O.— Grievances against Various Bodies.
- P.— A Special Recovery Grant for Gwyrfaï?
- Q.— Stone-dust, Silicosis and Tuberculosis.

OFFICIAL SHORTHAND REPORT OF DR. LLOYD OWEN'S EVIDENCE-IN-CHIEF.

Dr. E. Lloyd Owen, (M.O.H. for eight Districts in South Caernarvonshire and Adjacent Counties), called.

THE CHAIRMAN : Dr. Lloyd Owen, I now propose to take your Memorandum, if I may ?

DR. LLOYD OWEN : I have handed in several documents, Sir. First of all there is the Introduction. Then I have extracts from two Annual Reports. Then I have a little monograph on stone-dust, silicosis, and tuberculosis. Then there is a pamphlet called "Methods of Fighting Tuberculosis." Then there is a paper entitled "Myself and the King Edward Memorial Association," which is first a tribute, and secondly a criticism.

THE CHAIRMAN : I would read that if I were you, and then the other things that you mentioned. You are dealing with the matter in a way which is very convenient to me, and I am very grateful to you. Will you read them, or shall I read them ?

DR. LLOYD OWEN : It would be a great compliment to me if you were to read them.

THE CHAIRMAN : Very well. Documents A and B, &c., are in print, and I have them before me. Then we come to this document C. I will read it :—

C.—"*Myself and the King Edward Memorial Association.*"

C.(1).—A Tribute. I am personally proud of the Welsh Memorial Association for several reasons—(1) Because of its great pioneer work. (2) Because of my respect for its chief founder (Lord Davies). (3) Also for its medical staff (including Dr. Powell, Dr. R. O. Morris, &c.). (4) As a Welsh organisation. This organisation is co-extensive with the whole of Wales (*Cymru Gyfan*), that is Wales as it includes Monmouthshire. Wales as regards size is an ideal unit to work—neither too large nor too small and possessing a united sentiment at that. In a sense it has a counterpart in the Welsh Board of Health, but the powers of the latter, like those of itself, are limited."

C.(2).—Now comes the Criticism : "On Monday, October 4th, 1937, it was announced in the newspapers that a Committee of Inquiry had been appointed by the Government to inquire into the working of the anti-tuberculosis arrangements by Welsh Health Authorities through the agency of the Welsh Memorial Association. On the previous Friday (October 1st) I was present at a meeting of the Royal Sanitary Institute at Llandudno under the Chairmanship of Dr. Charles Porter. In the free discussion following a Paper by Dr. Powell, Chief Medical Officer

of the Welsh Memorial Association, the following provocative question was asked by me in the course of certain remarks of mine which will be detailed below :—‘ Whether the Welsh Memorial Association had not to some extent outlived its usefulness ?’ Dr. Powell at the end of the meeting, replying to the discussion said, ‘ That the Association had definitely not outlived its usefulness.’ He added that the Association considered that they could be of much greater utility if they were only given the chance and that the Association could do the work if the counties provided the money. This is an account of my argument as given in the Press the following day :—‘ The need for more practical interest on the part of Welsh County Authorities was stressed by Dr. E. Lloyd Owen of Criccieth. Dr. Lloyd Owen, while expressing his pride in the Association as a purely Welsh unit, asked whether the Association had not to some extent outlived its usefulness. He was afraid there was not the proper co-ordination between the Local Authorities and the Association. In England the work was carried out wholly by County Councils and County Boroughs, and interest was therefore kept alive by continued personal contact, but in Wales, thanks in a sense to the admirable work of the Association during the past 26 years, there was a tendency for the County Councils to take less interest in the combating of tuberculosis. They did not take a personal, practical part in the work. Could not the Association’s strength be its weakness? In Wales, practically all that the County Councils did was to vote monies towards the Association, and they had not a direct part in the fight. They were too detached from the work. There ought to be some organic connection between the Authorities and the Association, he said. He was sorry to hear of the 250 sufferers waiting for beds in sanatoria, and, without money, beds could not be provided. But what about the hundreds of people already in sanatoria who had no proper houses to return to. In England many authorities provided houses for tubercular families.’ Thereupon I mentioned a number of such English Authorities, including—Sheffield City Council, Middlesbrough County Borough Council, Walsall County Borough Council, South Shields Town Council, Tynemouth Town Council, Sunderland, Dudley, Hull, Paisley (in Scotland). May I add here that these sentiments of mine were not new on that date. I had given expression to them in my Annual Report to the Caernarvonshire Joint Sanitary Committee for 1933, as will be seen on pages x., xi., xii.

THE CHAIRMAN : May I also add that similar representations have been made to me by other witnesses. It shortly comes to this. The County Council allotted tuberculosis work to the Association, and after that everybody shrugged their shoulders and said, ‘ This is a matter for the Association, and not for us.’ The other point is what is the good of sending them to sanatoria if there is not a proper house for them to return to when they come home ?

DR. LLOYD OWEN : ‘ Conclusion. It will be thus seen that the gravamen of my grouse against the Welsh Memorial Association was that it had relieved the county and local sanitary authorities of a great part of their responsibility for tubercular patients that otherwise would have been theirs, and so in a sense robbed the said authorities of the interest which would have induced them to erect houses specially designed as regards spaciousness and number of bedrooms to suit such tubercular families. Further, it may have been a fault of the Association that it did not initiate care or *after-care* committees itself, nor insist that county and other sanitary authorities should long ere this have established such Committees. Such Committees, if they had been formed, would have come to realise the need for re-housing of tubercular families, and would have pressed the matter on their superior authorities. And incidentally, long ere this, there would have been a small army of efficient female health visitors to do liaison work between family doctors, medical officers of health and tuberculosis physicians. The Association in view of their financial and other difficulties should have asked for a Commission of Inquiry long ere this.’

I have this specific charge against the Association. A health visitor for Gwyrfaï was promised. They said there was a health visitor coming to Gwyrfaï, and it was only awaiting sanction. I do not throw the blame on Dr. Powell or his Committee. I do not know whom to blame. I would like you to look into it and find out whom is to blame—the Ministry or Health or whom. There was a distinct promise. I have that definite charge against somebody.

THE CHAIRMAN : Do you want to amplify at all this statement about the Memorial Association which I have read ? I follow it quite clearly. I do not suppose you want to amplify it.

DR. LLOYD OWEN : No.

D.—*The Place of Tuberculosis among Infectious and Other Diseases : Unity of Command Necessary.*

THE CHAIRMAN : Then the next document is headed "The place of tuberculosis among infectious and other diseases. Unity of command necessary." It says : "Although tuberculosis may be regarded as the Public Enemy No. 1 among diseases, still it is by no means the only disease, and two or more diseases may co-exist even in the same household. Of other diseases, a number fall into the same class as tuberculosis, namely, the class of infectious diseases, including the ordinary fevers. These infectious diseases are sometimes called 'The preventible diseases.' Sanitary authorities are sometimes associated in the public mind with these infectious diseases only, but most diseases may be more or less preventible and sanitary or health authorities have to fight other morbidities and mortalities, including general mortality or general death rate, and maternal, infant, cancer, and other mortalities. The campaign against all the diseases, Tuberculosis along with the rest, is under the control of the Minister of Health and his advisers. (I leave aside for the moment the possibility of forming a separate Welsh Ministry of Health for Wales). In the country, the Ministry of Health is represented by the County Councils (and County Boroughs) and their County Medical Officer of Health). (The lesser sanitary authorities may in health matters be regarded as Committees or branches of the County Council and may be left out of the present argument). To resume, on the above analogy the campaign against tuberculosis in the country, including Wales, should be under the County Councils (and County Boroughs) and their County Medical Officer of Health. This argument, which seems a fair one, would put individual tuberculosis physicians of the King Edward Memorial Association under the County Medical Officer of Health, as such tuberculosis physicians are, I believe, in England. This would obviate dual control and would give unified or unity of command of the campaign against tuberculosis like other diseases, but the subordination need not of necessity be more than technical and nominal."

E.—*A Different Approach Justified.*

THE CHAIRMAN : Then the next document is headed "A different approach justified." You put this point very clearly at Colwyn Bay to one of the other doctors, namely, what should be the position of the family physician, should he not be the first line of defence ?

DR. LLOYD OWEN : Exactly.

THE CHAIRMAN : Then I need not read out this document, because that is the point of it.

DR. LLOYD OWEN : That is so.

(The Document was as follows) :—

"A DIFFERENT APPROACH JUSTIFIED.

"The ordinary (or acute) Infectious Diseases (measles, scarlet fever, diphtheria, &c.) are highly infectious and alarming, but after setting up a sharp illness, and running their course, they are as a rule finally overcome by the healing powers of the patient's own system and constitution.

"Tuberculosis on the other hand is more chronic, that is, is slower in its onset and more prolonged in its duration and again slower in its recovery, where that happily occurs.

"Further, the acute infectious diseases as a rule totally incapacitate a person from ability to attend school or work or public gatherings for the time being.

"But neither early tuberculosis (unless of an unusually acute type) nor later quiescent tuberculosis disable a patient from attending such places, as far as he himself is concerned, and the risk to others (as long as certain precautions are taken by the sufferer) may be *nil* or not be considered sufficient to inflict the hardship (including hardship of an economic and prolonged kind) and the so-called stigma of segregation and isolation.

"In my opinion these differences justify a different approach to a case of tuberculosis from that to a case of the ordinary infectious diseases.

"While in a sense—'All hands on deck' should be the motto in coping with every case of tuberculosis and with the contacts of the same. I consider that the Medical Officer

of Health and Sanitary Inspector (a sort of 'Health Policemen,' as they are), should at the beginning at any rate, keep in the background of the Deck or Stage or Scene, and even keep behind the Stage. They should be entrusted with pulling the strings from behind the stage.

" In the foreground (as first line of defence, or rather attack) should be the Family Doctor (the G.P.). Next the Tuberculosis Physician, or Chest Specialist, makes his appearance in the company of the Family Doctor, unless the said Doctor is quite satisfied with his own diagnosis, and the patient's family are satisfied as well.

" The Family Doctor now formally notifies the District Medical Officer of Health and (as I would recommend) fills a Form (comparable to Form T.1.(Wales)), giving the names and ages of contacts and describing the environmental conditions of the patient and the possibility (or otherwise) of Home Isolation.

" The Family Doctor again, with or without the help of the Tuberculosis Physician, examines as soon as possible all the Contacts in the house.

" The Tuberculosis Physician becomes cognisant of the case either direct from the Family Doctor (as above) or indirectly through the Medical Officer of Health who has been first notified of the case.

" The Medical Officer of Health or the Tuberculosis Physician (whichever shall be responsible for Care or After-Care) instructs the Female Health Visitor (who should be well trained in Home Sanitation and in the subject of Infection) to insinuate herself into the household and to keep an eye on the same and to report periodically to the said Head of the Care or After-Care Committee.

" The Family Doctor should draw the attention of the householder (as also he has drawn the attention of the Medical Officer of Health in his above-recommended report) to any insanitary conditions in the house. The Female Health Visitor does the same. The Householder then draws the attention of the landlord to the same. If there is any delay in having the same remedied, the Householder or Family Doctor or Female Health Visitor again draw the attention of the Medical Officer of Health (with his Sanitary Inspector) to the same.

" The house is now visited by the Sanitary Inspector and, if necessary, by the Medical Officer of Health (the above-mentioned 'Health Policemen,' who now appear for the first time on the horizon) and an informal notice (and later if necessary a Statutory notice issued after a meeting of the Sanitary Authority) is served on the landlord.

" Any definite overcrowding and lack of means of Home Isolation (for patients cannot remain in a Sanatorium indefinitely) is also reported to the Council, so that action may be taken (the so-called re-housing of Tubercular families).

" The Family Doctor in his report to the Medical Officer of Health, or subsequently the Female Health Visitor, draws the attention of the County Medical Officer of Health or the Tuberculosis Physician (whichever shall be the head of the Care or After-Care Committee) to the financial circumstances of the family, if indigent, and to the need of an ampler food supply for the household, of special articles of nourishment for the patient, and the want of a sufficiency of bedding (mattresses, pillows and bed-clothing) and of under-clothing and other articles of personal clothing.

" Disinfectants and periodic disinfection of bedrooms and contents should, of course, always be free (unless in the case of well-to-do families).

" It will be for the Care or After-Care Committee to provide the necessary articles of food and clothing from its own funds or to apply to the Welsh Memorial Association or to the Public Assistance Committee or to the Health Committee of the County Council or to the District Sanitary Authority, as shall be specified by Government Acts, Orders or Regulations.

"The Care or After-Care Committee would be concerned also with the Housing of Tubercular patients, and would urge the County Council (or County Borough), and District Councils, to proceed vigorously with the re-housing of individual Tubercular families and of Tubercular families in general."

F.—Some Recommendations or Suggestions.

THE CHAIRMAN : Then we come to the next document which is headed "Some suggestions or recommendations." It says : "(1) Further recognition of the medical attendant or general practitioner as the acknowledged first line of defence. Could not the State delegate to, or impose on, the general practitioner (with adequate remuneration) and further to the existing duty of notifying all cases of tuberculosis, the additional duty of filling up an inquiry form similar to Form (Wales) 1, giving information as to the number and ages of inmates, and the number of living and sleeping rooms, and the degrees to which isolation can or cannot be carried out at home, together with the hygienic conditions of the home? He could also specify any recommendations made to the family or that should be taken in hand by the sanitary authority. A fee of 5s. or 7s. 6d. or so, in addition to the notification fee of 2s. 6d., to be paid to the general practitioner for providing such information. This fee to be paid from the State Exchequer as part of its contribution towards the stamping out of tuberculosis. (2) A special Government subsidy, independently of the subsidy in respect to slum clearance and in respect of relief of overcrowding, to be paid towards any house built by a local authority for re-housing tubercular families, that is, families with one, two or more tubercular members. The said houses, of course, to contain a good number of good-sized rooms, all well or specially ventilated (for example—Hope-Austral windows, as at Walsall)."

"Then there is a third recommendation about silicosis. The recommendation is to shorten the working life of the quarryman, first of all by having a shorter working day, entrants not to start so young, and after starting, only working half-time for a period, and elderly persons to reduce their working day as they get older. I am impressed with what Mr. Ellis Davies said about persons over 50 walking up a steep hill. Elderly persons should have a shorter working day as they get older, and all quarrymen should retire at an earlier age, say at 55 years of age."

G.—A Welsh Parliament, Government and Health Ministry Wanted.

THE CHAIRMAN : Do you want me to read document G, which is headed : "A Welsh Parliament, Government and Health Ministry wanted"? Is it not rather savouring of propaganda? I will read it if you like.

DR. LLOYD OWEN : I would specially ask you to read that.

THE CHAIRMAN : I will read it with fervour just as you would like to read it yourself : "A Welsh Parliament, Government and Health Ministry wanted." Of course most Welshmen are willing to recognise the British Parliament in London, but on the other hand a great number do not wish Welsh health matters, such as tuberculosis more than other purely domestic matters discussed there. We want them discussed in a Welsh Parliament and to be under the control of a Welsh Government and a Welsh Ministry of Health. The present Welsh Board of Health located in Wales is, of course, an advance on merely a Welsh Department at Whitehall, but a Welsh Ministry and a Welsh Government and a Welsh Parliament are wanted as well. At Westminster not only is there not enough time to discuss purely Welsh matters, but Westminster itself is not the right place to discuss such matters. A number of the brilliant sons of Wales should be recalled from Westminster and join with added representatives in forming a Parliament in Wales and for Wales."

H.—A Notice of Motion Given at a Conference.

The next document is headed "Copy of a Notice of Motion given by Dr. E. Lloyd Owen at a Conference of Non-County Boroughs held at Shrewsbury on 27th January, 1938." That is a point that you have already raised?

DR. LLOYD OWEN : Exactly : It corresponds to F. Recommendation 1.

I.—*An Intended Notice of Motion.*

Similarly this corresponds to F. Recommendation 2.

J.—(See next paragraph but one).

K.—*Minute of Criccieth Health Committee.*

THE CHAIRMAN : Then document K is " Minute of Criccieth Health Committee, 15th November, 1937." and it as follows : " Overcrowding—Dr. E. Lloyd Owen wrote drawing the Committee's attention to the distressing case of overcrowding at 4, Brynhyfryd. This case was made more tragic by the fact that the family was tubercular. The family consisted of husband and wife, three children over 10 years of age and five under 10—equivalent to $7\frac{1}{2}$ adults, and the accommodation was one living room, one bedchamber, one attic bedroom and two shelters in the garden. The Committee then considered the question of overcrowding generally. They were informed that when the survey of housing conditions was made about two years ago, there were 14 cases of overcrowding in Criccieth, but by now these had, because of various reasons, been reduced to seven, including the case reported by Dr. Lloyd Owen. After considering the matter carefully, it was resolved to recommend to the Council that inquiries be made for a suitable site for the erection of houses to abate the overcrowding. The Committee have in mind three sites which they consider suitable and they recommend that the Clerk be directed to communicate with the owners and inquire whether they would be disposed to sell the land for housing purposes, and if so, on what terms "

THE CHAIRMAN : What has happened ?

MR. WILLIAM GEORGE : May I say a site has been acquired and houses will be erected without delay.

THE CHAIRMAN : What has happened in the meantime to the husband, wife and eight children ?

DR. LLOYD OWEN : Unfortunately one of the patients there has died in Brynseiont.

THE CHAIRMAN : She was removed too late, I suppose ?

DR. LLOYD OWEN : She had been in Brynseiont Sanatorium several times, and at last went there to die.

THE CHAIRMAN : She would not stay ? She would come home ?

J.—*Procedure After Notification.*

THE CHAIRMAN :

Dr. Coutts tells me that I ought to have read document J. It says this : " Copy of a letter sent in reply to an Inquiry from Dr. Lewys Lloyd. Criccieth, 29th December, 1937. Dear Dr. Lloyd, Yours of 21st December to hand. On receipt of a notification of tuberculosis—1. I transmit a copy to the Tuberculosis Physician, who takes up the matter with the family medical attendant and consults with him as to the best available means of isolation, if not at a sanatorium or hospital (as would be preferable) then at the patient's own home (within the house or else in a shelter in the grounds). 2. I send a copy of an inquiry form to the sanitary inspectors (there are 10 sanitary inspectors in my area of 310,889 acres, and 70,723 population). These inquiry forms until quite recently were termed Form T (1) Wales and had printed at the foot the words ' Signed Health Visitor.' Either from pressure of other work, or from a feeling that they should not be called upon to do the work of a (female) health visitor, the response of the sanitary inspectors in connection with these forms has not been encouraging. In this connection I would recall the opinion of the late Dr. Parry Edwards. In his Annual Report for 1925 to the Caernarvon County Council he stated that some of the patients (or family) objected to the visits paid to houses by the existing class of sanitary officers on account of the publicity it caused. The work (he said) could be efficiently performed by an experienced female health visitor whose work did not need to be wholly confined to tuberculosis work. Her report could be submitted to the sanitary authority and through its officers to the tuberculosis physician. The greatest tact and sympathy (he added) should be exercised and discretion practised in the selection of cases."

THE CHAIRMAN : I take it that it is your view that that should be done by the woman health visitor who is more acceptable to the family, and who becomes more a friend of the family than the sanitary inspector ?

DR. LLOYD OWEN : That is why I asked for a health visitor at Gwyrfa.

THE CHAIRMAN : Then the letter continues : " 3. Not only after death from tuberculosis but after the departure of a patient to the sanatorium, the sanitary inspector at my request disinfects the bedroom and contents. I am, Yours faithfully, E. Lloyd Owen." Is that all the sanitary inspector does ? He does not disinfect the whole house, but only the bedroom ?

DR. LLOYD OWEN : Or the room where the patient has been sitting during the day.

L.—*Tabular Statement as to Disinfection Facilities and Health Visitors.*

THE CHAIRMAN : Then the next document is a statement as to disinfection facilities, &c., which are bad. (Document taken as read).

STATEMENT AS TO DISINFECTION FACILITIES AND HEALTH VISITORS IN
SOUTH CAERNARVONSHIRE, MERIONETHSHIRE AND ANGLESEY.

<i>Name of Authority.</i>	<i>Population.</i>	<i>Area.</i>	<i>Health Visitor.</i>	<i>Steam Disinfection.</i>
SOUTH CAERNARVONSHIRE. Caernarvon Borough	8558	2213	*Yes, but does not do Tuberculosis visiting.	Yes, both at the Tuberculosis Hospital and at the Fever Hospital.
Gwyrfa R.D.	24320	96475	No.	No. but Disinfector at the Tuberculosis Hospital is at the disposal of the district, but there are places ten miles away from Caernarvon Town.
Lleyn R.D.	17310	24460	No.	No.
Pwllheli Borough	3584	1120	No.	No.
Criccieth U.D.	1466	1450	No.	No.
Portmadoc U.D.	4065	3390	No.	No.
ANGLESEY. Aethwy R.D.	10300	36889	No.	No, but Disinfector at the Llangefni Tuberculosis Hospital is available, but there are houses five and ten miles away from the Hospital.
MERIONETHSHIRE. Deudraeth R.D.	7141	75915	No.	No.

* Is in the employ of the County Council and helps with School Medical Inspection, Infant Clinics, etc., but does not do Tuberculosis visiting.

The suggestion (in the Association's Report) of Travelling Disinfectors might improve the situation with regard to Disinfection.

M.—*Reply to a Query re Disinfection from the Pwllheli Town Clerk.*

THE CHAIRMAN : This document is a letter from you to the Town Clerk of Pwllheli, dated 19th July, 1937 :

" Dear Sir, In answer to yours of the 8th instant (enclosing a letter from the Secretary of the Women's Institute) *Disinfection in cases of infectious diseases* : It must be conceded that the ladies have pointed to a weak spot in our defence against, and our attack upon, tuberculosis."

(THE CHAIRMAN (Interpolating) : I am glad to know the Women's Institute have raised that question.) "At present in South Caernarvonshire what is done is for the sanitary inspector (or a man working under him in the Lleyd district) to fumigate or spray (or both) the bedroom and its contents after removal of a patient to a sanatorium, or after death from tuberculosis. The adequacy of the methods used could best be discussed at a meeting of representatives of Local Health Authorities, and of the County Health Committee at Caernarvon. It will be remembered that I have consistently advocated a separate disinfecting station for South Caernarvonshire, say somewhere near Four Crosses. I am, Yours faithfully, E. Lloyd Owen."

N.—*Statement as to Personnel (Private and Staff).*

(It should be stated that Mr. Wildgoose, the Committee's Secretary, had written to the Association of Municipal Corporations that the evidence being prepared should include information as to the Qualifications and Salaries of the Medical Officers of Health and Sanitary Inspector).

Then comes your statement as to personnel, which is document N. It says : "Statement (re Personnel) by Dr. E. Lloyd Owen (D.P.H. and whole-time M.O.H. to eight Sanitary Authorities under the Caernarvonshire (with adjacent counties) Joint Sanitary Authority). The eight Districts are :—A. In Merionethshire :—The Deudraeth R.D. B. In Anglesey :—The Aethwy R.D. (The Dwyran Division). C. In Caernarvonshire :—The Lleyd R.D. and the Gwyrfa R.D., The Portmadoc U.D. and the Criccieth U.D., The Pwllheli Borough and the Caernarvon Borough. Otherwise :—4 Rural Districts, 2 Urban Districts, and 2 Boroughs. My section of the combine covers an area of 310,889 acres and contains a population of 70,723. My salary is £700 with a nominal sum of £13 to cover the use of two rooms (at least) at my residence, and to cover the cost of necessary heating, lighting, and so on. Nothing towards clerical assistance and nothing towards travelling over the above area of 310,889 acres (spread over three out of the six counties of North Wales) and containing the said population of 70,723. My employing authority (The Caernarvonshire Joint Sanitary Committee) have not to this day (after over 29 years service) seen their way to place me on the minimum commencing (yes, commencing) scale of salary which came into operation (under the aegis of the Ministry of Health at Whitehall) eight years ago on 1st April, 1930. Either I have been paid far too little all these years, or my fellow M.O.H.s throughout the country have been paid far too much. This inadequate salary will reflect on the amount of my pension when I am thrown on the scrap-heap in a year's time under the new Superannuation Act. Not only have I personally never been provided with a clerk or two (able to type, &c.) to assist me with my indoor work,"but—

THE CHAIRMAN : I suppose you had to pay for all this—all these type-written Monographs that we are reading—out of your own pocket ?

DR. LLOYD OWEN : Yes, that is quite true.

THE CHAIRMAN : Well, that is unfair, very unfair.

"Not only have I personally never been provided with a clerk or two (able to type &c.) to assist me with my indoor work, but I consider that the Sanitary Departments of the various Councils have been inadequately staffed, notably by the non-appointment of female Health Visitors to assist in tuberculosis visitation (a separate one for each of the larger districts and a joint one for two or more of the smaller districts). Further, in some of my districts the sanitary inspector is also sanitary surveyor, and, in some cases, even architect and engineer on occasions. And, on the other hand, only one out of my ten sanitary inspectors has a special meat or food certificate. After over 29 years tenure of office, I feel that if I had been provided with proper travelling facilities, and with a proper establishment, manned with clerical staff and a full complement of sanitary officers, I could have devoted more time to out-door work and to investigation and research into the causation of diseases and of the high mortality from tuberculosis and diseases

in general in some of my districts. As matters have stood, between outdoor and indoor clerical work, I have been robbed of my Saturday half-day and of my evenings, and often of my Sabbath. There is at present talk of re-arranging the work in Caernarvonshire which will make some difference in the form of my work for the short remainder of my term of office.

THE CHAIRMAN : You are of course in favour of full-time Medical Officers to cover every District, and adequately paid, are you not ?

DR. LLOYD OWEN : Yes : You have at the back of Document N a printed Memorandum on the question of a Scale of Salaries, agreed upon by Sanitary Authorities and the B.M.A.

THE CHAIRMAN : Yes. Then comes another statement with regard to your personal service and salary.

O.—Grievances Against Various Bodies.

(Caernarvon Joint Sanitary Committee and Welsh Board of Health, the Whitehall Advisory Committee on Salaries and the British Medical Association).

It says : " I may say that I have a chronic grievance against the Caernarvon Joint Sanitary Committee—a Statutory Committee—that the members thereof have regarded themselves as Delegates and not Representatives, and have refused to take action with regard to my repeated applications for an increase in remuneration (only to be placed on the minimum commencing, scale of salary) without first consulting the 16 (at one time 20) constituent authorities, thus giving invidious publicity to such application, and bringing me into contempt with the public as a money-grabber. At every Annual Meeting for the last ten or fifteen years, my application has been either referred back as above to the 16 constituent authorities, or been postponed for successive periods of twelve months (not actually rejected), in my opinion on trivial or false grounds. On one occasion I obtained Counsel's Opinion on the grounds given for such postponements (that my application was not a ' formal ' one !). The said Counsel appeared to sustain my view, but pressure of work prevented my having the time to pursue the matter. Such postponements took place again three months ago, that is, last December. When they did refer the matter to the 20 Councils (11 of which were not in my division of the combine), they did not even add a recommendation that the request be granted, so that it proved a case of riding for a fall. With regard to the Advisory Committee appointed under the Askwith Memorandum of Agreement on Salaries, I here and now deliberately charge the said Advisory Committee with unnecessarily tying their own hands through their Rules of Procedure, by which they decided only to deal with cases where Local Authorities were willing to submit the case to them—that is limiting themselves to cases where the door was already open, and not attempting to open the door themselves. They had tied their own hands to such an extent that they were precluded from even approaching recalcitrant authorities with their friendly advice. Strangely enough, the then Minister of Health (in 1934) through his Secretary (Mr. W. Ward ?) also refused to ask the said Advisory Committee to consider my case. Another minor grievance is that when my salary is discussed, the *gross* or total figure is mentioned (the salary being inclusive of travelling and other expenses) whereas with other public officials only a *nett* salary is mentioned, not mentioning the total sum, —a most invidious distinction."

THE CHAIRMAN : If it is any help to you, Doctor, for me to say it, I agree it is putting you in an extraordinarily difficult position that you have to pay for all your travelling expenses going round to do your duty.

(A Private Addendum :—

The following is an example of the way the matter has been shelved :—

On the strength of Mr. Clement Davies' remarks which I quoted in my letter, I wrote to the Welsh Board of Health on 9 April, 1938—over 15 months ago—concluding with the words :—" Perhaps you will take the matter up with the Joint Sanitary Committee, and not let them wait until Re-organisation comes about, which will necessarily take a long time between Caernarvon, Anglesey, Merionethshire and Denbighshire—all these Counties sharing in the Combine."

I received this acknowledgment :—

Welsh Board of Health, Cardiff, 19 April, 1938.

Sir,—I am directed (by whom ?) to refer to your letter of the 9th April, 1938, and to state that your application to the Caernarvonshire Joint Sanitary Committee for an increase in your salary as Medical Officer of Health is a matter for consideration by the Committee in the first instance.

I am Sir, Your obedient Servant, JOHN ROWLANDS.

That meant that if the Joint Committee took no action, it was no concern of the Welsh Board of Health. And yet, I am stupid enough to stick up for a Welsh Board of Health rather than an English Board!.—E. Ll. Owen)

P.—*A Special Recovery Grant for Gwyrfai ?*

THE CHAIRMAN : Then we have a document headed “ A Special Grant,” and it says, “ I much regret that the sympathy engendered for the Gwyrfai people by the widely-advertised Conference held by the Memorial Association in the Autumn of 1933, was not seized upon by someone to lead to the establishment of a Recovery Fund for the Benefit of Gwyrfai. The Government of the day might have given a special grant for the purpose. I have noticed the Government has power to give Special Grants in deserving cases, such as in cases of loss from a severe coast erosion, &c. The Memorial Association or its patrons and friends might also have been found willing to contribute as well as numerous other philanthropic bodies and private benefactors throughout the land. Even now it might not be too late to initiate such a recovery fund. One great acquisition for Gwyrfai would be to establish an open-air residential school for children from households where a parent or other relative was suffering from open tuberculosis. Such children could be allowed to go home to see their families occasionally in the daytime, but would return to their dormitories at the residential school for the night. Being somewhat of a visionary I would ask, could not Bryn Bras Castle, until the present held by Mr. Elliot Alves, if it could be acquired, be adapted to make such a residential open-air school ?”

THE CHAIRMAN : In your suggestion that there should be a request for funds, you do not carry me with you. Far be it from me to stop charity, but I do not think public health should depend upon charity. Public health is a matter which the public should attend to.

DR. LLOYD OWEN : I bow to your opinion on that matter, Mr. Chairman.

THE CHAIRMAN : That finishes the first lot of documents which you sent in to the Committee. But there came some more documents this morning. The first one is an extract from your Annual Report, which Report I have got.

Q.—*Stone-dust, Silicosis and Tuberculosis.*

Then there is a document headed “ Stone-dust, silicosis and tuberculosis.” It says : “ Having looked up the causes of death for Gwyrfai during the whole of 1937, I find that the term silicosis is not once mentioned by the certifying doctors although I suspect that silicosis may have been a factor and a predisposing cause in several of the deaths. Neither is the term silicosis contained in the short list of causes of death issued by the Registrar-General for the use of us Medical Officers of Health for the purposes of tabulation, &c. Silicosis may, of course, be covered in the table by the term ‘ Other respiratory diseases ’ or ‘ Other defined diseases,’ but the term silicosis is not specifically mentioned. Perhaps it would be worth while drawing the attention of the Registrar-General to this fact.”

THE CHAIRMAN : I am drawing the attention of the Ministry of Health and the Home Office and the Ministry of Labour to the conditions as they were reported to me by the Medical Officer of Health for Blaenau Festiniog, so that I hope something will come of it. (Reading on) “ *The question of dust-allaying in Quarries.* I am sorry to find that the quarries in the Gwyrfai District have not made much progress in the matter of allaying dust during the last few years. It is true that in every quarry, in the process of slab-sawing, the circular saw passes through water in a tank at every revolution. This reduces the amount of stone dust emitted at the critical spot where the saw comes into contact with the slab. The friction in question also produces a certain amount of steam. But this water in the tank alone does not abolish the stone-dust.

The following seems to be the present position in the quarries in this matter of slab-sawing. 1. Penyrorsedd Quarry, Nantlle Vale. Nothing further than the above is attempted. 2. Dorothea Quarry, Nantlle Vale. Part A. Nothing is attempted except that one man was found of his own accord to utilise a small cask with water, which hung from a beam right above the saw and slab and which dripped water over the critical spot wherefrom the injurious dust would emanate. The beam was situated or placed exactly above the spot in question. This cask was one relic of a number of such casks that had existed at one time. Part B. (Gallt y Fedw). A perforated water-pipe dripping water over the said critical spot for the safe-guarding of each operator. 3. Dinorwic Quarries. Pipes or funnels for the escape of stone dust were provided some years ago but at present in some cases are removed by the men themselves."

DR. LLOYD OWEN : I was told that by the manager on the telephone. He may be here to give evidence.

THE CHAIRMAN (reading on) : "Power (electric fans) is not used at present to extract the dust, but a few years ago I seem to recollect that such power was used, but was not effective. The management say that they are very willing to carry out any improvements that may be recommended. 4. Re Penrhyn Quarries (not in the Gwyrfa District). Electric fans for extracting stone-dust, but in one shed only out of several. These fans are said to be very efficacious. That being so, it seems a great pity that the practice has not been extended to all the sheds. It seems that someone described as a Government expert informed the various managers that 450 particles of dust per c.c. of the atmosphere was a safe limit, the size of the particles to be under 10 microm ; that is, each particle less than 1/2500 of an inch. This dictum seems to have lulled the different managements into a sense of security, and made them consider it unnecessary to attempt any further modern methods of dust extraction. I trust that number of years the men might be exposed to the inhalation of these particles was taken into consideration. For is it not possible, and indeed probable that long-continued exposure to a ratio of particles under 450 per c.c. may prove injurious?"

THE CHAIRMAN : Quite obviously : that was what was being said by the Medical Officer of Health for Blaenau Festiniog. (reading on) "Rock-drilling (by hand and mechanical) is also a source of stone dust. I refer to this and the use (or non-use) of masks and other precautions in another part of this evidence. Some people say that this stone-dust is not a factor—I think it is a case of vested interest on their part."

THE CHAIRMAN : Do they say that ? All the Reports I have read, for example Dr. Chalke's, state that they consider it a very great factor. That is obviously their view.

DR. LLOYD OWEN : Exactly. But there is a section of people in this district that will not have it that it is a factor at all.

DR. COUTTS : They say it is not a factor in producing silicosis, or producing tuberculosis ?

DR. LLOYD OWEN : Tuberculosis, principally. This is a letter from Dr. Wade. "Of course, in view of the fact that the problem in Gwyrfa is largely a tuberculosis problem, reference was primarily directed to preventive measures in the quarries." Then he mentions—"you may have noticed in the Press the Bill now before Parliament entitled 'Workmen's Compensation (Silicosis and Asbestos) Bill,' which indicates that increased attention is being paid to the subject. I would like to know whether the Ministry of Labour has issued specific regulations to managers of quarries or not. (Slate-quarries and Granite quarries).

THE CHAIRMAN : I do not know, but I am going to inquire. I have been very deeply distressed to find the state of things which was described to me as existing in Blaenau Festiniog. I therefore called the attention of three Government Departments to it, and if they make, as I think they ought to make, and will make, an Order with regard to this district, then I take it there will be measures taken to lessen the amount of dust. Because, you see what is going to happen. Silicosis is going to be a matter for which the employer will have to pay compensation. He will of course insure against it, and the insurance companies will put up the premium to a very big height unless steps are taken by the employer to lessen the incidence. So that it will come about in a round about way, quite apart from any regulations which the Government may make. But I will inquire about your view.

DR. LLOYD OWEN : I am very glad to hear that. This is a quotation about Dr. Sutherland's inspection : "Silicosis was definitely diagnosed in 19 of the 96 men examined. All these cases had more than 40 years' service." Dr. Chalke, at page 27 in his Report says : "The number of deaths among males of 55 and over is very high." I am sorry that Dr. Wade has not been mentioned more ; it is always Dr. Chalke that is mentioned, but Dr. Wade made his report before Dr. Chalke. Here Dr. Chalke is acknowledging Dr. Wade's researches, and he says "Dr. Wade's researches leave little room for doubt that this high mortality is associated with the slate-quarrying industry." Dr. Chalke endorses Dr. Wade's opinion.

THE CHAIRMAN : They will have to produce very strong evidence before me to convince me that it had nothing to do with it. After all, it is only a question of degree in a difference between working in those horrible conditions in Blaenau Festiniog, and out in the open in Dinorwic and Bethesda. In Blaenau Festiniog the man is so far down that there is no air to get the dust away, and therefore he is breathing that dust in a much greater quantity than in the open air ; but it is only a question of degree after all.

DR. LLOYD OWEN : A very small dose of stone-dust, or a small dose of tubercle bacilli may not matter for a short period, but a small dose of tubercle bacilli or stone-dust for a prolonged period will have an effect. I pointed this out at Colwyn Bay. I would here repeat the recommendation I made near the beginning, that the working life of the quarryman should be reduced in various ways. Mr. David Jones, the Clerk of the County Council, very kindly sent me a copy of a letter, dated 22nd August, 1934, from the managers of three quarries.

THE CHAIRMAN : I have a copy of that.

DR. LLOYD OWEN : I will leave it at that.

(End of Dr. Lloyd Owen's Evidence-in-Chief).

METHODS OF FIGHTING TUBERCULOSIS.

MEMORANDUM BY DR. E. LLOYD OWEN.

Dr. Parry-Edwards' Analysis.—At the request of the Health Committee of the County Council, Dr. Parry-Edwards made a report on the incidence of Tuberculosis in Caernarvon and Gwyrfaï during the quinquennial period 1 January, 1924, to 31 December, 1928. Comparing the Tubercular Death-rate during this period with that during 1900—1904, he found that it had decreased in both Districts (from 2.9 to 2.6 in Gwyrfaï and from 2.5 to 2.3 in Caernarvon) but not in the same proportion as in the majority of the Districts in the County. He found that persons with a history of Tuberculosis in the family were more numerous in houses which had been classified as Fair or Poor (as against Good). This was due to the fact that there was a greater danger of infection in small houses where the cubic space per head was rather low.

This contradicts the fallacy that there are more cases of Tuberculosis from good and larger houses. An equal number of large and small houses must be taken before a fair comparison can be made.

Dr. Parry-Edwards also quoted from Dr. Wade's report, and stated that the question of allaying dust was a matter of great importance.

His conclusions were that enquiries could not be directed to one specific line of treatment or prevention, and he suggested recommendations for his Committee's consideration which may be amplified by myself as follows :—

METHODS OF FIGHTING TUBERCULOSIS.

1. *Housing.*—Endeavouring to cure Dampness, particularly in all living rooms, Erecting of New Houses on dry and sunny sites in place of existing ones where there are serious defects which cannot be remedied. The houses not to rent over 7s. per week, free of rates, and the County Council to co-operate, especially in Rural Districts ; roomy houses for large families to obviate Overcrowding, also a many-roomed house (with parlour or sitting room) where there are one or more Tubercular patients, so as to ensure a measure of segregation. A working-class dwelling with an attic bedroom with only a skylight for ventilation should be condemned pending construction of a side or dormer window, or raising of the roof.

2. *Food Supply*.—The importance of a generous nutritive Diet and for arrangements to be made (where possible) for all children and working men to have a suitable mid-day meal (Compare feeding of School Children and Communal Kitchens or Food Canteens). As regards food, not only sufficiency and purity, but variety also. Variety is possible, even apart from Meat-dishes and Alcohol.

A proportion of raw fruit and uncooked stuffs is valuable. Education of children and the public as regards Food-values, Cooking, &c., as well as in Hygiene generally.

3. *Milk Supply*.—To use only pure Tubercle-free Milk and plenty of it. Systematic inspection of milk for Tubercle bacilli. The desirability of Trade and Home Pasteurisation of Milk. Every effort to be made to help the farmer to produce milk of the highest possible standard. Sanitary, well-ventilated Cowsheds. (An open-air life being the natural one for a cow).

Veterinary Inspection and Tuberculin-resting of Cattle, especially Dairy Cows.

4. *Meat Supply*.—Meat also to be Tubercle-free, &c. Abolition of private slaughter-houses in favour of Public Abattoirs.

5. *Clothing*.—Suitable Clothing for Workmen to resist exposure, also a change of clothes when a child or worker has become wet; sound boots, dry warm stockings, two pairs of stockings—to be used on alternate mornings—are helpful. Also facility for drying clothes in schools, works, &c.

6. *Public and Personal Hygiene*.—This should be taught to young people by means of Lectures, Films, &c., especially in regard to cleanly habits, exercise, and clothing, also perhaps lectures or talks to Quarrymen and other workers during the dinner hour, that is, if more convenient than in the evenings.

7. *Proper Disinfection* (and Destruction where necessary) of Bedding and Clothing. In an Annual Report the late Dr. Parry Edwards said, "I have previously pointed out that there are no means of effectually disinfecting Clothing, &c., in South Caernarvonshire. I am of opinion that there ought to be 1 Disinfecting Station at Pwllheli and 1 at Portmadoc. These could be provided at a small expense." Stationary or Portable "Sack" Disinfectors would also be useful at other centres, such as Pen-y-groes and Brynrefail.

A Steam-laundry would be a fine adjunct to a Disinfecting Station.

8. *A Whole-time Disinfecting Officer*.—Such an Officer for the County would be valuable to disinfect schools and contents, also houses and contents after Fevers and Tuberculosis, also Cinemas, Halls, Places of Worship, &c. Also to disinfect houses of Tubercular Patients during life, as Dr. Chalke suggests.

Much of the time of the Sanitary Inspectors in some districts is taken up in disinfecting after removal to Sanatorium and in disinfecting in cases of death.

9. *Female Health Visitors*.—There is one at Caernarvon, at Bangor, and at Llandudno, but none in the Southern Division of the County. In his report for 1925 the late Dr. Parry-Edwards stated that some of the patients object to the visits paid to houses by the existing class of Sanitary Officers on account of the publicity it causes.

The work (he said) could be effectually performed by an experienced Female Health Visitor whose work need not be wholly confined to Tuberculosis work. Her reports could be submitted to the Sanitary Authority and Tuberculosis Physician. The greatest tact and sympathy should be exercised and discretion practised in the selection of cases.

10. *After-Care Committees*.—According to Dr. Parry-Edwards, in the same report, it had been decided to establish an After-Care system in the County, the same to consist of a Central Care Committee and Local Care Committees.

In the said report the scheme is carefully explained as regards the objects of the Scheme and the constitution of the Central and Local Committees. In his report for 1928 Dr. Parry-Edwards wrote, "A voluntary scheme was formulated for carrying out After-Care work, but owing to lack of funds, it was not put into operation."

In his report for 1929, he again called the attention of the County Council to the need for an After-Care Scheme for Cases of Tuberculosis.

11. *Healthy Housing and Working Conditions for all.*—(Allaying dust peril, &c.). One has heard of young quarrymen priding themselves on the thick layer of dust attached to their clothes, as if they were millers!

Especially Healthy Housing and Working Conditions for persons at present living in contact with persons known to be infective. Village Settlements, &c., for the infected.

12. *Efforts at Eradication.*—When an Area is never free from a particular infectious disease, that disease is said to be Endemic in that area. Tuberculosis therefore may be regarded as more or less strongly Endemic in the Quarry districts. The various causes, whether primary, secondary, predisposing or contributory, should be diligently sought out and if possible eradicated.

13. *Eugenics.*—A Voluntary Medical examination of each prospective partner before entering on the married state.

Marriage of near relations (Inter-Marriage) to be deprecated, especially when the same weakness may be present on both sides.

14. *Birth Control and Sterilisation.*—In special circumstances Birth Control : also Sterilisation of Defective cases (Mental and Physical), especially in so-called Hereditary diseases.

15. *Preventoria* (as well as Sanatoria) and village settlements.

Moreover, withdrawal of the healthy from the sick may be carried out occasionally, instead of the sick from the healthy.

16. *Dual Notification of Tuberculosis.*—Tentative notification in advance of confirmatory notifications.

17. *Exclusion of Tubercular Employees.*—This exclusion from the business of Milk Production and Distribution, as from that of other Food Trades, is called for. This is a very delicate but important matter. Those excluded would in many cases suffer in their monetary circumstances.

18. *Special Precautions in Slate Quarries.*—It remains for expert advisers to insist on Electric Fans and Suction Apparatus, also masks and moisture (spraying, damp-sweeping and other contrivances). Floors to be smooth and free from crevices. It is feared that the constant wearing of masks might be considered by the men to be cumbersome. Some men also fear that continual moisture might bring on Rheumatism, but that would be the lesser of two evils.

The use of a Conimeter—a dust-testing gauge. It is granted by the Authorities that a dusty atmosphere is injurious, for they regard a proportion of dust particles, about 450—500 per 1 C.C. to be above the safe limit.

At a meeting of the Slate Section of the Joint Industrial Council held on 29th September, 1930, an experimental programme of measures for the Prevention of Silicosis was outlined as follows :—

- (1) That the first point to be considered is the general tidiness and cleanliness of the sheds,
- (2) The floors should be made level and constructed either of concrete or of slate slabs cemented in position.
- (3) No accumulation of debris and general rubbish should be allowed on the floors.
- (4) All accumulation of dust on rafters, beams, &c., should be removed.
- (5) All slate waste and dust should be well watered before removal.
- (6) In the case of slate-splitting, as it has been indicated that this must be carried out on soft ground, this ground should be kept thoroughly damped.

As the tests have shown that dust concentration in dangerous quantities are produced by circular saws, dressing machines, both revolving and guillotine type, hand dressing and slate

splitting, it will be necessary to adopt some form of localised dust extraction for all of these operations adjacent to the point where the dust is produced. This is considered to be the only practical solution to the difficulty.

From rough experiments carried out with circular saws it appears that water is useless as a means for suppressing the finer, and consequently the more dangerous, slate dust particles.

Suction or negative pressure adjacent to the point where the dust is produced can be obtained either by means of a mechanically-driven suction fan or of a Venturi "ejector" operated from the compressed air supply.

re WET CLOTHING : Please see above under No. 5. above.

Additional Recommendations by Dr. Chalke.

- (1) Educating and *drilling* the patient and the family in the measures to prevent infection.
 - (a) Cleanly Habits, (b) Precautions when coughing and sneezing (the use of paper handkerchiefs, &c.), (c) The use of a special sputum bottle, (d) Care in the disposal of the sputum, (e) Individual Communion Cups.
 - (2) Regular disinfection of houses of cases of Open and Semi-open Tuberculosis during life.
 - (3) The Examination of the Sputum of all persons with Chronic Coughs, especially in the case of quarrymen.
 - (4) Periodical Medical Examination (for Tuberculosis) in Teachers and also, of course of candidates.
 - (5) Housing provision in all proposed housing schemes of a proportion of dwellings suitable for occupation by families in which there is a case of Tuberculosis.
 - (6) Recreation and Exercise. Healthy indoor and especially outdoor recreation,—development of the Village Institute.
 - (7) *Diet*.—Dr. Chalke recommends that the Memorial Association should issue a well planned Dietary which would be within the means of the poorer classes. (This has been attempted).
 - (8) Dr. Chalke recommends that Allotment Gardening should be encouraged to provide fresh vegetables, &c.
 - (9) A Campaign against Tuberculosis. Propaganda—
 - (a) Enlisting fuller co-operation of Religious Bodies (including Sunday Schools).
 - (b) Making wider use of the Press, Cinema and Wireless for health propaganda.
 - (10) The value of Maternity, Infant and Child Welfare Clinics to help detect early cases of Tuberculosis as well as to teach how to take precautions against the same.
 - (11) Dr. Chalke wishes *Records* to be kept of the time spent by employees in each branch of slate quarrying.
 - (12) Also that doctors should help to ensure facilities for investigations into the condition of quarriers' lungs in order to assess the effect of slate dust inhalation.
- September 30th, 1933.

Adroddiad Dr. Chalke (Mehffin, 1933,) ar ran Cymdeithas Coffa y Brenin Iorwerth er Atal y Darfodedigaeth.

RHAI NODIADAU GAN DR. E. LLOYD OWEN I GYNGOR Y GWYRFAL.

Adroddiad yw o'r ymchwiliad i achos neu achosion y Treng-radd uchel a pharhaol oddiwrth y Tiwbercl mewn rhai mannau o Ogledd Cymru. Ein lle ni ydyw ceisio canolbwyntio ar Ddosbarth Gwyrfaol.

Bu dau ymchwiliad blaenorol—y cyntaf gan Dr. Wade ar ran Bwrdd Iechyd Cymru, a'r ail gan y Meddygon Sutherland a Bryson ar ran y Swyddfa Gartrefol yn Llundain (Bwrdd y Silicosis neu y Diwydiannau Llychlyd neu y Refractories Board. Hefyd, Adran y Mwnau).

Bum gyda Dr. Chalke yn chwarel Llanberis ac yn chwarel Penyrorsedd, a rhoddais lythyr cyflwyniad iddo i Swyddogion rhai o'r Cynghorau.

Y mae adroddiad argraffedig Dr. Chalke yn nwyllaw yr holl Gyngor, a gwastraff fuasai ymhelaethu gormod yma.

Gwyddis mai nad un achos mawr yn unig sydd i afiechyd y Tuberculosis, ond amryw achosion; yr un ffunud y mae yn rhaid, nid wrth un dull, ond cyfuniad o ddulliau i ymladd yn erbyn y gelyn. Ar un olwg gellir gyda phriodoldeb ddweyd mai y man-hadau hynny a elwir gan y Sais yn Tubercle Bacilli ydyw achos mawr ac arbennig a gwreiddiol yr afiechyd hwn (ac nis gellir Tiwbercl heb yr hadau hyn) ond os y rhain yw yr achis *cynhyrfiol*, mae lliaws o achosion eraill hefyd, neu ail-achosion megis corff neu gyfansoddiad (cyfatebol i ddaear) rhy barod a chwannog i dderbyn yr had (neu yn rhy wan i wrthsefyll y gwenwyn) a lliaws eraill o achosion neu amodau ffafriol i dyfiant a lliosogiad yr had, megis gorlenwad ystafelloedd mewn tai, neu Orlenwad gweithdai neu neuaddau—hynyn peri cyffyrddiad rhy agos rhwng claf ac iach. Diffyg awyriad yn gwneud pethau yn waeth. Gorlenwad tai yn codi oddiar brinder, nifer, a maint yr ystafelloedd. Rhai tai yn llaith a darpariadau iechydol yn ddiffygiol.

Nid gwaeth yw cofio na all neb osgoi dyfod i gyffyrddiad a haint y Tiwbercl yn gyfangwbl, ond dyledswydd personau a Chynghorau ydyw gostwng yr angenrheidrwydd i ddod i gyffyrddiad felly i'r pwynt isaf posibl. Gellir gorchfygu "dose" fechan o wenwyn, ond nis gellir hynny gyda dognau trymion a pharhaus. Fel gyda hadau y Tiwbercl felly gyda llwch y chwareli—dognau trymion am faith flynyddau sydd yn debyg o godi nychdod. Ac wrth gwrs, mae y dognau Tiwbercl a dognau llwch yn gymorth i'w gilydd. Gyda chwydd-wydr gellir gweled bod ymylau miniog i'r llwchyn lleiaf.

Dywed Dr. Chalke fel hyn: "Yn y fangre a ddewiswyd ar gyfer yr ymchwiliad (sef Dosbarth Gwyrfai mae'n debyg) mae yr hwylusdod neu y cyfleusterau ar gyfer heintiad uniongyrchol (sef o berson i berson) yn or-liosog, a hynny ar gyfrif amryw resymau. Hefyd ceir amgylechiadau sydd yn gostwng gallu personau i wrthsefyll yr haint."

(a) *Tai Afiach*, yn enwedig tai llaith ac heb foddion awyro yn briodol ac heb ddarpariadau iechydol eraill. Wrth son am ddiffyg awyro, yr wyf am godi bloedd a chyhoeddi rhyfel yn erbyn taflodi mewn tai gweithwyr a dim ond nen-ffenestr ynddynt. Gall fod y ffenestr wedi ei gwneud i'w hagog, ond wedi ei hagog nid yw yn awyro yn effeithiol, ac ni ellir ei chadw yn agored ar dywydd gwlyb. Pa les i ddarlithwyr hyodl y Gymdeithas er Atal Darfodedigaeth (megis y Dr. R. O. Morris) fyned o gwmpas i bregethu o blaid cadw ffenestr yr ystafell wely yn agored nos a dydd, haf a gaeaf, pryd nad oes ond nen-ffenestr yn yr ystafell?

Mewn pob taflod neu ystafell felly, dylid cael ffenestr ychwanegol arall—ffenestr yn yr ochr. Os nad oes lle yn y pared i roi ffenestr felly, dylid gwneyd ffenestr "dormer" neu ynte godi ar y to. O hyn allan dylid collfarnu pob ty gweithiwr sydd a thaflod fel y desgrifiwyd yn cael ei defnyddio fel ystafell-wely, fel yn "unfit for human habitation," sef yn gwbl anaddas i fod dynol breswyllo ynddo. Carwn i Gyngor Gwyrfai a phob Cyngor gymryd safiad cadarn yn y mater hwn. Byddai i safiad felly esgor hefyd ar welliannau eraill ynglyn a thai (megis drysau cefn a ffenestri ol a blaen).

(b) *Gorlenwad* mewn tai, gweithtai, neuaddau, &c.

(c) "Amgylechiadau yn dal perthynas a'r prif ddiwydiant lleol, sef chwarelillechi." Dyna eiriau Dr. Chalke (tud. 84), ac awgryma fod yr amgylechiadau hynny yn ffafriol i'r Tiwbercl

(d) Arferion cymdeithasol y trigolion—a yw yn awgrymu hoffder at fynychu cyfarfodydd, a'r rhai hynny mewn adeiladau rhy fychain neu afiach?

(e) Cyd-briodi (*Inter-marriage*).—Perthnasau yn priodi, a hwyrach gwendid neilltuol yn perthyn iddynt o bobtu.

(f) "Ymostwng i'r Drefn," er mai anrhefn yw, sef diffyg ymdrech i geisio codi uwchben amgylchiadau ac i orchfygu amgylchiadau anffafriol, boed yn y cartref, neu'r gwaith neu rywle. Cred mewn ffawd—hyd yn oed mewn ffawd ddrwg, a phedio a gwneud ymdrech i osgoi y pla, sef y Tiwberel.

(g) *Ymborth Annigonol neu Anghyfaddas.*

(h) *Gor-weithio a Lludded.* Gwelais engraifft o ormod o straen ar y corff.

(i) *Gwlychu ac Oeri*—bod yn ddarostyngedig i oerni a gwlybaniaeth—*exposure*—fel y creigwyr.

(j) *Etifeddeg.*—Yr wyf yn ychwanegu hwn fy hunan. Nid bod hadau y Tuberculosis yn cael eu trosglwyddo o rieni i blant—nid yw hynny yn bod, ond gall plant wrth gwrs, etifeddu cyfansoddiad heb fod mor gryf. Byddant felly yn gofyn gofal neilltuol.

Gwelwn bod i'r Tiwberel amryw achosion cyd-redol, a dywedasom hefyd fod cyfuniad o ddulliau yn ofynol i ymladd yn erbyn y gelyn. Mae y rhai hyn i'w cael yn Adroddiad Dr. Chalke, a chymerai ormod o ofod i'w hailadrodd yma (ond gwel y llith Saesneg).

27/9/33.

E. LLOYD OWEN.

RE FORM T.1. (WALES) AND FEMALE HEALTH VISITORS.

4th Dec., 1933.—From Dr. Powell (Principal Medical Officer) to Dr. Lloyd Owen :—

"This Form in the first instance was issued by the Welsh Board of Health, but is now printed and circulated by the Memorial Association when asked for.

"The whole of the Form is completed by the Health Visitors, excepting the results of examinations, by Tuberculosis Officers, of the Home Contacts.

"With regard to 3 North Wales Counties no application is made to the Association for the Forms.

"We are awaiting sanction for the appointment for the Health Visitor for Gwyrfaei."

Sad to say, the Female Health Visitor never arrived. All we had was one Area Sister to serve two Counties—Caernarvonshire and Anglesey.

At the Inquiry I said : "It is for you, Mr. Chairman, to allocate blame. I do not know who is to blame. Not Dr. Powell, I hope, nor his Committee. Possibly it was somebody at the Ministry of Health, Dr. Coutts, perhaps!" (Laughter).

A LETTER MISCONSTRUED.

Relevant passages from Correspondence re date of despatch of a return—the last of certain outstanding Quarterly Statements—the one relating to the Gwyrfaei District. (Interpolations in square brackets have been made by Dr. Lloyd Owen).

1. From Dr. Ll. Owen. To Welsh Board of Health, 3rd February, 1938 :—

"Gwyrfaei will be sent tomorrow (4 Feb.)."

(The return was duly sent on 4 Feb., but an amended copy sent on the next day (5 Feb.) which reached Dr. Parry-Pritchard on Monday, 7 Feb., Sunday intervening).

2. From Welsh Board of Health. To Mr. D. G. Jones. 7 Feb., 1938 :—

"It is understood from [his declared intention in] a communication dated 3rd Feb., 1938, received from Dr. Lloyd Owen, that the outstanding Quarterly returns have [by] now [7 Feb.] been forwarded to the County Medical Officer of Health."

3. From Dr. Parry-Pritchard. To Mr. D. G. Jones. (9 Feb., 1938).

4. From Mr. D. G. Jones. To Welsh Board of Health (10 Feb., 1938).

5. From Mr. D. G. Jones. To Dr. Ll. Owen (31 March, 1938).

6. From Mr. D. G. Jones. To Dr. Ll. Owen.

" 7 April, 1938.—You will observe that in the memorandum [of 7 Feb., from the Welsh Board of Health to Mr. D. G. Jones] it is noted that it was understood from a communication dated the 3rd of Feb., received from you, that the outstanding Quarterly Tuberculosis returns for the Southern Area of the County had been forwarded to the County Medical Officer of Health, whilst the County Medical Officer of Health, in his letter, states that such statements were received in the office from you on the 7th of Feb., and not before the 3rd of Feb., as stated in this memorandum'."

7. From Dr. Parry-Pritchard. To Mr. D. G. Jones. 11 April, 1938.

8. From Mr. D. G. Jones. To Dr. Ll. Owen. 12 April, 1938.

9. From Mr. D. G. Jones. To Dr. Ll. Owen. 19 April, 1938.

" but I cannot reply thereto until I hear from the County M.O.H., who is away, as my letter to the Welsh Board of Health was based on a letter received by me from him."

10. From Mr. D. G. Jones. To Dr. Ll. Owen. 20 April, 1938.

" I have now seen the County M.O.H. and he has shown me the Returns [re Gwyrfai] received by him from you. The first [of which Dr. Ll. Owen sent an amended copy the next day] is dated the 4th of February, 1938 (the date on which Dr. Ll. Owen promised to send it) and received by him on the 5th.

I have not misconstrued any letters [please note], as my letter of the 10th of Feb., 1938, to the Welsh Board of Health was a statement of the facts."

11. 20 April, 1938 : From Mr. D. G. Jones' letter of 4 May [see below], it seems I sent him for his information on 20 April, 1938, a copy of the draft of my letter of Feb. 3 to the Welsh Board of Health.

12. From Mr. D. G. Jones. To Dr. Ll. Owen. 21 April, 1938 :

" I have not made any charge of untruthfulness against you. All I did at Colwyn Bay [at the Public Inquiry] was to read the letter received by me from the County M.O.H."

13. From Mr. D. G. Jones. To Dr. Lloyd Owen. 22 April, 1938.

" I am in receipt of your telegram of today's date, and as I have already informed you, I have not misconstrued any letter [please note again], and I have nothing further to add to what I wrote you on the 20th and 21st."

(I did not reply to this letter).

14. From Mr. D. G. Jones. To Dr. Ll. Owen. 4 May, 1938.

" Adverting to previous correspondence. I informed the Committee of Inquiry at their sitting at Cardiff that I had received from you on the 21st ult., what you believed to be an exact copy of a letter forwarded by you to the Welsh Board of Health on the 3rd February last" (no doubt Mr. Clement Davies had shown him my solemn declaration on the subject, as practically acknowledged by the Secretary, Mr. Wildgoose, in his letter of 13 May to me, which see below).

The above letter of Mr. D. G. Jones is the " pointless " letter which I refer to in my letter of 21 May, 1938, which is found below.

15. From Dr. Ll. Owen. To The Chairman of the Welsh Board of Health. 12 May, 1938.

" On Feb. 7, 1938, you wrote a letter to the Clerk of the Caernarvonshire County Council.

" In the said letter you correctly conveyed to the County Clerk what I had promised to you on Feb. 3rd (that the last of the Caernarvonshire Returns—that relating to Gwyrfai—would be dispatched on Feb. 4th). This was actually done, as acknowledged by the County Clerk on April 20th, in answer to a further letter I sent him on April 13th, though it seems that I sent, of my own accord, an amended Duplicate on Feb. 5th, which reached

Dr. Parry Pritchard on Feb. 7th (Sunday having intervened). But that does not affect the main issue which is the matter of my good name.

"Strangely both Dr. Parry Pritchard and the County Clerk, in succession, misconstrued your letter, as you yourself will see from a letter written to you by the latter on Feb. 10th.

"And most unfortunately, the County Clerk quoting from a letter he had received from Dr. Parry Pritchard, used the same words as part of the County Council's evidence against me at the Tuberculosis enquiry at Colwyn Bay, thus publicly making a serious reflection on my character and honour as a truthful person.

"But for my almost accidental presence at the Enquiry on that day, I might not have known of the false accusation.

"I told the committee of Enquiry then and there that I challenged the assertion and that I would have to look the matter up.

"As far as I can gather, you yourself could not have observed the said damaging misconstruction, and therefore did not immediately correct the County Clerk.

"I shall be pleased to hear from you. I am, Yours obediently, E. Lloyd Owen."
16. From the Welsh Board of Health. To Dr. Ll. Owen. 17 May, 1938.

||| "I am directed to acknowledge the receipt of your letter of the 12th May, and to state that it is evident that the Department's memorandum of the 7th February, 1938, to the Clerk of the Caernarvonshire County Council was misconstrued. |||

"The memorandum was intended to indicate that it was understood from your letter addressed to the Department on the 3rd February, 1938, that the outstanding quarterly returns for 1937 would be in the hands of the County Medical Officer of Health by the date of the Department's memorandum, i.e., the 7th February.

"I am to add that a copy of your letter of the 12th May, together with a copy of this reply, is being sent to the Clerk to the Caernarvonshire County Council. I am, Sir, Your Obedient Servant, J. Haydn Jones."

17. From Dr. Ll. Owen. To Mr. D. J. Wildgoose (Secretary Tuberculosis Commission.) 21 May, 1938 :—

"I enclose a copy of a letter dated 17th May, 1938, from the Welsh Board of Health, which speaks for itself.

"Though Mr. D. G. Jones would have received a copy of the same on May 18 (as indicated in Mr. Haydn Jones' letter), he has not condescended to write me to acknowledge his misconstruction, even after the receipt of the said letter.

"In his letter to me of 22 April, 1938 (as in previous letters), he had written :— 'I have not misconstrued any letter.'

"Strange to say, on 4th May, 1938, after an interval of 12 days, without any further letter from me, he wrote me the following letter, which I call pointless (the letter quoted above, No. 14)."

Whether the misconstruing of the Board of Health's letter was culpable or not, whether the innuendo against my veracity and honour contained in Dr. Parry-Pritchard's letter, which letter was endorsed by Mr. D. G. Jones and read at the Public Inquiry at Colwyn Bay was intentional or not, the least that Mr. D. G. Jones could have done would have been to apologise on behalf of the County Council and Dr. Parry-Pritchard and himself.

THE CLEMENT DAVIES COMMITTEE ALSO TO BLAME. MIS-STATEMENTS NOT REFUTED IN THEIR OFFICIAL REPORT.

BLOTS ON A HISTORIC REPORT.

Worse than all, Mr. Clement Davies and Dr. Coutts, although they had every chance, did not publicly (at the subsequent and final sitting at Cardiff), nor in their Official Report (a permanent document) see fit to clear my character from the said base innuendo.

On 23rd April, 1938, I sent them a formal declaration, supported with full particulars, declaring that part of the evidence of the Caernarvon County Council against myself at Colwyn Bay on March 10, 1938, was false.

The declaration was as follows :—

“ Urgent.

Criccieth, April 23, 1938.

“ To the Chairman of the Tuberculosis Committee of Inquiry.

“ Dear Sir.—This is to solemnly declare that part (not the whole) of the evidence of the Caernarvonshire County Council (through the Clerk, Mr. D. G. Jones) against myself at Colwyn Bay on March 10th, 1938, was, to speak bluntly, false, and that I have called upon Mr. D. G. Jones since April 13th to write immediately to your Committee acknowledging this false evidence. As he is attending the inquiry at Cardiff, he will have an opportunity to make such confession or admission orally, and it would thus be open to the public and press.

“ If you should have received such admission in writing, then you would of course read it out, so thus again it would be open to the public and press.

“ If the Clerk should not volunteer to make the confession, then you will of course at the resumed Inquiry read out this my solemn declaration.

TWO PROTESTS OF MINE IGNORED.

Not only was this protest against a reflection on my personal honour ignored, but also my remonstrance against ugly mis-statements, with exaggerated and unrestrained language, (“hellish,” “hell-hole,” &c.) by a diligent external witness with respect to 2 homes in South Caernarvonshire, which constituted a slur upon the respective Districts, and upon the County, and upon Wales itself as a country and Nation.

I will quote from the letters I received from the capable and courteous Secretary of the Commission, Mr. D. J. Wildgoose, who by the way, on his subsequent visit in company with Mrs. Walter Elliot (the Minister of Health himself had to cut short his tour of Wales), and the principal Health Officials of Whitehall and Cardiff, was able to see for himself, how a bedroom with a window measuring 24-ins by 18-ins, not counting the frame, had by the said witness been unaccountably pronounced to have been “windowless” and “night for 24 hours.”

These letters (headed Ministry of Health, Whitehall, S.W.1) except the first, deal at the same time with both remonstrances of mine :—

“ 30 March, 1938 (with respect to my protest against part of Mr. Candy’s evidence) :—

“ I am desired by the Chairman of the Committee to acknowledge your letter of the 28th inst., and accompanying Statutory Declaration [before a Commissioner of Oaths], the contents of which will be carefully examined.”

27 April, 1938 : “ I have consulted Mr. Clement Davies with regard to your letter, and he instructs me to say that he does not propose to make any public reference to the matters to which you refer. They will of course be duly borne in mind by the Committee when the evidence given at Colwyn Bay and Caernarvon is under consideration.”

5 May, 1938 : “ I have to inform you that the Committee have read (but not publicly) your two declarations and will take due note of them when considering the relative evidence. No further public sitting of the Committee will be held.

13 May, 1938 : " The position is that the members of the Committee (Mr. Clement Davies and Dr. Coutts) have read your declarations, and will of course take note of them when they come to consider the relative evidence. The declarations have not been read out openly at the Inquiry, nor have they been read out to the two gentlemen named [Mr. Candy and Mr. D. G. Jones.] To the best of my recollection however, Mr. D. G. Jones has seen and read the document in which he is referred to."

I would ask here, did they show the document in which he is referred to to Mr. Candy, or did they wish to spare the feelings of the diligent external witness, who had given so much of his time to the Inquiry and who had received such praise from Mr. Clement Davies ?

21 May, 1938 : Dr. Lloyd Owen to D. J. Wildgoose, Esq.

" Many thanks for your letter of May 13th re my Two Solemn Declarations. I am bound to say that I feel that I have been unjustly treated by the Committee of Inquiry, (and with respect to the Declaration re Mr. Candy that South Caernarvonshire, and to some degree the whole of Wales, have been unjustly treated), in that my Two Solemn Declarations (in one case made before a Commissioner of Oaths) did not receive the same publicity at the hands of the Committee as the false charges which they were meant to refute.

" It is still due from the Committee to make the best amends they can for the said omissions when they issue their Final Report."

The gross and nett result of my efforts is, that both of my remonstrances have been ignored.

The Committee did not take the trouble either to confute my declarations nor to expunge the mis-statements I had pointed out to them.

They did not even read out my declarations in public, to speak for themselves. Neither have they made any reference to my protests in their final Report.

On the other hand, the mis-statements remain permanently recorded in their Blue Book, that is, with regard to the two maligned homes : and in the official shorthand typescript of the evidence in the case of the innuendo against my personal honour and veracity'

As regards myself the sight of this latest Blue Book will be calculated to remind me of the volumes that gave rise to the sinister expression, " Brâd y Llyfrau Gleision " !

One knows only too well that Housing and other conditions have been very bad.

But I am certain that others like myself feel that witnesses were not, to say the least, discouraged from painting things blacker than they really were.

In any case we in rural Wales have not the advantages of Pontypool.

Mr. Candy said of Pontypool people :—

" The advantage we have is this. We have 1360 economic houses, not slum-replacement houses, and with us we always have a change of houses where we can put a person in."

Mr. Candy was speaking of re-housing Tubercular families.

It is evident from this that Pontypool is fairly affluent, to be able to build 1360 economic or self-supporting houses, as well as being free with public money. They also rightly or wrongly in his County challenge and fight Government Auditors, as Mr. Candy testifies elsewhere.

Letter marked " A."

(Please see below Solemn Declaration under Oath relating to this letter).

Criccieth, 28 March, 1938.

To the Chairman of the Committee of Enquiry. (Mr. Clement Davies)

DEAR SIR,

(1). **Re Ty Isa** (otherwise **Barracks** or "**Barics**"), **Llannor Village, Lleyn Rural District.**

At the Enquiry at Caernarvon on Thursday, March 17th, Mr. Candy of Pontypool referred to the above house by the name of Ty Isa. I myself could not recall a house of that name.

But, according to my promise to you, I looked up the house on the following Monday, and found that Ty Isa was another name for a house which was down in my Note-Book as Barracks (or "Barics"). (There is another house in Llannor, better known as Ty Isa).

The house is occupied by Edward Williams (at present at a Tuberculosis Hospital) and his expectant wife.

Edward Williams is owner-occupier of the house (with accompanying yard and fowl-run), so that there is no outside Landlord to serve notice on.

At one time it seems that I advised them to try and find a house elsewhere and sell the property as a building site.

Individual unfit houses, like this one, and Overcrowded houses are about to be dealt with by the Council, but up to this they have been held up by a Slum Clearance Scheme relating to Areas, which after a Government Enquiry has just gone through.

The said house is like several other individual houses very defective, but at the Enquiry it was painted even blacker than it is.

(2). In the *North Wales Chronicle* for March 25th we read the following under the sub-heading "Hellish."

"Mr. Candy went on to refer to a house in South Caernarvonshire which he designated 'Hellish.' There was an expectant mother there.

"The Living-room and sleeping-quarters were on the same floor.

"It was a stable-floor, unfit for human beings.

The grate was nearly falling out.

"The door was 14 or 15 inches off the ground.

"In the sleeping-quarters it was a case of night for twenty-four hours—perfectly dark.

"THE CHAIRMAN : No window ?

"(ANSWER) : Perfectly dark.

"THE CHAIRMAN : Have you seen anything quite as bad in a Distressed Area ?

"ANSWER : I have seen them prior to the Order of Demolition, but nothing to equal this."

In the *Caernarvon and Denbigh Herald* of March 18th, we read this :—

"He (Mr. Candy) instanced cases—

1.

2.

"3. A heart-broken expectant mother living in a terrible house where it was night for twenty-four hours in the windowless bedroom.

"Mr. Candy said that he could repeat his evidence on oath if necessary. He had taken the names and addresses of the people concerned, so that they could be verified, but that they were nervous of being victimised."

Without dwelling on the first four items of Indictment specified as quoted in the *North Wales Chronicle*, of which some items are without point, and others very exaggerated, let me examine the last-mentioned charge that the bedroom or bed-chamber was windowless.

As stated I visited the house on Monday, March 21st, and was accompanied by one of the Lleyen Sanitary Inspectors (Mr. Turner), he being Surveyor as well. (We called at Llannor en route for Mr. Turner's own District, the Nevin District).

We found the bed-chamber in question, not without, but *with* a window, and fairly well lighted.

At my request, Mr. Turner measured the window and found as follows :—

Measurement outside frame—30 inches by 24 inches.

Measurement inside frame—24 inches by 18 inches.

Will you please let the Public at Cardiff and also the Minister of Health hear this and explain the discrepancy if they can?

(By the way, this very window was shown by me to Mr. Wildgoose, Secretary to the Commission, on his subsequent visit to Wales with the Chief Secretary and the Principal Medical Officer of the Ministry of Health, and Mrs. Walter Elliott—Mr. Elliott (the Minister of Health) himself having been called at the last moment up to London to an important Cabinet Meeting).

(2). **Re 4, Brynhyfryd Cottage, Criccieth.**

In the *Caernarvon and Denbigh Herald* for March 18th, under the sub-heading "Hell-hole," we read :—

"Mr. Candy, who had also made investigations outside Gwyrfaï, said that at Criccieth he had come upon a "Hell-hole" about 50 yards from the Medical Officer's own house. (But Mr. Candy and his guide did not pay me the compliment of calling upon me.—E. Ll. Owen).

"Dr. Lloyd Owen said he [himself] had already mentioned the house [stating the number of inmates and the amount of accommodation, including two outside shelters, and the Council's intention to build] in his report handed to the Chairman [and read out by the Chairman at the Enquiry]. Mr. William George, Clerk to the Criccieth Council had [also] informed him [the Chairman], that a site had been acquired for Housing."

In the *North Wales Chronicle* for March 25th, again under the sub-heading "A Hell-hole," we read :—

"MR. CANDY said that he called at a house at Criccieth at 5.30 p.m., and there he found some children who had just got up. They had been lying in a "Hell-hole." [All day long according to the Official Shorthand Report. This allegation is indignantly denied by the parents].

"The house was not fit.

"There was a ladder—

"DR. LLOYD OWEN : [It is not a ladder], it is an elementary form of staircase.

"THE CHAIRMAN : Whatever it is, there are the children described by Mr. Candy.

"DR. LLOYD OWEN : I hope someone will go from Caernarvon to South Wales.

"MR. CANDY : We will welcome them.

"THE CHAIRMAN : And Criccieth poses as a Health Resort !

"MR. CANDY said if he had criticised his colleagues and friends in North Wales, it had not been done from spite. They were trying to do what they could—looking after mother and children.

"The Chairman remarked that Mr. Candy had shown great Public spirit."

The Newspapers did not add that Dr. Lloyd Owen (myself) said he wondered how, as it transpired, several of the complaints in Pontypool went to Mr. Candy, and not to the Local Sanitary Officials ! (See below "Pontypool complaints").

To return to the house in question.

Here again as in the case of the preceding house, there was more than one mis-statement on Mr. Candy's part, but I will limit myself to answering one or two.

The so-called "ladder" of Mr. Candy leads into an attic bedroom with two large sky-lights opening into the Heavens and not into Hell, as Mr. Candy would have us believe. (Not that I am satisfied with sky-lights alone for ventilation purposes).

The so-called "ladder" again might have suggested an ordinary moveable ladder, but as matter of fact and of accuracy it is a fixed, firm staircase with a platform or landing on top situated outside the bedroom door and measuring over 3 feet by 2 feet. The staircase has a solid banister (or baluster) at the foot and a solid hand-rail with vertical bars all the way up and enclosing and rendering safe the said platform or landing, all of strong varnished woodwork.

As for children who had just got up at 5 to 5.30, the truth is that one child only of two years of age had just got up, after having had the usual afternoon rest on the bed according to the latest Kindergarten methods.

May I add that it seems a pity certain lay minds keep confusing over-crowding with structural unfitness. There is a fundamental difference between the two.

In making out a case for subsidy, one of course must be able to avoid this.

In conclusion, Mr. Chairman I must ask, if Mr. Candy's utterances are to be quoted in your final reports, that this rejoinder of mine should also appear in full in the same Report.

Let me add also that having already had a sufficient bouquet from you, I would be prepared to accept any castigation you might be pleased to inflict. It would come to the same thing as for those who have received their castigation first, and bouquet last.

I am, Mr. Chairman, Yours obediently,

E. LLOYD OWEN.

SOLEMN DECLARATION.

I, EDWARD LLOYD OWEN, of Glasfryn, in the Town of Criccieth, and County of Caernarvon, hereby solemnly Declare that the contents of the Letter addressed by me to the "Chairman of the Committee of Inquiry" dated the 28th day of March, 1938, and marked with the letter "A" are true and correct: and I make this Solemn Declaration conscientiously believing the same to be true and by virtue of the provisions of the Statutory Declaration Act, 1835.

Declared by the said Edward Lloyd Owen, at
Caernarvon, in the County of Caernarvon, the
28th day of March, 1938.

EDWARD LLOYD OWEN.

Before me,—JOHN WILLIAMS,

A Commissioner of Oaths.

Since the Commission has chosen to ignore my two solemn declarations to the effect that not all the disparaging statements (in the Clement Davies Volume and the Shorthand Transcript of evidence, and in the Newspapers of the day with their flaming and sensational Headlines) are true, I am obliged to place such declarations on record in this year's Annual Report; and since Mr. Clement Davies tells us that he hopes to deposit a copy of his Report, and of every tittle of evidence on which it is based, in the Welsh National Library at Aberystwyth for reference by future generations, so shall I send my little contribution to the safe keeping of the said National Library.

The said house, with the "Hell-hole" having now been demolished, a photo of the so-called "ladder" will be sent to the National Library at Aberystwyth, and perhaps the "ladder" itself to the National Museum at Cardiff. It is estimated to have cost £13 at least.

From the *Western Mail*.

(Interviews with various persons after the appearance of Mr. Clement Davies' Report).

"Dr. Lloyd Owen, of Criccieth, expressed his surprise that the Commissioners had repeated and thus finally accepted, details given by a man who had paid lightning visits to places where the more difficult and, therefore, worst cases could be found.

Dr. Owen said he had inspected the two houses—one at Criccieth, the other at Llannor—which had been specifically referred to, and had sent a sworn statement to Mr. Clement Davies controverting certain important points in which Dr. Owen described as the "over-coloured, jurid statements made by one person."

Referring to the house at Criccieth, he said :—"The so-called hell-hole—the attic bedroom—had at least two separate skylights opening into the heavens and not into hell—not that I hold a brief for skylights as suitable windows for a bedroom."
From the *Western Mail*, 1st April, 1938.

NORTH WALES EVIDENCE AT T.B. INQUIRY.

"HUNTING ISOLATED EXAMPLES OF SORDID CONDITIONS."

M.O.H. AND STATEMENTS BY COUNCILLOR. DOCUMENT SENT TO CHAIRMAN.

To the Editor of the "*Western Mail*"

SIR,—As medical officer of health to councils which on many occasions I have considered hard and too legal-minded when certain cases or conditions were brought to their attention, I would have welcomed sober reproaches at the Tuberculosis Inquiry from men rich in the milk of human kindness, and enlightened at that.

But I am sorry to have to say that Councillor Candy's knack for hunting (with assistance) isolated examples of sordid, terrible, yes, hellish conditions, as he luridly calls them, have repulsed me rather than made me grateful to him.

He even got councillors, as he tells us, to condemn themselves by saying that worse examples could have been cited than those given!

Mr. Candy had arrogated himself the right to interrogate all and sundry—almost the sole right, for I remember his shaking his head at me once when he saw I was preparing to intervene before him at a certain juncture!

PONTYPOOL COMPLAINTS.

The Chairman had introduced Mr. Candy on more than one occasion as one to whom the good people of Pontypool brought their complaints, and at whose house or shop complaints were left in his absence.

After having undergone the usual cross-examination at his hands—made "with great respect" as he assured me—and after having myself put a question or two to Mr. Candy, I told the Chairman and assembly that I had been puzzled to hear how so many of the complaints at Pontypool came direct to Mr. Candy and not to the various sanitary officials.

In Caernarvonshire, I said, the complaints came to the sanitary officials in the first instance. If the local officials did not listen to complaints why had Mr. Candy not reported them to his council and the Ministry of Health, since he was so zealous?

No answer, or only a feeble disclaimer, was forthcoming.

In conclusion, allow me to say that last Monday I posted to Cardiff a document addressed to Mr. Clement Davies, K.C., M.P. (Chairman of the inquiry), refuting some of Mr. Candy's statements—in which statements my name had been specifically mentioned—after surprise and hurried, not to say spying, visits by him to different premises, one only 50 yards, as he was careful to say, from my own house.

This document was uttered by me under a solemn declaration before a Commissioner of Oaths.

If my document sees the light of day the public will judge how many of Mr. Candy's statements to accept or reject (and to what degree).

Yours, &c., E. LLOYD OWEN, M.O.H.

Criccieth, 30 March, 1938.

The *Western Mail* omitted the following sentence :—

“ If Mr. Candy also takes the oath he said at the inquiry he was prepared to take with respect to his numerous statements, there will be a plain case of perjury on one side or the other.”

From Mr. Candy's talk about the young wife (erroneously described by Mr. Candy first and, repeating him, by myself afterwards, as “ an expectant mother ”) “ breaking her heart,” one would have thought that the poor woman was yearning for us to insist on the remedying of the housing conditions (“ hellish or worse ! ”) she lived in, but the fact is that she resented any interference on our part, and it would have been the last thing she would have wished for us to condemn the house (which, with a large garden, belonged to themselves) or even to compel them to carry out repairs, her husband being out of work, and at the time in a Sanatorium.

It was up to them, of course, to repair to the best of their ability, for example, fixing a piece of boarding under the door which was said to admit so much draught and wet.

SUPPLEMENTARY EXTRACTS FROM THE SHORTHAND REPORT.

1. TUBERCULOSIS AND RE-HOUSING.

MR. CANDY : (referring to the Criccieth house, now demolished) I hope my appeal to the doctor will have effect immediately.

DR. LLOYD OWEN : A house is not a mushroom. A site has been bought, and the next step is to draw up plans.

MR. CANDY : I ask you for the sake of the little children, to get them away from there.

DR. LLOYD OWEN : You need not ask me. They are as near to my heart as to yours.

THE CHAIRMAN : You, in common with other Authorities in South Wales, give special preference to people suffering from Tuberculosis ?

MR. CANDY : That is our resolution, always carried out.

DR. LLOYD OWEN : Mr. Candy, supposing a person's house came to be condemned and was to be demolished under slum clearance, you would not refuse that person a house and give it to a Tuberculous family ? Of course, if the Tuberculous family lives in a similar unfit house, by all means give that family preference.

My point is that there ought to be a special subsidy for Tuberculosis. There is such a subsidy for slum clearance, and there is for overcrowding. And there ought to be a special Government subsidy for the Tuberculous family. It should not be a case of giving preference, but there should be a special subsidy for the family.

MR. CANDY : The advantage we have is this : We have 1360 economic or self-supporting houses, not slum clearance houses, and with us we always have a change of houses where we can put a person in.

2. MONMOUTH COUNTY COUNCIL AND THE AUDITOR.

THE CHAIRMAN : You are also a member of the Monmouth County Council, and your Public Assistance Committee also gives extras in all cases of Tuberculous patients—extras for the patient, and extras for the family in order to try and build them up ?

MR. CANDY : Yes. They are often given more than we are allowed to give. What we do when the Auditor comes down is this. We arrange for 4 or 5 of us County Councillors to be present at the office, and they battle it out with the Auditor, and we always get away with it.

THE CHAIRMAN : One other thing. I was surprised at the amount of the family income that goes in the payment of rent. In most cases it was 25 per cent., but in some instances it was as high as 35 per cent. of the income paid in rent. That is in an area where 42 per cent. are still out of work, and dependent on Public Assistance.

MR. CANDY : We have 7 collieries closed in the area. Our Rents are 10/6, 11/-, 11/3 and 12/6, inclusive. We collect 99 per cent. of our rents.

THE CHAIRMAN : Is anything paid by the Public Assistance Committee ?

MR. CANDY : Yes, half the rent, up to a maximum of 8/-.

3. MR. CANDY, THE DILIGENT EXTERNAL WITNESS AND CROSS-EXAMINER.

MR. CANDY (saying he would be leaving shortly) : I wish to thank you very much, Mr. Chairman and Dr. Coutts, for the opportunity of putting questions during the last 7 weeks. While I may have criticised my friends of North Wales, I have not done it with any idea of spite, but with the idea of all of us trying to do for Wales whatever we can.

THE CHAIRMAN : Thank you, Mr. Candy, I am very grateful to you. Mr. Candy is here carrying out a public service for which he does not get a penny, and for which the ratepayers will be responsible. Meanwhile, his wife is taking notes for him day by day from people in his locality asking for Mr. Candy's attention to this or to that, whether it is a drain, or a roof, or a tap, or even the sash of a window.

DR. LLOYD OWEN : I should like to ask how it is that those people in South Wales do not lodge their complaints with the Medical Officer of Health, or with the Sanitary Inspector, or at the Council Office ? Why should they go to Mr. Candy ?

MR. CANDY : That is easily answered. When you are walking through your Ward day after day, they come and tell you the various complaints they have, and then you get on to the track of the Sanitary Inspector or the Surveyor. It may be they complain that the Drains are smelling, or it may be that there is a hole in the pavement, and when a lady goes to the pictures she gets her stockings splashed. There are also many other things. If I am going by, people will say to me, "Councillor Candy, we reported this last Friday, and nothing has been done."

DR. LLOYD OWEN : I can quite understand them coming to you, if the Officers have refused to attend to the complaints. But what I say is this. In North Wales the people go in the first instance to the Council Offices. Mr. Rogers Jones, who speaks for the Sanitary Inspectors, would resent it very much if these people went to a Councillor before going to him, or to the Surveyor, or going to the Water Manager, or so forth. In North Wales we would resent it very much indeed. Another thing, if your officers do not do their duty, why not complain to the Ministry of Health ?

MR. CANDY : Do your Sanitary Inspectors stop in the office all day waiting for complaints, or do they go out into their districts ?

DR. LLOYD OWEN : There may be a clerk who can receive the complaints. Besides, some Sanitary Inspectors have wives, like yourself, who can take in complaints.

(Since the 3 Sanitary Inspectors in Pontypool each has an outside Helper, surely the population have plenty of opportunities to buttonhole them instead of the Councillors).

4. QUARTERLY STATISTICS.

From *Blue-book*, page 73 :—

"In one combined area (in South Caernarvonshire and parts of Anglesey and Merionethshire), however, with a Medical Officer of Health giving his whole time to public health work, it was admitted that the requirements of the Regulations [re Quarterly Statistics] had not been properly (my word was "promptly"—E. Ll. Owen) complied with, the explanation given being lack of Office facilities and clerical assistance.

(1). From *Official Shorthand Report*, page 15 :—

DR. LLOYD OWEN : I will confess at once that I have been lacking in promptness in sending these returns to Dr. Parry-Pritchard. I confess that, but I have never had a clerk, and the sending of these returns is the work of an office boy (here I exaggerated—E. Ll. Owen). I have

been doing the work of an office boy for 30 years, because my authorities have refused to give me clerical assistance, and I have no travelling expenses. I have to cover parts of 3 Counties—Merionethshire, Caernarvonshire and Anglesey, and I get not a penny piece for travelling these 3 Counties with a population of over 70,000. I am quite willing to take part of the blame, but not by any means the whole of the blame.

(2). Page 18 :—

MR. DAVID JONES (Clerk of County Council) reading a letter from the County Medical Officer :—

“ I wish to state that the last of the outstanding Quarterly Statistics were received in this office from Dr. Lloyd Owen on the 7th Inst., and not before the 3rd inst., as stated in the Memorandum from the Welsh Board of Health, dated 7th February.”

DR. LLOYD OWEN : There is a discrepancy there. I cannot allow that to stand. It would seem to suggest that I informed the Welsh Board of Health that I had done that which I had not done. I can never accept that I said that I sent the statements before 3rd February, when in fact I only sent them by 7th February, because that is false. I could never have done that.

(It will be seen from the letter of the Welsh Board of Health, dated 17th May, 1938, and appearing above, that Dr. Parry-Pritchard in the first instance, and then Mr. David Jones, had misconstrued the Board's letter, leading to a cruel innuendo, which has never been apologised for).

While I am on my feet, I would submit that this is a question of Statistics. As regards passing on all Notifications to the Tuberculosis Physician, and as regards Deaths from Tuberculosis, and Disinfection, the communications go promptly. The patients and their families do not suffer at all.

Reference has been made to my colleague in North Caernarvonshire, and to the fact that he is prompt in this matter. But he is fortunate in that he has a whole-time clerk, but I cannot afford to pay a clerk out of my pocket. Naturally, her work is to send out these forms.

There has been a fearful epidemic of Diphtheria and Scarlet Fever in Gwyrfaï and another large epidemic of Diphtheria in Caernarvon, and in the Autumn there was Dysentery as well as Diphtheria in Gwyrfaï, and I thought it was better for me to go after those cases rather than sit down in my home and write out these reports promptly to the day, following out the regulations.

THE CHAIRMAN : I follow.

(The matter ended there as far as the Inquiry was concerned, but I wrote the Welsh Board of Health, and received their reply, which completely upheld me. (See copy of correspondence).)

B.—TABLES-IN-COMMON.

(Furnishing much of the matter demanded by the Ministry of Health in a condensed tabular form).

Table I.
VITAL STATISTICS.

(Note.—Rate per 1000 of the Population unless otherwise specified...

BIRTHS: (Live) (a) Total Number	A
(b) Boys	B
(c) Girls	C
(d) Live Birth-rate (on Registrar-General's figures)	D
(e) Live Birth-rate for England and Wales (per 1000 of population)	E
DEATHS: (a) Total number from all causes (civilians only)	F
(b) Males	G
(c) Females	H
(d) General Death-rate (on Registrar-General's Figures)	I
(e) Death-rate for England and Wales	J
DEATHS OF INFANTS UNDER ONE YEAR: (a) Number	K
(b) Infant Mortality (rate per 1000 live Births)	L
(c) Infant Mortality for England and Wales	M
(d) Deaths of Legitimate Infants: Number	N
(e) Do. do. Mortality (per 1000 live births)	O
(f) Deaths of Illegitimate Infants: Number	P
(g) Do. do. Mortality (per 1000 live births)	Q
DEATHS OF ELDERLY PERSONS (65 years and upwards): (a) Number	R
(b) Senile Mortality	S
ILLEGITIMATE AND STILL-BIRTH BIRTH-RATES	
No. of Illegitimate Births (live)	T
Illegitimate Birth-rate (Percentage of Total live Births—see above)	U
No. of Still-births (a) Total	V
(b) Legitimate	W
(c) Illegitimate	X
Still-birth Birth-rate (per 1000 live Births)	Y
Still-birth Birth-rate (per 1000 of population)	Z
Still-birth Birth-rate for England and Wales (per 1000 of population)	A
MATERNAL (including Puerperal) MORTALITY (Deaths connected with Childbirth and	
Pregnancy): Total	B
(a) From Sepsis	C
(b) From Other Causes	D
(c) Maternal Mortality (per 1000 live Births)	E
(d) Ditto for England and Wales (per 1000 Births)	F
ZYMOTIC MORTALITY (Deaths from the so-called Principal Zymotic Diseases. See table	
of Infectious Diseases): (a) Number of Deaths	G
(b) Zymotic Mortality	H
DEATHS FROM CANCER (and allied malignant diseases): (a) Number of Deaths	I
(b) Cancer Mortality	J
(c) Ditto for England and Wales	K
DEATHS FROM RESPIRATORY DISEASES (Non-Tubercular): (a) Number of Deaths	L
(b) Respiratory (non-Tubercular) Mortality	M
DEATHS FROM TUBERCULOSIS: (a) Number of Deaths	N
(b) Tubercular Mortality	O
(c) Ditto for England and Wales	P
DEATHS FROM INFLUENZA: (a) Number of Deaths	Q
(b) Influenza Mortality	R
(c) Mortality for England and Wales	S
DEATHS IN PUBLIC INSTITUTIONS: (a) Number	T
(b) Percentage of total deaths	U
(c) Ditto for England and Wales	V
OPHTHALMIA NEONATORUM: An Eye-Affection of the New-born:	
(a) No. of Cases notified	W
(b) Cases Treated at home—(1) Total Number	X
(2) No. where vision unimpaired	Y
(3) No. where vision impaired	Z
(4) No. where Total Blindness followed	A
(5) No. which proved fatal	B
c) Cases treated in Hospital—(1) Total Number	C
(2) No. where vision unimpaired	D
(3) No. where vision impaired	E
(4) No. where Total Blindness followed	F
(5) No. which proved fatal	G

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Bangor City.	Bethesda U.D.	Llandudno U.D.	Llanfairfechan U.D.	Penmaenmawr U.D.	Nant Conway R.D.	Ogwen R.D.	Aethwy R.D.	Hiraeathog R.D.	Carnarvon Borough.	Criccieth U.D.	Pwllheli Borough.	Portmadoc U.D.	Gwyrfai R.D.	Lleyn R.D.	Deudraeth R.D.	Conway Borough.	Bellwyscoed U.D.	Llanrwst U.D.
A	174	74	169	26	50	79	67	154	72	128	13	54	63	367	249	98	115	8	4
B	80	34	83	12	26	43	35	81	37	64	6	27	26	213	116	40	60	4	28
C	94	40	86	14	24	36	32	73	35	64	7	27	37	154	133	58	55	4	20
D	13.8	16.4	11.1	8.4	12.8	12.8	13.5	15.1	13.1	14.71	8.89	15.08	15.50	15.55	14.51	13.97	12.7	10.7	19.7
E	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
F	155	67	188	34	53	105	82	163	86	123	27	50	72	427	304	103	138	12	44
G	68	34	79	16	25	50	39	83	53	68	15	26	40	195	148	62	70	8	25
H	87	33	109	18	28	55	43	80	33	55	12	24	32	232	156	41	68	4	19
I	12.3	14.9	12.4	11.07	13.6	16.8	16.5	15.5	15.7	14.14	18.46	13.97	17.72	18.09	17.71	14.68	14.2	16.05	18.1
J	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
K	12	4	9	-	2	4	2	13	4	5	-	3	3	26	19	5	6	-	3
L	69	54	53	-	40	51	29	84	55	39.06	-	55.55	47.61	70.84	76.30	51.02	52	-	62
M	53	53	53	53	53	53	53	53	53	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53	53	53
N	12	4	8	-	1	3	2	13	2	-	-	-	-	-	-	-	4	-	3
O	68	54	47	-	20	39	29	84	27	-	-	-	-	-	-	-	34	-	62
P	-	-	1	-	1	1	-	-	2	-	-	-	-	-	-	-	2	-	-
Q	-	-	5	-	20	12	-	-	27	-	-	-	-	-	-	-	17	-	-
R	83	37	95	20	22	51	47	76	42	-	-	-	-	-	-	-	63	7	22
S	6.6	8.2	6.2	6.5	5.6	8.1	9.4	7.4	7.6	-	-	-	-	-	-	-	7.00	9.3	9.05
T	5	1	15	-	5	8	4	13	8	10	-	4	6	20	15	5	5	-	1
U	2.8	1.3	8.8	-	10.0	10.1	5.9	8.4	11.1	7.81	-	7.40	9.52	5.44	6.02	5.10	4.3	-	2.08
V	11	6	5	2	5	6	3	8	3	4	2	1	2	21	19	6	5	-	2
W	10	5	4	2	5	5	3	8	1	4	2	1	2	18	17	6	5	-	2
X	1	1	1	-	-	1	-	-	2	-	-	-	-	3	2	0	-	-	-
Y	63	81	29	76	100	75	44	52	41	31.25	153.8	18.51	31.74	55.22	76.30	61.22	43	-	41
Z	0.8	1.3	0.3	0.6	1.2	0.9	0.6	0.7	0.5	0.45	1.36	0.27	0.49	0.88	1.10	0.85	0.5	-	0.8
A	-	-	-	-	-	-	-	-	-	0.60	0.60	0.60	0.60	0.60	0.60	0.60	-	-	-
B	-	1	1	-	-	-	-	1	-	-	1	-	-	1	3	-	2	-	1
C	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2	-	-
D	-	1	1	-	-	-	-	1	-	-	1	-	-	-	2	-	-	-	1
E	-	13	5.9	-	-	-	-	6	-	-	76.92	-	-	2.72	12.04	-	17.2	-	20
F	-	-	-	-	-	-	-	-	-	3.08	3.08	3.08	3.08	3.08	3.08	3.08	-	-	-
G	-	-	-	-	-	1	1	2	1	-	-	-	-	6	3	1	4	-	-
H	-	-	-	-	-	0.1	0.2	0.1	0.1	-	-	-	-	0.25	0.17	0.14	0.4	-	-
I	21	12	35	6	6	14	12	23	18	20	5	6	14	56	49	14	19	1	3
J	1.6	2.6	2.3	1.9	1.5	2.2	2.4	2.2	3.2	2.29	3.43	1.67	3.44	2.3	2.85	1.99	2.1	1.3	1.2
K	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L	9	8	12	7	3	10	5	20	5	8	3	4	3	26	27	10	11	-	4
M	0.7	1.7	0.7	2.6	0.7	1.6	1.00	1.9	0.9	0.91	2.05	1.11	0.73	1.10	1.57	1.44	1.2	-	1.6
N	4	4	4	1	2	5	7	2	2	11	2	6	7	53	20	5	7	3	3
O	0.3	0.9	0.2	0.3	0.5	0.8	1.4	0.1	0.3	1.26	1.36	1.67	1.72	2.24	1.16	0.72	0.7	4.01	1.2
P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q	1	-	3	-	2	3	-	1	1	-	-	-	-	5	10	1	4	-	3
R	0.08	-	0.1	-	0.5	0.4	-	0.09	0.1	-	-	-	-	0.21	0.58	0.14	0.4	-	1.2
S	-	-	-	-	-	-	-	-	-	0.11	0.11	0.11	0.11	0.11	0.11	0.11	-	-	-
T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W	3	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	-	-	-
X	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Y	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Z	Slight	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CAUSES OF DEATH.

NOTE.—In England and Wales the Death Rate (number of fatal cases per 1000 of population) of certain Fevers was as follows :—
Enteric Fever (including Paratyphoid)—(0.00), Small-pox—(0.00), Measles—(0.04), Scarlet Fever—(0.01), Whooping Cough—(0.03), Diphtheria and M. Croup—(0.07), Influenza—(0.11), Diarrhoea and Enteritis (under 2 years)—(5.5) per 1000 Births in this last case.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
A 1213	893	2840	4472	3814	2388	44066	36889	8776	2213	1450	1120	3390	96475	24460	75915	3813	4472	822
										x				y				
B12290	4548	15110	3122	3951	6380	5110	10300	5593	8697	1462	3578	4063	23600	17159	7015	8924	782	2367
C11029	4132	19281	3639	4483	4270	5842	8235	1723	8340	1802	3546	4079	24180	16680	7170	7964	1025	2367
D10959	4476	13677	3162	4021	4529	5639	8013	1853								8769	912	2366
E10959	2243	13677	3062	4021	4529	5639	8013	1853	8469	1449	3599	3986	23947	16441	7417	8769	912	2364
F 4993	2233	5540	1498	1877	2174	2780	3963	939	3906	575	1621	1831	11726	8084	3653	4114	308	1142
G 5966	2124	8137	1664	2144	2355	2859	4050	914	4563	874	1978	2155	12221	8357	3764	4655	514	1229
H -	4.6	6.8	0.8	1.2	0.3	0.1	0.2	0.2	3.82	3.08	3.21	1.03	0.34	0.17	0.09	1.9	0.2	2.0
I 2478	1171	3934	709	1068	1926	1480	2078	405	2102	475	878	1079	6572	4379	1773	1275	211	616
J 2455	1160	2170	705	918	791	1466	2073	401	2085	377	877	1058	6526	4319	1750	1197	195	592
K 9842	4115	14770	295	4148	8150	5653	8138	1717	8035	1759	3547	4124	23987	16827	7090	5295	792	2284
L 3.97	3.51	3.75	4.16	3.88	4.23	3.82	3.92	4.24	3.82	3.70	4.04	3.82	3.65	3.84	4.00	4.15	3.75	3.77
M 1.01	1.01	1.81	1.01	1.16	1.08	1.01	1.00	1.01	1.01	1.26	1.00	1.02	1.01	1.01	1.01	1.07	1.08	1.04
N13365	5645	16713	3972	5461	9228	7591	10532	2000	11808	3071	5592	6629	34293	23959	9848	6784	1361	2883
O 5.44	4.87	7.83	5.63	5.95	5.15	5.18	5.08	4.99	5.66	8.15	6.38	6.27	5.26	5.55	5.63	5.67	6.98	4.86
P 1.36	1.37	1.13	1.35	1.32	1.13	1.34	1.29	1.16	1.47	1.75	1.58	1.61	1.43	1.42	1.39	1.28	1.72	1.20
Q 407	102	1099	120	147	557	169	796	139	422	23	144	62	538	634	222	343	16	200
R 4.1	2.5	7.4	4.1	3.5	6.8	3.0	9.8	8.1	5.3	1.3	4.1	1.5	2.2	3.8	3.1	6.5	2.0	9.6
	£	£	£186,	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
S68200	11094	485	14470	23901	28731	17510	25694	27626	46452	10441	20577	16813	54203	44768	41619	61219	5528	14003
T 260	40/7	734	54	90	111	68	107	115	179	42	81	66	201	167	164	234	22/4	48
U 24	13	30	15	13	18	13	21	21	24	15	16	16	42	43	14	20	11	12
V 155	67	188	34	53	105	82	163	86	123	27	50	72	427	304	103	138	12	44
W 68	34	79	16	25	50	39	83	53	68	15	26	40	195	148	62	70	8	25
X 87	33	109	18	28	55	43	80	33	55	12	24	32	232	156	41	68	4	19
Y -	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Z -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B -	-	-	-	-	-	1	2	-	-	-	-	-	1	5	1	-	-	-
C -	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	2	-	-
D 1	-	3	-	2	3	-	1	1	-	-	-	-	5	10	1	4	-	3
E -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F -	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
G 4	4	5	3	1	7	9	5	1	10	1	4	6	45	16	4	9	3	4
H 2	-	1	-	1	2	-	-	2	1	1	-	1	8	4	1	2	1	-
I -	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J -	-	1	-	-	-	1	-	-	-	-	-	-	1	1	-	-	-	-
K 21	12	35	6	6	14	12	23	18	20	5	6	14	56	49	14	19	1	3
L 2	-	1	1	-	1	1	4	2	1	-	-	-	1	4	2	2	-	-
M 9	3	11	1	7	12	5	12	5	4	1	5	7	16	31	8	8	-	6
N 41	20	51	10	10	27	29	36	19	29	9	11	17	101	56	22	27	3	8
O -	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
P 4	4	13	3	4	4	4	4	6	11	3	4	3	23	18	5	16	2	1
Q 1	1	2	4	1	4	4	9	3	4	1	2	1	9	10	3	1	-	4
R 4	5	8	3	1	6	-	11	2	4	1	2	1	14	17	6	7	-	-
S 4	2	2	-	1	-	1	-	-	-	1	-	1	3	-	1	3	-	-
T -	-	1	-	-	3	-	1	1	1	-	-	-	5	4	-	3	-	-
U -	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	1	-	-
V 1	-	1	-	-	-	-	-	1	-	-	-	-	1	3	2	1	-	-
W -	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-
X 4	-	1	1	-	-	-	2	-	-	-	-	-	-	1	1	-	-	-
Y 4	1	3	1	2	2	2	3	2	5	-	2	2	5	4	-	4	-	2
Z 9	4	7	-	4	5	3	3	4	11	-	5	6	23	11	11	6	1	1
A -	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	2	-	-
B -	1	1	-	-	-	-	1	-	-	1	-	-	-	2	-	-	-	1
C 8	3	6	1	2	2	-	8	2	1	-	1	2	14	11	3	3	-	3
D 16	-	1	-	1	2	3	4	1	2	-	-	3	26	8	-	1	1	1
E 1	1	1	-	-	1	-	-	1	2	-	-	-	2	-	1	1	-	-
F 3	2	7	-	1	2	2	11	4	3	1	-	4	12	14	5	2	-	2
G 16	3	23	1	7	7	4	22	10	14	1	6	4	46	19	11	13	-	5
H -	-	1	-	1	-	-	-	-	-	1	-	-	3	4	-	-	-	-
I -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J -	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
K -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

 x Otherwise 1466 y Otherwise 17155

Calculated in relation to the number of Births, the Case-Rate of Puerperal Fever with that of Puerperal Pyrexia was 14.52 per 1,000 Total Births (Live and Still) registered.

(N.B.—The number of Fatal Cases of Fever are given in Table II. The number of cases sent to Fever Hospital are given in the Additional Local Report for each Council and on Table VI. as well).

[illegible]

NEW CASES								H
(a)	Primary Notifications, including cases notified by Tuberculosis Physician	I
(b)	Other New Cases	J
(c)	Pulmonary (including all Respiratory)	K
	(1) Males	L
	(2) Females	M
(d)	Non-Pulmonary	N
	(1) Males	O
	(2) Females	P
FATAL CASES: (a) Total								Q
(b)	Pulmonary (including all Respiratory)	R
	(1) Males	S
	(2) Females	T
(c)	Non-Pulmonary	U
	(1) Males	V
	(2) Females	W
(d)	Non-notified Tuberculosis Deaths : (1) Number	X
	(2) Percentage of Total Tuberculosis Deaths	Y
CASES ADMITTED to Hospital or Sanatorium : (a) Total								Z
(b)	Pulmonary (including all Respiratory)	A
(c)	Non-Pulmonary	B
(d)	For Observation	

* The so-called "Principal Zymotic Diseases."

Table IV.
HOUSING STATISTICS.

NOTE.—A Working-class house may roughly be regarded as a plainly built house with not more than one parlour (in addition to kitchen and scullery).

NEW WORKING CLASS HOUSES ERECTED (and completed) DURING THE YEAR :—

A.	Number (including numbers given separately under B.)	Grand Total	..	..	..	..A
(i).	By the Local Authority. Total	..	..	..	..	..B
(ii).	By other Local Authorities. Total	..	..	..	..	..C
(iii).	By other bodies and persons. Total	..	..	..	..	..D
B.	With State assistance under the Housing Acts. Total	..	..	..	..	..E
(i).	By the Local Authority. Number	..	..	..	..	..F
(a)	To Replace Condemned Houses	..	..	..	..	..G
(b)	To Abate Overcrowding	..	..	..	..	..H
(c)	For Fresh Housing	..	..	..	..	..I
(ii).	By other bodies or persons	..	..	..	..	..J

INSPECTION OF DWELLING-HOUSES DURING THE YEAR

I.—INSPECTION.—(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) K
(b) Number of inspections made for the purpose. L
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932 .. M
(b) Number of inspections made for the purpose N
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation O
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation P

II. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES.

Number of defective dwelling-houses rendered fit in consequence of Informal action by the Local Authority or their officers	9
---	---

III.—ACTION UNDER STATUTORY POWERS DURING THE YEAR.

A.—Proceedings under sections 9, 10 and 16 of the Housing Act, 1936.

(1) Number of dwelling-houses in respect of which Formal notices were served requiring repairs	.. .. .	R
(2) Number of dwelling-houses which after Formal Notices were rendered fit :—		
(a) By Owners	.. .. .	S
(b) By local authority in default of owners	.. .. .	T

B.—Proceedings under Public Health Acts :—

(1) Number of dwelling-houses in respect of which Formal Notices were served requiring defects to be remedied .. .. .	..U
(2) Number of dwelling-houses in which defects, after Formal notices, were remedied :—	
(a) By owners .. .. .	..V
(b) By local authority in default of owners. .. .. .	..W

C.—Proceedings under Sections 11 and 13 of the Housing Act 1936 :—

(1) No. of Dwelling-houses in respect of which an undertaking to close the house for human habitation was accepted .. .. .	..x
(2) Number of dwelling-houses in respect of which Demolition Orders were made..	..y
(3) Number of dwelling-houses demolished in pursuance of Demolition Orders ..	..z

D.—Proceedings under Section 12 of the Housing Act 1936 :—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	.. .. .	A
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	.. .. .	B

NUMBER OF HOUSES OWNED BY THE LOCAL AUTHORITY.	Grand Total	..	c
--	-------------	----	---

	Those completed during the year.	..	..	..	..	..	..	..	D
(i)	To Replace Condemned Houses ..	..	..	..	..	..	..	..	E
(ii)	For Fresh Housing ..	..	..	..	..	..	..	..	F
(iii)	To Abate Overcrowding.	..	..	..	..	..	..	..	G

NEW SUPERIOR HOUSES (Superior to Working-class Dwellings):

No. completed during the year	H
-------------------------------	----	----	----	----	----	----	----	----	---

RE-CONDITIONED HOUSES (under Housing of Rural Workers Act, 1926).

No. Re-conditioned (and work completed) during the year	I
---	----	----	----	----	---

HOUSING ACT, 1935—OVERCROWDING. Result of First Survey :

(a) Total number of houses in the district	..	..	..	..	..	..	J
(b) Number of houses Surveyed (Workmen's houses)	..	..	..	..	..	..	K
(c) Number of these overcrowded	..	..	..	..	..	..	L
(d) Number of Families dwelling in the Overcrowded Houses	..	..	..	..	..	..	M
(e) Number of Persons dwelling in the Overcrowded Houses	..	..	..	..	..	..	N

HOUSING ACT, 1936 (Part IV—OVERCROWDING)

(a).	(i)	No of dwellings overcrowded at the end of the year	..	..	..	..	..	O
	(ii)	No. of families dwelling therein.	..	..	..	..	..	P
	(iii)	No. of Persons dwelling therein	..	..	..	..	..	Q
(b)		No. of new cases of overcrowding reported during the year	..	..	..	..	..	R
(c)	(i)	No. of cases of overcrowded dwellings relieved during the year	..	..	..	..	..	S
	(ii)	No. of families concerned in such cases.	..	..	..	..	..	T
	(iii)	No. of Persons concerned in such cases.	..	..	..	..	..	U
(d)		Particulars of any cases in which dwelling houses have again become overcrowded after the Local Authority have taken steps for the Abatement of overcrowding						
(e)		Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report.						

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
A	295	33	-	25	44	25	63	-	4	150	-	34	-	265	21	35	-	1	88
B	295	33	-	15	40	22	62	-	-	150	-	34	-	-	-	23	-	-	73
C	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
D	-	-	-	10	4	3	1	6	-	-	1	-	-	15	-	12	50	1	11
E	295	33	-	15	40	22	62	-	2	150	-	34	-	-	-	23	-	-	-
F	295	33	-	15	40	22	62	-	-	150	-	34	-	-	-	23	-	-	-
G	295	33	-	15	31	19	28	-	-	138	-	6	-	258	-	23	-	-	73
H	-	-	-	-	9	-	34	-	-	12	-	28	-	7	-	-	-	-	-
I	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
K	1024	978	213	54	33	44	354	280	15	625	420	105	136	1518	298	148	39	30	125
L	1081	1059	213	68	57	44	395	-	15	625	441	150	400	1607	371	186	39	30	-
M	529	-	-	-	9	40	-	-	15	-	-	40	-	174	-	-	22	-	-
N	731	-	-	-	15	40	-	-	-	-	-	40	-	211	-	-	22	-	-
O	174	151	6	14	2	-	238	270	5	63	13	7	12	38	128	110	-	-	-
P	312	29	70	22	8	4	72	20	2	85	22	2	89	64	42	15	22	15	-
Q	312	27	68	17	5	-	32	10	2	22	13	2	-	109	28	7	15	9	-
R	-	-	2	-	-	4	-	-	-	22	9	-	24	107	3	14	7	-	-
S	-	-	2	-	-	4	-	-	-	22	9	-	15	99	2	6	7	-	-
T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U	-	15	-	2	9	2	1	-	-	235	5	-	65	94	-	9	17	-	-
V	-	2	-	2	9	2	1	-	-	235	4	-	43	89	-	6	17	-	-
W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X	14	5	1	2	3	-	5	5	-	17	3	-	-	76	10	2	1	-	-
Y	-	34	-	11	22	22	23	-	-	108	1	6	2	37	-	40	-	-	-
Z	-	-	-	2	6	-	23	-	-	30	-	-	1	-	-	6	7	-	-
A	-	-	2	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	-	79	330	52	104	28	75	12	33	447	18	122	23	-	-	43	473	3	117
D	932	33	-	15	40	22	62	-	-	150	-	34	-	265	-	23	23	-	73
E	295	33	-	15	31	19	28	-	-	138	-	6	-	258	-	23	23	-	73
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	-	-	-	-	9	3	34	-	-	12	-	28	-	7	-	-	-	-	-
H	-	1	-	1	-	1	-	16	-	43	3	13	14	3	17	6	-	1	11
I	26	-	-	-	-	1	1	2	3	-	-	-	-	-	6	-	-	-	-
J	-	1453	-	887	1155	1969	1352	3343	1702	2336	550	1018	1217	10064	5214	2300	2600	218	-
K	-	1249	1009	674	900	1309	1117	1929	1451	1641	122	338	811	6037	2903	2300	39	123	-
L	-	38	43	43	33	84	58	193	101	*174	13	70	44	494	213	31	17	4	-
M	-	38	44	46	33	84	67	193	101	182	13	70	53	504	213	32	17	4	-
N	-	242	231	259	167	-	366	884	455	903	77	-	354	-	1097	198	109½	18½	-
O Under pReview	-	57	14	13	24	14	21	-	97	43	6	27	35	201	-	30	17	3	-
Q	-	60	14	13	24	14	25	-	97	43	6	27	37	233	-	30	17	3	1
R	-	337	118	85	127	70	131	-	435	310	48	134	212	961	-	194	109½	21	1
S	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-
T	-	5	5	30	9	10	37	-	4	12	1	28	4	-	-	1	11	1	2
U	-	5	5	30	9	10	42	-	4	12	1	28	4	-	-	4	11	1	2
U	-	37	31	174	40	46	235	-	20	74	9	-	-	-	-	-	572	6½	15

* 80 of these were Slum Clearance Houses as well, and were all relieved.

Table V
SOUND AND UNSOUND FOOD.

MILK AND MILK SAMPLES.									
No. of Dairy Cows (whether temporarily dry or not)	..	..	..	..	..	..	..	..	A
Whether Milk imported ?	From how many Dairy Farms ?	..	..	..	..	..	..	..	B
Whether Milk exported ?	From how many Dairy Farms?	..	..	..	..	..	..	..	C
No. of Samples of milk taken by Sanitary Inspector	..	..	..	..	..	..	..	..	D
No. of these unsatisfactory	..	..	..	..	..	..	..	..	E
No. of Samples of Milk taken by County Inspector of Foods and Drugs	..	..	..	..	..	..	..	..	F
No. of these unsatisfactory	..	..	..	..	..	..	..	..	G
No. of Prosecutions	..	..	..	..	..	..	..	..	H
No. of these successful	..	..	..	..	..	..	..	..	I
MEAT AND MEAT INSPECTION.									
How many slaughterhouses licensed as well as registered ?	..	..	..	..	..	..	..	..	J
No. of slaughterhouses on Register end of December (including licensed and unlicensed)	..	..	..	..	..	..	..	..	K
No. of slaughterhouses on Register in the previous year	(Ditto)	..	..	..	..	..	..	..	L
No. of voluntary surrenders of Carcases or Part Carcases—									
(a) For Tuberculosis	..	..	..	..	..	..	..	..	M
(b) For other Diseases	..	..	..	..	..	..	..	..	N
No. of seizures (supported by magistrate) of ditto—									
(a) For Tuberculosis	..	..	..	..	..	..	..	..	O
(b) For other Diseases	..	..	..	..	..	..	..	..	P
OTHER FOODS.									
No. of Voluntary Surrenders of other Unsound Foods	..	..	..	..	..	..	..	..	Q
No. of Seizures	..	..	..	..	..	..	..	..	R
PROSECUTIONS.									
No. of Prosecutions for Unsound Meat or other Foods	..	..	..	..	..	..	..	..	S
BAKEHOUSES.									
Total number of Bakehouses	..	..	..	..	..	..	..	..	T
No. of underground Bakehouses	..	..	..	..	..	..	..	..	U
No. of Factory Bakehouses	..	..	..	..	..	..	..	..	V
ADOPTIVE ACTS, BYELAWS, Etc.									
A.—WHETHER FOLLOWING ACTS (OR PARTS) BEEN ADOPTED :—(Append									
date of adoption and Sections adopted)*									
1. Infectious Diseases (Prevention) Act, 1890	..	..	..	..	..	..	..	..	W
2. Public Health Acts Amendment Act, 1890 (Parts I. and II.)	..	..	..	..	..	..	..	..	X
3. Public Health Acts Amendment Act, 1907 (Part III.)	..	..	..	..	..	..	..	..	Y
4. Public Health Act, 1925	..	..	..	..	..	..	..	..	Z
B.—WHETHER BYE-LAWS RELATING TO FOLLOWING MATTERS BEEN MADE :—									
1. New Streets and Buildings	..	..	..	..	..	..	..	..	B
2. Slaughterhouses	..	..	..	..	..	..	..	..	C
3. Prevention of Nuisances	..	..	..	..	..	..	..	..	D
4. Private Scavenging	..	..	..	..	..	..	..	..	E
5. Houses Let in Lodgings or Tenements	..	..	..	..	..	..	..	..	F
6. Common Lodging Houses	..	..	..	..	..	..	..	..	G
7. Baths and Wash-houses	..	..	..	..	..	..	..	..	H
8. Public Bathing	..	..	..	..	..	..	..	..	I
9. Offensive Trades	..	..	..	..	..	..	..	..	J
10. Cemeteries	..	..	..	..	..	..	..	..	K
11. Mortuaries	..	..	..	..	..	..	..	..	L
C.—WHETHER RECOMMENDATIONS ISSUED AMPLIFYING THE MILK AND									
DAIRIES ORDER, 1926									
D.—WHETHER URBAN POWERS (FOR RURAL DISTRICTS) UNDER PUBLIC									
HEALTH ACT, 1875 (Statement to be appended)									
E.—WHETHER A LOCAL WATER ACT OBTAINED									
WHETHER SOME OTHER ACT OBTAINED..									
F.—WHETHER ANY FEVER MADE LOCALLY NOTIFIABLE									
(a) Measles	..	..	..	..	..	..	..	..	R
(b) Whooping Cough,	..	..	..	..	..	..	..	..	S
(c) Chicken Pox	..	..	..	..	..	..	..	..	T

*.Part III. of the Housing of the Working Classes Act, 1890, is since the passing of the Housing, Town Planning, &c., Act, 1909, in force in each District without formal adoption.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Bangor City.	Bethesda U.D.	Llandudno U.D.	Llanfairfechan U.D.	Penmaenmaur U.D.	Nant Conway R.D.	Ogwen R.D.	Aethwy R.D.	Hiraethog R.D.	Carnarvon Borough.	Criccieth U.D.	Pullheli Borough.	Portmadoc U.D.	Gwyrfai R.D.	Lleyn R.D.	Deudraeth R.D.	Conway Borough.	Bellwyscoed U.D.	Llanrwst U.D.
A	112	115	500	166	81	1081	1029	650	820	253	106	88	-	1146	956	262	277	64	130
B	36	13	10	4	4	1	-	1	-	12	5	11	3	4	-	2	6	3	5
C	-	-	-	-	-	42	58	42	-	-	-	-	-	7	-	2	3	1	5
D	26	-	115	-	14	-	69	24	8	50	-	-	-	-	-	47	-	-	-
E	2	-	22	-	2	-	6	3	-	6	-	-	-	-	-	2	-	-	-
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J	3	4	2	5	3	9	7	8	7	1	1	1	3	34	25	9	6	1	5
K	4	3	2	5	3	9	7	8	-	1	1	1	3	34	25	11	6	1	5
L	4	4	2	5	3	12	7	8	7	1	1	1	3	-	31	12	6	1	-
M	28	-	2	-	-	-	-	-	-	8	-	-	-	29cwt	-	-	16	-	-
N	6	3	3	-	-	-	2	-	-	3	-	-	-	5½"	-	-	5	-	-
O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q	10	-	17	1	-	-	2	-	-	18	-	-	-	29	3	-	3	-	4
R	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-
S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T	21	13	28	6	6	12	3	15	9	12	8	15	10	11	16	10	15	2	5
U	-	-	-	-	-	-	-	-	-	1	0	-	-	-	-	-	1	-	-
V	5	3	16	3	5	1	1	-	-	3	5	2	4	-	2	5	3	1	2
W	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	-	Yes	-	Yes	No	Yes	Yes	-	Yes	-	Yes
X	No	No	"	-	"	"	"	"	-	Yes	-	Yes	-	-	-	-	"	-	"
Y	Yes	Yes	"	-	"	"	"	"	-	Yes	Yes	Yes	Yes	Yes	Yes	-	"	-	"
Z	"	"	"	-	"	No	"	-	-	Yes	Yes	Yes	-	-	-	Yes	Part	-	Part
A	"	"	"	-	Part	-	-	-	-	-	-	-	-	-	-	-	"	-	"
B	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes
C	"	No	"	-	"	No	"	-	-	Yes	Yes	Yes	Yes	Yes	"	Yes	"	-	"
D	"	Yes	"	-	"	Yes	"	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	"	-	"
E	No	-	No	-	No	No	-	-	-	Yes	Yes	-	-	Yes	Yes	-	"	-	"
F	Yes	-	"	-	Yes	"	-	-	-	-	-	-	-	-	-	-	No	-	"
G	"	-	"	-	"	"	-	-	-	Yes	-	Yes	Yes	Yes	-	Yes	"	-	"
H	No	-	"	-	No	"	-	-	-	Yes	-	-	-	-	-	-	Yes	-	"
I	"	-	Yes	-	Yes	"	-	-	-	-	Yes	-	-	-	-	-	"	-	"
J	"	-	No	-	"	"	-	-	-	Yes	-	-	-	-	-	-	"	-	"
K	"	-	Yes	-	No	"	-	-	-	-	-	-	-	-	-	-	No	-	"
L	"	-	No	-	Yes	"	-	-	-	-	-	-	-	-	-	-	Yes	-	"
M	-	-	Yes	-	"	Yes	Yes	Yes	-	-	-	-	-	-	-	-	No	-	-
N	-	-	-	No	No	-	No	No	-	-	-	-	-	Yes	Yes	Yes	No	-	Yes
O	Yes	Yes	Yes	Yes	Yes	No	"	"	-	Yes	Yes	-	-	-	-	-	Yes	-	No
P	1937	-	No	"	No	"	"	"	-	-	-	-	-	-	-	-	No	-	No
Q	-	-	Yes	No	"	"	"	"	-	No	No	No	Yes	No	No	No	"	-	-
R	-	-	"	-	-	"	"	"	-	"	"	"	Yes	"	"	"	"	-	-
S	-	-	No	-	-	"	"	"	-	"	"	"	Yes	"	"	"	"	-	-
T	-	-	Yes	-	-	"	"	"	-	"	"	"	No	"	"	"	"	-	-

* Sampling by their own Inspector commencing this year (1939).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Bangor City.	Bethesda U.D.	Llandudno U.D.	Llanfairfechan U.D.	Penmaenmawr U.D.	Nant Conway R.D.	Ogwen R.D.	Aethwy R.D.	Hiraelhog R.D.	Carnarvon Boroughs.	Criccieth U.D.	Pwllheli Borough.	Portmadoc U.D.	Gwyrfai R.D.	Lleyn R.D.	Dendraeth R.D.	Conway Borough	Betwsycoed U.D.	Llanrwst U.D.
A	3412	458	-	222	1158	1076	269	1120	232	3123	538	-	1038	3121	-	1101	3185	241	715
B	-	385	-	-	-	-	2	-	12	-	-	-	2	60	-	-	-	-	-
C	-	96	-	-	-	603	84	29	-	-	-	-	37	1919	-	376	30	-	-
D	26	123	146	68	33	798	1017	1900	936	20	-	5	6	2614	-	757	35	49	10
E	-	-	-	18	-	-	-	-	274	-	-	-	-	-	-	-	-	-	-
F	-	1	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	5	-
G	-	2	6	2	2	8	-	6	-	-	-	-	3	2	-	1	-	1	-
H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I	-	-	-	-	-	-	36	-	7	-	-	-	-	49	-	-	-	-	-
J	-	-	-	-	-	-	-	-	2	1	-	-	3	26	-	-	-	-	-
K	-	12	5	5	-	1	-	-	-	-	-	-	-	55	29	17	-	-	-
L	-	4	-	-	-	-	-	-	-	-	-	-	-	9	4	-	-	-	-
M	-	12	2	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-
N	-	9	5	11	-	16	17	-	-	26	-	-	-	191	27	10	16	1	-
O	-	-	-	7	-	24	11	-	15	800	-	-	-	528	-	4	-	-	-
P	-	-	-	7	-	-	11	-	-	-	-	-	-	78	-	14	-	-	-
Q	-	-	-	-	-	-	-	-	-	65	-	-	-	17	-	25	107	-	-
R	-	-	-	-	-	6	-	-	6	50	44	-	-	75	-	4	107	-	-
S	-	14	5	5	-	2	2	-	12	-	-	-	-	68	21	9	-	-	4
T	82	19	67	32	5	6	8	-	2	84	9	15	12	210	6	9	13	17	10
U	4	3	10	16	4	11	13	10	3	3	3	4	4	30	14	2	-	1	1
V	-	2	-	2	2	2	2	3	-	1	-	0	0	-	1	0	-	-	-
W	-	-	-	-	-	1	-	4	2	-	-	-	-	5	2	-	-	-	-
X	-	-	-	-	-	40	-	-	-	-	-	-	-	-	1	-	-	-	-
Y	268	-	-	36	8	7	1	-	-	143	31	20	-	63	-	13	29	33	-
Z	5	-	1	-	-	16	34	-	8	5	-	-	-	74	88	5	-	-	-
A	238	35	66	6	12	14	35	54	4	160	7	20	-	284	72	12	-	-	-
B	108	45	40	3	5	18	63	-	4	104	6	5	-	313	78	16	60	-	-
C	131	13	-	3	-	11	14	-	4	68	-	-	-	151	6	-	40	-	-
D	-	1	4	1	-	-	-	-	-	10	-	-	-	5	-	-	-	-	-
E	6	3	24	3	1	1	4	-	-	20	-	-	-	33	2	4	-	2	-
F	262	38	277	4	1	6	87	-	-	42	-	-	-	666	22	4	74	11	-
G	3409	259	4113	202	223	248	968	-	650	1025	1034	140	400	3720	527	58	2449	235	83
H	183	30	109	19	14	8	45	-	10	247	73	16	-	775	-	18	114	86	6
I	-	2	23	-	9	4	1	-	-	10	2	-	89	110	-	-	55	-	-
J	183	32	132	221	23	12	46	-	10	257	75	16	89	885	-	18	169	86	6
K	-	-	2	-	-	-	-	-	-	-	-	0	0	2	-	0	1	-	-
L	b	No	a	No	No	No	No	No	-	No	No	No	No	No	No	No	No	-	No
M	No	Yes	-	"	-	"	"	"	-	"	No	No	No	No	No	No	No	-	-
N	2	1	1	1	1	1	1	Yes	1	1	1	1	1	2	2	1	1	-	1
O	b	Yes	Yes	Yes	Yes	Yes	Yes	"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
P	No	"	No	"	"	"	"	"	"	No	Yes	Yes	Yes	"	Yes	Yes	No	"	"
Q	No	"	"	"	"	No	No	No	No	No	No	No	No	No	No	No	No	"	"
R	Yes	-	Yes	No	"	Yes	Yes	Yes	"	No	No	No	No	Yes	No	No	Yes	No	"
S	-	-	No	"	No	"	No	No	"	Yes	No	No	No	No	No	No	No	-	No
T	No	-	"	"	"	1	"	"	"	Yes	No	No	No	No	No	No	1	-	-
U	"	-	"	"	"	1	"	"	"	Yes	No	No	No	No	No	No	-	-	-
V	"	-	"	"	"	1	"	"	"	No	No	No	No	No	No	No	-	-	-

a Part-time, b Whole time,

Table VII.
FACTORIES, WORKSHOPS AND WORKPLACES.

REMARKS : (1) Nuisances under the Public Health Acts (See below, defects 1—8). These include not only nuisances under the Public Health Acts, but those specified in Sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

(2) Offences under the Factory and Workshop Acts (see below, Defects 9 and 10). These offences exclude those relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921)

A.—INSPECTION OF :

FACTORIES (including F. Laundries and F. Bakehouses)	Number on Register .. .. .	..	..	..	..	A
	No. of Inspections .. .. .	..	..	..	..	B
	No. of Written Notices .. .. .	..	..	..	..	C
	No. of Prosecutions .. .. .	..	..	..	..	D
WORKSHOPS (including W. Laundries and W. Bakehouses)	Number on Register .. .. .	..	..	..	..	E
	No. of Inspections .. .. .	..	..	..	..	F
	No. of Written Notices .. .. .	..	..	..	..	G
	No. of Prosecutions .. .. .	..	..	..	..	H
WORKPLACES (other than Outworkers' premises)	Number on Register .. .. .	..	..	..	..	I
	No. of Inspections .. .. .	..	..	..	..	J
	No. of Written Notices .. .. .	..	..	..	..	K
	No. of Prosecutions .. .. .	..	..	..	..	L
TOTAL OF FACTORIES, WORKSHOPS AND WORKPLACES	Number on Register .. .. .	..	..	..	..	M
	No. of Inspections .. .. .	..	..	..	..	N
	No. of Written Notices .. .. .	..	..	..	..	O
	No. of Prosecutions .. .. .	..	..	..	..	P

B.—DEFECTS FOUND IN THE SAID PREMISES :

1. Want of Cleanliness (including lime-washing)	Cases found .. .. .	..	..	..	..	Q
	Cases remedied .. .. .	..	..	..	..	R
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	S
	No. of Prosecutions .. .. .	..	..	..	..	T
2. Want of Ventilation	Cases found .. .. .	..	..	..	..	U
	Cases remedied .. .. .	..	..	..	..	V
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	W
	No. of Prosecutions .. .. .	..	..	..	..	X
3. Overcrowding	Cases found .. .. .	..	..	..	..	Y
	Cases remedied .. .. .	..	..	..	..	Z
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	A
	No. of Prosecutions .. .. .	..	..	..	..	B
4. Want of Drainage of Floors	Cases found .. .. .	..	..	..	..	C
	Cases remedied .. .. .	..	..	..	..	D
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	E
	No. of Prosecutions .. .. .	..	..	..	..	F
5. Other Nuisances	Cases found .. .. .	..	..	..	..	G
	Cases remedied .. .. .	..	..	..	..	H
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	I
	No. of Prosecutions .. .. .	..	..	..	..	J
6. Sanitary Accommodation—Insufficient	Cases found .. .. .	..	..	..	..	K
	Cases remedied .. .. .	..	..	..	..	L
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	M
	No. of Prosecutions .. .. .	..	..	..	..	N
7. Sanitary Accommodation—unsuitable or defective	Cases found .. .. .	..	..	..	..	O
	Cases remedied .. .. .	..	..	..	..	P
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	Q
	No. of Prosecutions .. .. .	..	..	..	..	R
8. Sanitary Accommodation—not separate for sexes	Cases found .. .. .	..	..	..	..	S
	Cases remedied .. .. .	..	..	..	..	T
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	U
	No. of Prosecutions .. .. .	..	..	..	..	V
9. Illegal occupation of underground bakehouses (Sec. 101)	Cases found .. .. .	..	..	..	..	W
	Cases remedied .. .. .	..	..	..	..	X
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	Y
	No. of Prosecutions .. .. .	..	..	..	..	Z
10. Other Offences (see Remarks above)	Cases found .. .. .	..	..	..	..	A
	Cases remedied .. .. .	..	..	..	..	B
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	C
	No. of Prosecutions .. .. .	..	..	..	..	D
11. Total of Defects found	Cases found .. .. .	..	..	..	..	E
	Cases remedied .. .. .	..	..	..	..	F
	Cases referred to H.M. Inspector .. .. .	..	..	..	..	G
	No. of Prosecutions .. .. .	..	..	..	..	H

REMARK.—This Table does not include the case of *Outwork* and *Outworkers* (if any) in Unwholesome Premises (Section 108).

	Bangor City.	Bethesda U.D.	Llandudno U.D.	Llanfairfechan U.D.	Penmaenmawr U.D.	Nant Conway R.D.	Ogwen R.D.	Aethwy R.D.	Hiraelthog Rural.	Carnarvon Borough.	Criccieth U.D.	Pwllheli Borough.	Portmadoc U.D.	Gwyrfai R.D.	Llwyn R.D.	Deudraeth R.D.	Conway Borough.	Bettwsycod U.D.	Llanrwst U.D.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
A	20	3	38	3	6	4	3	-	-	14	8	2	24	14	10	9	8	6	-
B	42	10	38	9	14	4	9	-	-	18	32	2	51	13	28	9	62	10	-
C	2	1	5	-	-	-	-	-	-	6	-	-	-	2	-	2	-	4	-
D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E	153	24	92	8	13	12	21	15	40	105	27	90	51	140	94	20	60	4	28
F	162	48	60	10	18	-	21	25	30	112	52	118	100	156	144	20	121	9	-
G	3	-	5	-	-	-	-	-	-	3	-	-	1	10	-	11	-	2	-
H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I	15	-	13	26	20	6	-	-	-	-	-	-	-	2	-	4	-	7	-
J	38	-	13	18	6	6	-	-	-	-	-	-	-	-	-	16	-	9	-
K	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M	188	27	143	37	39	22	24	-	40	119	35	92	77	154	104	33	-	17	-
N	242	58	111	37	38	44	30	-	30	130	84	120	151	169	172	45	183	28	-
O	5	1	10	-	-	-	-	-	-	9	-	-	1	12	-	13	-	8	-
P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q	5	6	7	4	-	-	1	-	-	3	-	-	-	6	-	10	1	5	-
R	5	-	6	4	-	-	1	-	-	3	-	-	-	6	-	10	1	5	-
S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
V	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Z	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	-	-	-	1	-	-	-	-	-	-	-	-	-	2	1	-	-	1	-
D	-	-	-	1	-	-	-	-	-	-	-	-	-	2	1	-	-	1	-
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	-	-	-	-	-	-	-	-	-	1	-	-	-	3	-	-	-	-	-
H	-	-	-	-	-	-	-	-	-	1	-	-	-	3	-	-	-	-	-
I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
K	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
L	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
M	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
O	-	-	3	1	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-
P	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-
Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Z	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	6	-	-	1	-	-	6	0	-	-	11	1	13	-	-	-
F	-	-	-	6	-	-	1	-	-	6	-	-	-	11	1	13	-	-	-
G	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**C.-Additional Short Local
Reports.**

BANGOR CITY (CAERNARVONSHIRE)

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions.</i>	<i>Purveyors from outside the District</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies ..	8	9	16	2	2	2	0	0	0	36
Retailing Milk Carts ..	42	42	67	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	12	12	24	-	-	-	-	-	-	-
Public Slaughter House ..	1	1	439	-	-	-	-	-	-	-
Private Slaughter House ..	3	4		-	-	-	-	-	-	-
Meat Shops	22	22	243	-	-	-	-	-	-	-
Retailing Meat Carts ..	3	3	108	-	-	-	-	-	-	-
Factory Bakehouses ..	5	5	10	-	-	-	-	-	-	-
Workshop Bakehouses ..	16	16	32	-	-	-	-	-	-	-
Bread Shops	37	37	112	-	-	-	-	-	-	-
Retailing Bread Vans ..	16	16	31	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	20	20	42	2	2	2	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries	153	153	162	3	3	3	-	-	-	-
Workplaces	15	15	38	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing..</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	12	8	0
B.—Occupying premises outside the District, and importing milk into the District	0	34	2

In 1920, Registered only, 4; Licensed 6; Total on Register 10.

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

	In Dec. 1936.	In Dec. 1937	In Dec. 1938
Registered only	4	4	3
Licensed	-	-	-
Total on Register	4	4	3

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938.

Together with the Vital Statistic figures (which I assisted in preparing) given in the Annual Report for 1907.

The estimated Population furnished by the Registrar General for June, 1938, is 12530.

The Estimated Population for June, 1907 was 12224.

(1). The Birth-rate is 13.8 per 1000 of the Population. During the ten years ending 1907 the Average Birth-rate was 26.2 per 1000 of the population.

(2). The Infantile-Mortality rate is 69 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality-rate was 137 per 1000 Births.

(3). The Zymotic Diseases.—Deaths from Measles (all ages), Nil; Deaths from Whooping Cough (all ages), Nil; Deaths from Diarrhoea (under 2 years), Nil.

Giving a Zymotic Mortality-rate of 0.00 per 1000 of the Population. During the ten years ending 1907 the average Zymotic Mortality-rate was 1.6 per 1000 of the population.

(4). The General Death-rate is 12.3 per 1000 of the Population. During the ten years ending 1907, the average Death-rate was 17.3 per 1000 of the populaion.

(5). The Death-rate from Tunderculosis is 0.3 per 1000 of the Population. During the 10 years ending 1907 the average Death-rate from Tuberculosis was 1.6 per 1000 of the population.

(6). The Death-rate from Cancer is 1.6 per 1000 of the Population. During the 10 years ending 1907 the average death-rate from Cancer was 1.4 per 1000 of the population.

SCHOOLS.

There were no schools closed during the year on account of Infectious Diseases.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 83 patients were admitted. Of these 16 were treated for Diphtheria, 60 treated for Scarlet Fever, and 7 for other Infectious Diseases, namely :—Measles, 3; Infantile Paralysis, 2; Mumps, 1; and Chicken Pox, 1.

With Diphtheria, 2 of the patients were under 5 years of age, 5 under 10 years of age, 7 between 15 and 25 years, and 2 between 25 and 35 years.

With Scarlet Fever, 10 were under 5 years of age, 20 under 10 years, 12 between 10 and 15 years, 16 between 15 and 25 years, and 2 between 25 and 35 years.

There was 1 Death during the year.

There were no "Return" cases.

There were 45 patients admitted from outside the District making total number of patients admitted during the year 128.

SANITARY INSPECTOR'S REPORT.

(T. ROGERS JONES, F.S.I.A., M.R.S.I.).

BANGOR ISOLATION HOSPITAL.

During the year 1938, 131 patients were admitted to the Isolation Hospital from within and outside the Borough.

TABLE I. CASES TREATED AT THE ISOLATION HOSPITAL.

<i>Diseases</i>	<i>Number of cases from</i>		
	<i>Bangor.</i>	<i>Outside Bangor.</i>	<i>Total.</i>
Scarlet Fever	57	28	85
Diphtheria	16	16	32
Erysipelas	—	2	2
Pneumonia	—	1	1
Typhoid Fever	—	1	1
Measles	3	2	5
Whooping Cough	—	1	1
Acute Poliomyelitis	2	—	2
Chicken Pox	1	—	1
Mumps	1	—	1
	80	51	131

There were two deaths during the year, viz. :—Scarlet Fever, 1 ; Typhoid Fever, 1.

TABLE 2. SUMMARY SHEWING AGES OF PATIENTS IN TABLE 1.

(a) Cases from Bangor.

<i>Diseases.</i>	<i>Ages.</i>					<i>Total.</i>
	<i>Under 5 years.</i>	<i>5—10</i>	<i>10—15</i>	<i>15—25</i>	<i>Over 25</i>	
Scarlet Fever	7	19	13	16	2	57
Diphtheria	2	5	..	6	3	16
Chicken Pox	1	..	..	..	..	1
Measles	1	1	..	..	1	3
Mumps .. ..	..	..	1	..	..	1
Acute Poliomyelitis .. ..	..	1	..	1	..	2
	11	26	14	23	6	80

(b) Cases from Outside Bangor.

<i>Diseases.</i>	<i>Ages.</i>					<i>Total.</i>
	<i>Under 5 years.</i>	<i>5—10</i>	<i>10—15</i>	<i>15—25</i>	<i>Over 25</i>	
Scarlet Fever	7	8	7	4	2	28
Diphtheria	6	2	5	3	..	16
Erysipelas .. ..	..	..	1	..	1	2
Measles	1	..	..	..	1	2
Typhoid Fever .. ..	..	..	..	..	1	1
Pneumonia .. ..	..	1	..	..	..	1
Whooping Cough .. ..	..	1	..	..	..	1
	14	12	13	7	5	51

INFECTIOUS DISEASES.

Total number of cases notified within the Borough	..	91
Where Treated :—Isolation Hospital	..	80
Home	..	6
C. & A. Infirmary	..	2
County Hospital	..	3
		—
		91
		—

TABLE 3. SUMMARY OF CASES NOTIFIED WITHIN THE BOROUGH.

<i>Disease.</i>	<i>Treated at</i>				
	<i>Isolation Hospital.</i>	<i>Home.</i>	<i>C. & A. Infirmary.</i>	<i>County Hospital.</i>	<i>Total.</i>
Scarlet Fever	57	..	..	..	57
Diphtheria	16	..	..	..	16
Erysipelas .. .. .	..	1	..	..	1
Puerperal Pyrexia .. .. .	..	..	1	3	4
Pneumonia .. .. .	..	1	..	..	1
Puerperal Septicaemia .. .. .	..	1	..	..	1
Acute Poliomyelitis	2	..	..	..	2
Chicken Pox	1	..	..	..	1
Mumps	1	..	..	..	1
Serous Pleural Effusion .. .. .	..	..	1	..	1
Ophthalmia Neonatorum .. .. .	..	3	..	..	3
Measles	3	..	..	..	3
Total	80	6	2	3	91

TABLE 4.

Housing Inspections (Clearance Areas)	..	..	437
Housing Inspections (Overcrowding)	..	..	192
Housing Inspections .. .. .	..	..	452
Families transferred to new houses .. .. .	..	..	226
Number of vanloads of furniture disinfected .. .. .	..	..	167
Complaints received and investigated .. .. .	..	..	262
Drains examined and tested .. .. .	..	..	156
Inquiries re Infectious Disease .. .. .	..	..	56
Number of rooms disinfected .. .. .	..	..	71
Number of houses disinfected .. .. .	..	..	18
Visits to Public Abattoir .. .. .	..	..
Number of Animals examined			
Beasts .. .. .	..	..	920
Sheep .. .. .	..	..	7643
Pigs .. .. .	..	..	2156
			—
			10719

Visits to Market Hall and Food Shops	..	..	191
Shops Inspections under Shops Act	..	..	38
Meat Retailing cars examined	..	..	101
Milk Vans examined	..	..	75
Visits to Pig Sties	..	..	10
Cowshed Inspections	..	..	22
Milk Samples :—			
Accredited	..	..	9
Tuberculin Tested	..	..	9
Tuberculosis Scheme	..	..	18
		—	36
Miscellaneous, including revisits	..	..	215
Visits re Rat and Insect Pests	..	..	172
Samples of Water	..	..	4

TABLE 5.

NATURE OF DEFECTS DISCOVERED.

Choked and Defective Drains	..	..	80
Percolation of water	..	..	23
Defective W.C. fittings	..	..	35
Defective eavesgutters and downpipes	..	..	28
Defective grates and ovens	..	..	11
Defective yard pavings	..	..	19
Defective window frames	..	..	15
Defective roofs	..	..	3
Defective wall plaster	..	..	8
Offensive accumulations	..	..	6
Defective floors	..	..	5
Dampness	..	..	15
Smoke nuisance	..	..	1
Unsatisfactory sanitary conveniences	..	..	5

HOUSING.

With a view to completing the 5 year programme of Slum Clearance before the 31st December, 1938, the Department was obliged to concentrate on making fresh Clearance and Compulsory Purchase Orders, preparing for two Public Inquiries, and rehousing families from areas respecting which Confirmed Orders had been made.

(a) PUBLIC INQUIRIES.—Two Public Inquiries were held respecting 21 Orders which included 174 houses.

The owners of 117 houses lodged appeals. Of these, 2 were upheld, while 9 were recommended for good maintenance compensation.

(b) RE-HOUSING.

Total number of families rehoused during the year	..	261
Number of families to be rehoused early part of 1939	..	48

REVIEW OF HOUSING SITUATION.

Now that the Five Year Programme of Slum Clearance is nearing completion it is interesting to record the progress made and the present housing situation.

At the outset the Council undertook to carry out a Five Year Programme involving 539 houses.

In only five of these cases did the Minister of Health uphold the owners' appeal, while good maintenance compensation was recommended respecting 19 of the houses.

The Council undertook to transfer, and disinfest the furniture of all families free of cost. It is gratifying to report that all this work was deeply appreciated by the displaced families, and that their willing co-operation enabled the department to complete the work without friction or any mishap.

The disinfestation operations were carried out with Hydrocyanic Acid Gas—by contract at the outset, and later by the Health Department Staff. I desire to take this opportunity of expressing my appreciation of the very efficient way these operations and the transfer work were carried out by all concerned.

As the Council had not erected small houses for pensioners and aged persons, we anticipated difficulties when such persons would have to be rehoused. The situation was met by arranging interchanges with other families from houses not scheduled for clearance. In this connection the department succeeded in obtaining the close co-operation of several owners and agents to whom we extend our cordial thanks.

It is gratifying to record that the displaced families appreciated the efforts of the City Council to provide better housing conditions, and that such appreciation is expressed in a very practical way by the splendid response of a very large majority of these families. The houses are kept clean, the gardens cultivated, and the tenants take keen interest in the development of all the new estates.

INDIVIDUAL UNFIT HOUSES.

In addition to houses dealt with under Clearance or Compulsory Purchase Orders, fourteen houses were represented as "Individual Unfit."

In each of these cases the Council accepted signed undertakings from the owners that the houses would not be used for human habitation until such time as they were rendered fit for such purpose.

PRESENT SITUATION.

While the Council may claim to have dealt with the worst types of houses, there are still a number which do not in all respects comply with present day standards.

In addition the question of Overcrowded Families remains to be solved. When the Overcrowding Survey was carried out in 1935, 114 cases were discovered. Of these, 52 occupied unfit houses which have since been cleared under the Five Year Programme.

The department has recently started a new survey with a view to ascertaining the present situation. It is being found that young married couples are occupying rooms for which a rental of 10/- to 15/- is being charged.

There is also a regular influx to the Town Hall of applicants for Council Houses and the present total applications is between 700 and 800.

It is therefore expedient for the Council to obtain new sites so as to provide adequate accommodation for the varying needs of the Borough.

RAT AND INSECT PESTS.

During the year a number of properties have been infested with Rats and Insect Pests, and the services of the department have been sought with a view to exterminating the pests.

In this connection it is felt that the public should be advised that the onus of taking remedial measures devolves upon them.

It is found in practice that the occupiers are under a misapprehension that it is the duty of Local Authorities to actually carry out operations as soon as complaints are lodged. The duty rests with the occupiers, the Local Authorities, through their offices, are only expected to advise and assist occupiers of premises.

MILK.

(a) *Designated Milks.*—In response to requests from the Caernarvonshire County Council, 18 samples of designated milks were obtained and submitted for analysis. The majority of these complied with standards.

(b) *Biological Testing.*—18 samples were obtained and submitted for Biological Examination. No positive results were obtained.

MEAT AND FOOD INSPECTION.

During the year 439 visits were made to the Abattoir and Private Slaughterhouses. The number of animals examined were :—

Sheep	..	..	..	..	7643
Beasts and Calves	..	..	..	..	920
Pigs	..	..	..	..	2156
					<hr/>
					10719
					<hr/>

The following were condemned as unfit for food.

3 carcasses of beef and all organs	..	..	..	Generalised Tuberculosis.
5 pairs of bovine lungs	..	..	..	Tuberculosis.
6 bovine livers	..	..	..	Do.
8 Pig's heads	..	..	..	Do.
6 Pig's plucks	..	..	..	Do.
4 Beef livers	..	..	..	Cysts or Flukes.
5 Pairs beef lungs	..	..	..	Cysts.
1 Carcase pig	..	..	..	Septic Pneumonia.
1 Carcase pig	..	..	..	Jaundice.
1 Carcase sheep	..	..	..	Moribunds.
50lbs. beef	..	..	..	Bone taint.

Other Foods.

30lbs. Corned Beef	..	..	..	Decomposed.
24lbs. Jellied Veal	..	..	..	Do.
51lbs. Boiled Ham	..	..	..	Do.
56lbs. Liquid eggs	..	..	..	Do.
14lbs. Prawns	..	..	..	Do.
67lbs. Turkeys	..	..	..	Do.

SURVEYOR'S REPORT.

(B. PRICE DAVIES).

26 houses were erected by private enterprise.

Housing.—To cope with the Council's re-housing programme under the Clearance scheme 203 houses were completed at Maes y Geirchen, making a total of 239 houses occupied at the end of the year.

54 houses at Brynllwyd and 30 houses and 2 shops in the Central Area were completed.

Refuse Collection and Disposal.—The house refuse collection of the district was continued by contract at a cost of 1/10d. per head per annum. The refuse is removed from all houses once a week and from Colleges and Public Institutions twice a week. The refuse is disposed of by Controlled Tipping with satisfactory results.

Sewerage.—During the year no extension of the sewerage system was necessary.

Water Supply.—Extensions of mains were carried out on the Belmont Road and on the Caernarvon Road for the supply of Maes y Coed. Periodical analysis of the water (bacteriological and chemical) were carried out and the result showed, that after filtration and treatment, the water supply to the consumer is highly satisfactory.

BETHESDA URBAN DISTRICT, (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies..	33	-	61	-	-	-	-	-	-	-
Retailing Milk Carts ..	15	15	15	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	1	0	2	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	3	4	109	-	-	-	-	-	-	-
Meat Shops	10	10	30	-	-	-	-	-	-	-
Retailing Meat Carts ..	2	2	4	-	-	-	-	-	-	-
Factory Bakehouses ..	3	3	6	-	-	-	-	-	-	-
Workshop Bakehouses ..	11	11	22	-	-	-	-	-	-	-
Bread Shops	8	8	14	-	-	-	-	-	-	-
Retailing Bread Vans ..	5	5	-	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	3	3	10	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries.. ..	24	24	30	-	-	-	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing.</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	6	8	1
B.—Occupying premises outside the District, and importing milk into the District	-	8	4

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920 : Registered only, 0; Licensed, 0; Total on Register, 0.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	2	2	1
Licensed	3	3	2
Total on Register	5	5	3

Note.—The District is without a Public Abattoir.

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938,

Together with the Vital Statistic figures (which I assisted in preparing) given in the Annual Report for 1907.

The estimated Population furnished by the Registrar General for June 1938 is 4489.

The Estimated Population for June, 1907, was 4981.

(1) The Birth-rate is 16.4 per 1000 of the Population. During the ten years ending 1907 the Average Birth-rate was 28.7 per 1000 of the population.

(2). The Infantile Mortality rate is 54 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality rate was 168 per 1000 Births.

(3). The Zymotic Diseases. Deaths from Measles (all ages), Nil; Deaths from Whooping Cough (all ages), Nil; Deaths from Diarrhoea (under 2 years), Nil.

Giving a Zymotic Mortality rate of 0.00 per 1000 of the population. During the ten years ending 1907 the average Zymotic Mortality rate was 1.2 per 1000 of the population.

(4). The General Death-rate is 14.9 per 1000 of the population. During the ten years ending 1907 the average Death-rate was 22.7 per 1000 of the population.

(5). The Death-rate from Tuberculosis is 0.9 per 1000 of the population. During the 10 years ending 1907, the average Death-rate from Tuberculosis was 2.3 per 1000 of the population.

(6). The Death-rate from Cancer is 2.6 per 1000 of the population. During the 10 years ending 1907 the average death-rate from Cancer was 1.5 per 1000 of the population.

SCHOOLS.

There were no schools closed during the year on account of Infectious Diseases.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 14 patients were admitted. Of these 13 were treated for Scarlet Fever, and 1 for Measles.

With Scarlet Fever, 4 were under 5 years of age, 4 under 10 years, 4 between 10 and 15 years, and 1 between 15 and 25 years.

There were no Deaths during the year. There were no "Return" cases.

REPORT OF SANITARY INSPECTOR AND SURVEYOR.

(T. POWELL JONES, A.R.S.I., M.S.I.A.).

Water Supply.—The water supply of the District is obtained from three sources. The larger part of the town is supplied from Afon Gaseg, where there is at all times an abundant supply of water. Twenty one houses at Tanyfoel obtain very satisfactory supply of water from the stored overflow of a well. The upper part of Caellwynngrydd is supplied from Ffynnon Corbri. This supply is not very satisfactory, owing to the internal corrosion of the pipes, which have been down since a very long time. The Council intends to close Ffynnon Corbri, and obtain a supply from Afon Gaseg. A scheme for such purpose has been submitted, and the Council proposes to commence work on the initial stages of the scheme during the coming year. This scheme will improve the distribution and the quality of the water supply.

New mains were laid on the housing sites at Ty'n Canol and Braichmelyn.

Housing.—The Ministry of Health held a Public Inquiry in respect of six Clearance Orders, all the Orders were confirmed, including 34 houses. Five Individual Unfit houses were condemned, and the owners gave undertakings not to let the houses for human habitation. Most of the displaced persons from the above houses moved to the 33 new houses erected by the Council during the year, 19 at Braichmelyn, 11 at Ty'n Canol, and 3 at Carneddi. It was only necessary to disinfect furniture, etc., from one Clearance Area, before removal to new houses. This work was done by contract. The Council has under consideration a scheme for the erection of 40 more houses, to rehouse families from Overcrowded and Unfit houses.

Sewerage.—The sewerage is on the Separate System and is treated on the Broad Land Irrigation Method. The sewers are well maintained and scavenged periodically. It was necessary to extend some sewers to the new building sites.

Refuse Collection.—The collection of refuse is done by contract, the Council having decided on the Contractor to provide an approved covered lorry. The refuse is disposed of by Controlled Tipping. The tip is free from rats, and is kept at all times in a satisfactory manner, and no nuisances arise therefrom.

Slaughterhouses, Meat Shops, Bakehouses, Etc.—One slaughterhouse is in a very bad condition, and its fate is often discussed, but no action is taken. A new slaughterhouse, spacious and up-to-date would facilitate supervision and inspection. One licenced slaughterhouse was closed during the year, one of the remaining slaughterhouses is in good condition, though there is room for further improvements. Every care is taken to ensure that they are kept as clean as possible, and efforts made to inspect all carcasses. It is gratifying to report that healthy animals are slaughtered within the District. Bakehouses are periodically limewashed. 2 were closed during the year, and one building was converted into a bakehouse after approval by the Council.

Milk and Dairies.—The cowsheds, dairies and milk carts are inspected periodically. Instructions were given to remedy structural defects, to improve lighting and ventilation, and to raise standard of cleanliness.

Disinfection.—13 cases of Infectious Diseases were removed to Bangor Isolation Hospital, 35 houses were disinfected. Bedding, etc., of infectious condition, are burnt, and where necessary, the Council compensates the family.

LLANDUDNO URBAN, (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies ..	45	46	-	-	-	-	-	-	-	10
Retailing Milk Carts ..	50	-	-	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	12	13	27	-	-	-	-	-	-	-
Public Slaughter House ..	1	1	300	2	2	2	-	-	-	-
Private Slaughter House ..	1	1	45	-	-	-	-	-	-	-
Meat Shops	21	19	556	-	-	-	-	-	-	-
Retailing Meat Carts ..	-	-	-	-	-	-	-	-	-	-
Factory Bakehouses ..	16	16	150	-	-	-	-	-	-	-
Workshop Bakehouses ..	12	13		-	-	-	-	-	-	-
Bread Shops	-	-	-	-	-	-	-	-	-	-
Retailing Bread Vans ..	-	-	-	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	38	38	58	5	5	4	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries	92	93	-	5	5	5	-	-	-	-
Workplaces	13	13	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	1	1	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing.</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	23	36	14
B.—Occupying premises outside the District, and importing milk into the District	4	7	2

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920: Registered only, 0; Licensed, 1; Total on Register, 2.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	-	-	-
Licensed	2	2	2
Total on Register	2	2	2

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938,

Together with the Vital Statistic figures (which I assisted in preparing), given in the Annual Report for 1907.

The estimated Population furnished by the Registrar General for June, 1938, is 15110.
The Estimated Population for June 1907 was 10785.

(1). The Birth-rate is 11.1 per 1000 of the Population. During the ten years ending 1907 the average Birth-rate was 20.6 per 1000 of the population.

(2) The Infantile Mortality rate is 53 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality-rate was 146 per 1000 Births.

(3) The Zymotic Diseases.—Deaths from Measles (all ages), Nil; Deaths from Whooping Cough (all ages), Nil; Deaths from Diarrhoea (under 2 years), Nil. Giving a Zymotic Mortality rate of 0.00 per 1000 of the population. During the ten years ending 1907 the average Zymotic Mortality rate was 0.65 per 1000 of the population.

(4). The General Death-rate is 12.4 per 1000 of the population. During the ten years ending 1907 the average Death-rate was 11.5 per 1000 of the population.

(5). The Death-rate from Tuberculosis is 0.2 per 1000 of the population. During the 10 years ending 1907 the average Death-rate from Tuberculosis was 1.3 per 1000 of the population.

(6). The Death-rate from Cancer is 2.3 per 1000 of the population. During the 10 years ending 1907 the average death-rate from Cancer was 0.79 per 1000 of the population.

SCHOOLS.

There were no schools closed during the year on account of Infectious Diseases.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 61 patients were admitted. Of these 4 were treated for Diphtheria, 11 treated for Scarlet Fever, and 17 for other Infectious Diseases, namely:—Mumps, 1; Erysipelas, 2; Meningitis, 1; Puerperal Pyrexia, 1; Pneumonia, 1; Encephalitis, 1; Measles, 5; Dermatitis, 1; Chicken Pox, 4.

With Diphtheria, 1 of the patients was under 5 years of age, 2 between 10 and 15 years of age, and 1 between 15 and 25 years,

With Scarlet Fever, 3 were under 5 years of age, 6 under 10 years, 1 between 10 and 15 years of age, and 1 between 25 and 35 years.

There were no Deaths during the year. There were no "Return" cases.

Of the Diphtheria patients 2 were from outside the District.

Of the Scarlet Fever patients 1 was from outside the District.

REPORT OF THE SANITARY INSPECTOR.

(MR. T. F. ROBERTS, M.S.I.A.).

NUISANCES ABATED AND DEFECTS REMEDIED.

DRAINAGE AND PAVEMENTS.

Drains opened and cleansed for obstruction	..	..	53
Drains provided with efficient traps	..	..	1
New drains and Intercepting Chamber provided	..	..	9
Drains relaid	..	..	0
Soil pipes and ventilating shafts improved	..	..	2
Rainwater pipes disconnected from the sewer	..	..	2
Courts and back-yards paved and repaired	..	..	0

DWELLINGS.

Floors of dwellings relaid or repaired	..	..	4
Damp walls—damp courses inserted	..	..	2
Roofs repaired and made water-proof	..	..	10
Defective spouting repaired	..	..	4
Foul cellars cleansed and defects in drains remedied	..	..	4
Houses limewashed and cleansed	..	..	21
Houses disinfected after Infectious Diseases	..	..	45
Cases of Overcrowding dealt with	..	..	5

WATER CLOSETS AND URINALS.

Additional W.C.'s provided	..	..	9
Water closets repaired and limewashed	..	..	3
Water closet pans and traps replaced with pedestals	..	..	1
Foul W.C. basins and traps cleansed	..	..	0
Defective W.C. cisterns repaired	..	..	10
New flushing cisterns provided	..	..	9

PRIVIES ASHPITS AND DUSTBINS.

Offensive privies and pail closets converted into W.C.'s	..	..	1
Offensive privies and pail closets abolished and new W.C.'s erected	..	..	1

VARIOUS.

Nuisances from animals kept, abated	..	..	4
Offensive accumulations removed	..	..	24
Miscellaneous	..	..	130

FOOD (A).

The Milk supply during 1938 averaged about 2500 gallons per day ; of this quantity, about 1000 gallons was produced within the Urban District of Llandudno, and delivered direct to the consumer. A large quantity of the milk is now bottled on Registered premises before delivering ; this method of delivery is encouraged. Every encouragement is given to produce milk under the Milk Marketing Board's Accredited Producers scheme.

SAMPLES OF MILK FOR TUBERCLE BACILLI.

During the year 41 samples of Milk were taken on behalf of the County Council and sent to the Biological Department, Bangor University for examination.

SAMPLES OF MILK FOR BACTERIOLOGICAL EXAMINATION.

20 samples of Tuberculin Tested Milk were submitted for Bacteriological Examination.

MILK. SPECIAL DESIGNATIONS.

There are five firms in the Town licensed under the Special Designations Order, 1936.

COWSHEDS.

Number of Cowsheds on Register, December, 1937	..	..	46
Number of Cowsheds discontinued during the year	..	..	2
Number of Cowsheds on Register, December, 1938	..	..	44
Number of Contraventions	..	..	8
Number of Contraventions remedied	..	..	7

MEAT (B).

During the year 345 visits have been made to the Slaughter Halls at the Public Abattoir, and the one private Slaughter House. The number of animals slaughtered being, viz. :— Beasts, 620 ; Calves, 596 ; Pigs, 1119 ; Sheep and Lambs, 13028.

All carcases and organs are inspected before they are removed from the Abattoir, the number of carcases condemned being six, with a few Pigs' heads and Cirrhotic livers.

The butchers in Llandudno will only have the best quality meat in their shops, and if a carcase is only partially diseased, they willingly surrender the whole carcase.

PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

During the year 556 observations and visits have been made in connection with the Markets, shops, stores, etc., in order to ascertain if the above regulations were being complied with.

With the exception of a few minor infringements, the regulations were being observed.

FOOD AND DRUGS (ADULTERATION) ACT.

Samples of Food.—During the year 65 Samples were purchased for analysis :—

<i>Description of Sample.</i>	<i>No. of Samples taken.</i>	<i>Result of Analysis.</i>	<i>Doubtful.</i>
New Milk	54	41 Genuine	13
Lard	3	Genuine	..
Margarine	3	Do.	..
Sausage	5	Do.	..

Number of Prosecutions—2.

The Vendors of the doubtful samples were called before the Health Committee and dealt with.

OTHER FOODS.

The following unsound food has been surrendered by Shopkeepers, etc., viz. :—208 lbs. of Tinned Ham ; 6 lbs. of Tongue ; 10 lbs. of Sausage ; 15 lbs. of Fish ; and 3 Pheasants.

RATS AND MICE DESTRUCTION.

During the year 171 visits and re-visits were made to rat infested premises ; drains have been inspected and tested, and any defects remedied ; rat runs have been sealed up and where necessary poison laid. Advice has been given to all complainants desiring the same, and rat poison supplied free of charge.

DISINFECTION.

102 Visits have been made to the Disinfecting Station, and 1262 articles of bedding, clothes, etc., have been disinfected by steam and hot air.

HOUSING (OVERCROWDING) ACT.

Four families numbering 27 persons have been re-housed by the Council, and one family numbering 4 persons has found other accommodation during the year.

DISINFESTATION—ERADICATION OF BED-BUGS.

During the year all houses that have come under the notice of the Health Department as being infested with bed-bugs, have been treated with a special insecticide, with very good results. Bedding, clothing, etc., being treated with steam.

REPORT OF ENGINEER AND SURVEYOR.

(MR. W. T. WARD).

Water Supply.—Previous to 1875 the Town was supplied with springs on the Great Orme. These supplies, however, though being of excellent quality, becoming inadequate for the increasing population, powers were obtained for a more extensive supply, and the Improvement Commissioners purchased two lakes—Dulyn (meaning “Black Lake”), 35 acres in extent, which is a weird but grand lake, filling up, apparently, an old crater, with rock rising sheer at the back of it to a height over 300 feet and huge boulders scattered about the side and front of it, and Melynlyn, a beautiful shining lake, 18 acres, with a surrounding watershed of 1481 acres and on this watershed the Council have recently made a small but interesting experiment in tree planting.

The lakes are situated on the Western or Caernarvonshire side of the Conway River, and are $15\frac{1}{2}$ miles distant from Llandudno. The surface of Dulyn is at an altitude of 1747 feet, and that of Melynlyn 2094 feet above ordinance datum.

Works for increasing the present storage capacity of the above lakes, now 152 million gallons to 348 million gallons, have been completed. This, with a 50 per cent. increase on the present demand, will give 116 days storage.

There is no inhabitable or other dwelling on any of the watersheds to either of the lakes, and the water is as pure as it was in 1880, when Professor Frankland, after analysis, said :—“It is most excellent water for dietetic and all domestic purposes. It is wholesome and palatable, and contains only a very small amount of vegetable organic matter. It is exceedingly soft and therefore well adapted for washing purposes. For the supply of the Town, it is fully equal to the celebrated Lock Katrine water.”

The last section of the 15 inch Trunk mains between Llandudno Junction and Llanrhos was completed in 1909.

Llandudno is now supplied with water by two separate trunk mains (9 inch and 15 inch), giving an abundant supply for many years to come, and almost making the town immune from the possibility of a total breakdown in the water supply.

During 1928—29 a $1\frac{1}{2}$ mile length of 9 inch trunk main was replaced with new 15 inch steel bitumen lined main.

New Water Mains laid. (Total length in yards).

Diameter	3 inch.	4 inch.	6 inch.
.. .. .	24	476	457

Sewers.—

Diameter	6 inch.	9 inch.
.. .. .	203	628

S.W. Drains (Length in Yards)	287	670
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Scavenging.—The removal of house refuse and scavenging is undertaken by the Council by Motor refuse vehicle with special closing lids for loading, and is under the direct supervision of the Surveyor. Galvanised iron bins with covers, of standard pattern are provided by the Council and the refuse collected daily from the Hotels, twice a week from large houses and weekly from the smaller houses. All refuse is burnt at the Destructor.

Artisan's Dwellings.—The houses are designed in five classes with accommodation as follows :—

27 of class “A.”—Sitting room, Kitchen, Scullery, Bathroom and 2 W.C.'s and four Bedrooms. The rents are :—7 at 21/., 10 at 19/., and 10 at 15/.

82 of class “B.”—Living room, Scullery and 3 bedrooms. The rents are :—58 at 17/-; 4 at 16/-; and 20 at 14/6.

41 of class "C."—Living room, Scullery and 3 bedrooms. The rents are :—8 at 13/-, 8 at 12/-, 19 at 11/3, and 6 at 13/6.

116 of Class "D."—Living room, Scullery, 1 W.C. and 2 bedrooms. The rents are :—65 at 13/-, 8 at 10/6, 10 at 12/-, 6 at 10/6, 8 at 14/-, 16 at 13/-, 2 at 4/3 and 1 at 8/-.

32 of class "E."—Which consist of self contained tenements, each having one living room and one bedroom, scullery and 1 W.C. The rents are :—8 at 6/6 and 24 at 6/6.

20 houses of the type of class "B" were completed under the assisted scheme. The rents of these houses are 14/6 each.

The rents of the above Artisan's Dwellings (unassisted schemes) are sufficient to pay the interests, repairs, rates and taxes and other outgoings, and the whole charge for the Annual Loan Redemption.

Re-Housing Schemes.—The 32 families displaced under Clearance Orders have been rehoused as follows :—

8 flats. Non-Parlour. 1 Bedroom. Rents—3 at 4/6 and 5 at 6/6.

8 flats. Non-Parlour. 2 Bedrooms. Rents—2 at 9/6 and 6 at 6/-.

12 Houses. Non-Parlour. 3 Bedrooms. Rents—10 at 7/6; 1 at 12/-; and 1 at 13/-.

4 houses. Non-Parlour. 4 Bedrooms. Rents—1 at 14/-; and 3 at 9/6.

LLANFAIRFECHAN URBAN, (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies ..	33	33	46	3	1	1	-	-	-	3
Retailing Milk Carts ..	8	8	12	-	-	-	-	-	-	3
Milk Shops (Dairy Shops)	1	1	-	-	-	-	-	-	-	-
Public Slaughter House ..	0	0	-	-	-	-	-	-	-	-
Private Slaughter House ..	5	5	19	-	-	-	-	-	-	-
Meat Shops	6	6	16	-	-	-	-	-	-	-
Retailing Meat Carts ..	1	1	2	-	-	-	-	-	-	-
Factory Bakehouses ..	3	3	9	-	-	-	-	-	-	-
Workshop Bakehouses ..	3	3	5	-	-	-	-	-	-	-
Bread Shops	9	9	12	-	-	-	-	-	-	-
Retailing Bread Vans ..	5	4	8	-	-	-	-	-	-	-
Factories(including Factory Bakehouses & Laundries)	3	3	9	-	-	-	-	-	-	-
Workshops(including Workshop Bakehouses and Laundries	8	7	10	-	-	-	-	-	-	-
Workplaces	26	29	18	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	1	33	1
B.—Occupying premises outside the District, and importing milk into the District	1	3	1

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920 : Registered only, 0 ; Licensed, 0 ; Total on Register, 0.

	<i>In Dec. 1936</i>	<i>In Dec. 1937</i>	<i>In Dec. 1938</i>
Registered only	3	3	3
Licensed (The Public Abattoir)	2	2	2
Total on Register	5	5	5

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938,

Together with the Vital Statistics figures (which I assisted in preparing) given in the Annual Report for 1907.

The estimated population furnished by the Registrar General for June, 1938, is 3070.

The Estimated Population for June, 1907, was 3022.

(1). The Birth-rate is 8.4 per 1000 of the population. During the ten years ending 1907 the Average Birth-rate was 25.7 per 1000 of the population.

(2). The Infantile Mortality rate is 0.00 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality rate was 142 per 1000 Births.

(3). The Zymotic Diseases.—Deaths from Measles (all ages), Nil; Deaths from Whooping Cough (all ages), Nil; Deaths from Diarrhoea (under 2 years), Nil. Giving a Zymotic Mortality rate of 0.00 per 1000 of the population. During the ten years ending 1907 the average Zymotic Mortality rate was 0.88 per 1000 of the population.

(4). The General Death rate is 11.07 per 1000 of the population. During the ten years ending 1907, the average Death-rate was 17.0 per 1000 of the population.

(5). The Death-rate from Tuberculosis is 0.3 per 1000 of the population. During the 10 years ending 1907 the average Death rate from Tuberculosis was 1.7 per 1000 of the population.

(6). The Death rate from Cancer is 1.9 per 1000 of the population. During the 10 years ending 1907 the average death-rate from Cancer was 1.1 per 1000 of the population.

SCHOOLS.

There were no schools closed during the year on account of Infectious Diseases.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 3 patients were admitted suffering from Diphtheria, 2 of the patients were under 5 years of age and 1 was between 15 and 25 years.

There were no Deaths during the year. There were no "Return" cases.

REPORT OF THE SURVEYOR AND SANITARY INSPECTOR.

(W. T. ELLIS, A.I.A.S., C.P.S.I.).

Water Supply.—This is obtained from Aber Lake as the Chief Source and Camarnaint Reservoir as an auxiliary source. The Council have approved of a Filtration Scheme and propose to proceed with the works forthwith.

Sewerage Works.—The usual maintenance and periodical flushing are being carried out. The Council have under consideration a scheme for the renewal of present pumps, ejectors and outfall main.

Public Conveniences.—These are kept in good sanitary repair, and are attended to daily. Another convenience at the upper end of the town would be an improvement.

Scavenging.—The roads are being swept daily. The house and trade refuse is being removed to the refuse tip once a week during the year and weekly from the larger premises during the summer season.

River Pollution.—The river is periodically cleaned and rat poison is layed along its banks, through the built up area twice during each year.

Schools.—None were closed during the year due to infections disease.

Disinfection.—In such instances the premises are immediately treated with formaldehyde lamps and on the recommendation of the M.O.H. the bedding is destroyed and replaced by the Council.

Slaughter Houses.—There are five private slaughter houses in the district. They are well conducted, the Humane Killer is in general use.

Milk Samples.—The standard of milk is good and periodical samples for analysis are being taken by the County Sampling Officer.

Housing.—The Council erected 15 new houses during the year to replace those demolished under the Slum Clearance Act.

PENMAENMAWR URBAN. (CAERNARVONSHIRE)

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies ..	12	12	14	-	-	-	-	-	-	-
Retailing Milk Carts ..	14	14	26	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	-	-	-	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	3	3	8	1	1	1	-	-	-	-
Meat Shops	6	4	12	-	-	-	-	-	-	-
Retailing Meat Carts ..	2	2	6	-	-	-	-	-	-	-
Factory Bakehouses ..	5	5	3	-	-	-	-	-	-	-
Workshop Bakehouses ..	1	2	2	-	-	-	-	-	-	-
Bread Shops	17	18	17	-	-	-	-	-	-	-
Retailing Bread Vans ..	6	6	16	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	6	9	14	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries)	13	12	18	-	-	-	-	-	-	-
Workplaces	20	20	6	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing..</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	4	12	-
B.—Occupying premises outside the District, and importing milk into the District	-	-	-

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920 : Registered only, 0; Licensed, 0; Total on Register, 0.

	In Dec. 1936	In Dec. 1937	In Dec. 1938.
Registered only	1	1	1
Licensed	2	2	2
Total on Register	3	3	3

Note—The District is without a Public Abattoir.

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938.

Together with the Vital Statistics figures (which I assisted in preparing) given in the Annual Report for 1907).

The estimated population furnished by the Registrar General for June, 1938, is 3896.

The Estimated Population for June, 1907, was 4112.

(1) The Birth-rate is 12.8 per 1000 of the Population. During the ten years ending 1907 the Average Birth-rate was 26.7 per 1000 of the population.

(2). The Infantile Mortality rate is 40 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality rate was 144 per 1000 Births.

(3). The Zymotic Diseases.—Deaths from Measles (all ages), Nil; Deaths from Whooping Cough (all ages), Nil; Deaths from Diarrhoea (under 2 years), Nil. Giving a Zymotic Mortality rate of 0.00 per 1000 of the population. During the ten years ending 1907 the average Zymotic Mortality rate was 0.51 per 1000 of the population.

(4). The General Death rate is 13.6 per 1000 of the Population. During the ten years ending 1907 the average Death-rate was 15.4 per 1000 of the population.

(5). The Death rate from Tuberculosis is 0.5 per 1000 of the population. During the 10 years ending 1907 the average Death-rate from Tuberculosis was 1.8 per 1000 of the population.

(6). The Death rate from Cancer is 1.5 per 1000 of the Population. During the 10 years ending 1907 the average death rate from Cancer was 0.8 per 1000 of the population.

SCHOOLS.

There were no schools closed during the year on account of Infectious Diseases.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL

During the year 1938, no patients were admitted to Hospital

REPORT OF SANITARY INSPECTOR AND SURVEYOR

(J. PARRY HUGHES)

Water Supply—The supply to the District has been satisfactory and no restrictions were placed on consumers. The Council are, however, considering the question of augmentation of storage together with that of purification.

Sewerage—The sewerage system was maintained in a satisfactory manner.

House Scavenging—The scavenging of the District, which is done by direct labour, was carried out without any serious complaint.

The Incinerator was not used during the whole of the year, all the refuse being dealt with by tipping under the "control" system, and for covering material, old dead material from the Incinerator and earth was used.

Housing—Forty new houses were completed by the Council during the year, complete with roads, sewers, &c. The houses are four, three, two and one bedroom types, the latter being for the use of Aged Persons.

Disinfestation—No case of disinfestation arose during the year.

Rats and Mice Act—The Council took the necessary action to keep down these pests on their own property, and in many cases provided special bait for Ratepayers to use on their own properties.

Isolation and Disinfection—Cases of infectious disease have been again small in number. Disinfection is carried out, and if recommended by a Medical Practitioner is also, in certain cases, done in places where no infectious disease has occurred.

Bakehouse and Slaughter Houses.—These premises were inspected together with Meat and Bread Shops and were in general found to be very clean.

Milk.—The standard of cleanliness is good, and periodically samples for analysis were taken by the County Food and Drugs Officer. Further samples were also taken by the local Council staff.

NANT CONWAY RURAL, (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies ..	216	276	80	-	-	-	-	-	-	-
Retailing Milk Carts ..	20	20	-	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	-	-	-	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	9	12	64	1	1	1	-	-	-	-
Meat Shops	5	5	10	-	-	-	-	-	-	-
Retailing Meat Carts ..	8	9	8	-	-	-	-	-	-	-
Factory Bakehouses ..	1	1	4	-	-	-	-	-	-	-
Workshop Bakehouses ..	12	12	36	-	-	-	-	-	-	-
Bread Shops	20	20	-	-	-	-	-	-	-	-
Retailing Bread Vans ..	14	14	-	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	4	-	4	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries	12	12	-	-	-	-	-	-	-	-
Workplaces	6	6	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing..</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	-	52	-
B.—Occupying premises outside the District, and importing milk into the District	1	-	-
<i>Wholeselling, Producing and Retailing, 1. Producing only, 33.</i>			

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920: Registered only, 0; Licensed, 0; Total on Register, 0.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	7	7	5
Licensed	5	5	4
Total on Register	12	12	9

Note.—The District is without a Public Abattoir.

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938,

Together with the Vital Statistic figures (which I assisted in preparing), given in the Annual Report for 1907. (These figures apply only to the Conway Rural District).

The Estimated Population furnished by the Registrar General for June, 1938 is 6244.

The Estimated Population for June, 1907, was 7882.

(1). The Birth-rate is 12.8 per 1000 of the population. During the ten years ending 1907 the Average Birth-rate was 29.5 per 1000 of the population.

(2). The Infantality Mortality rate is 51 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality rate was 126 per 1000 Births.

(3). The Zymotic Diseases.—Deaths from Measles (all ages), Nil; Death from Whooping Cough (all ages), Nil; Deaths from Diarrhoea (under 2 years), 1. Giving a Zymotic Mortality rate of 0.1 per 1000 of the population. During the ten years ending 1907 the average Zymotic Mortality rate was 1.1 per 1000 of the population.

(4). The General Death-rate is 16.8 per 1000 of the population. During the ten years ending 1907 the average Death-rate was 16.0 per 1000 of the population.

(5). The Death-rate from Tuberculosis is 0.8 per 1000 of the population. During the 10 years ending 1907 the average Death-rate from Tuberculosis was 1.2 per 1000 of the population.

(6). The Death-rate from Cancer is 2.2 per 1000 of the population. During the 10 years ending 1907 the average death-rate from Cancer was 0.82 per 1000 of the population.

SCHOOLS.

There were no schools closed during the year on account of Infectious Diseases.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 11 patients were admitted. Of these 3 were treated for Diphtheria, 3 treated for Scarlet Fever, and 3 for other Infectious Diseases, namely:—Erysipelas, 1; Septic Throat, 2.

With Diphtheria 1 of the patients was under 10 years of age, 1 between 15 and 25 years and 1 between 25 and 35 years.

With Scarlet Fever, 2 were under 5 years of age and 1 under 10 years.

There were no Deaths during the year. There were no "Return" cases.

REPORT OF SANITARY INSPECTOR AND SURVEYOR.

(EVAN WILLIAMS, A.R.S.I., A.F.A.S.).

Water Supply.—*Dolgarrog.*—This village is supplied with water by the Conway and Colwyn Bay Joint Water Supply Board, the source of supply being Cowlyd Lake.

Dolwyddelen.—The supply is obtained from an upland stream, impounded in a reservoir.

Penmachno.—The supply is by springs gathered into reservoirs. The village was well supplied throughout the year.

Roewen.—The supply is derived from a spring, and is distributed by standpipes.

Llanbedr.—During the year the Council laid a new main to supply 20 houses which previously depended on a small well for their water supply. The Council now obtain the water in bulk from the mains of the Conway and Colwyn Bay Joint Water Supply Board.

Trefriw.—The supply of water is obtained from Crafnant Lake, and no shortage was experienced during the year.

Sewerage.—The systems at Dolgarrog, Dolwyddelen and Penmachno are working satisfactorily. Owing to the flooding of part of the village of Trefriw, it is the intention of the Council to have the sewers and sewage disposal tanks overhauled.

Scavenging.—House refuse is removed fortnightly direct by the Council by means of a refuse lorry. Night soil and house refuse in the village of Cwm Penmachno is carried out by contract. The refuse tips are periodically inspected, and cleared of rodents from time to time during the year.

River Pollution.—I have to report that much improvement is to be noted in the conditions of the streams in the district.

Milk and Dairies Order, 1926.—Improvements are to be noted in cowsheds during my periodical inspections. The Council have agreed to have samples taken during the coming year, from all milk purveyors in the district.

Meat Inspection.—Every endeavour is made to have the slaughterhouses and meat inspected in the district. During the year I had no cause to seize any.

Disinfection.—Eleven cases were removed to the Groesynyd Fever Hospital during the year. Bedding and clothing from infectious cases, together with Tuberculosis cases of death are removed for treatment at the Fever Hospital. Rooms are sprayed and fumigated in all cases.

OGWEN RURAL, (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies ..	92	91	174	6	6	6	-	-	-	-
Retailing Milk Carts ..	23	23	38	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	-	-	-	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	7	7	158	-	-	-	-	-	-	-
Meat Shops	3	3	35	-	-	-	-	-	-	-
Retailing Meat Carts ..	5	4	14	-	-	-	-	-	-	-
Factory Bakehouses ..	1	-	2	-	-	-	-	-	-	-
Workshop Bakehouses ..	2	3	5	-	-	-	-	-	-	-
Bread Shops	7	7	8	-	-	-	-	-	-	-
Retailing Bread Vans ..	10	10	7	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	3	2	5	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries)	21	24	21	-	-	-	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing.</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	-	65	27
B.—Occupying premises outside the District, and importing milk into the District	-	-	-

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920 : Registered, only 0 ; Licensed, 0 ; Total on Register, 0.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	1	1	1
Licensed	7	6	6
Total on Register	8	7	7

Note.—The District is without a Public Abattoir.

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938,

Together with Vital Statistics figures (which I assisted in preparing) given in the Annual Report for 1907.

The estimated Population furnished by the Registrar General for June, 1938, is 4956.

The Estimated Population for June, 1907, was 6229.

(1). The Birth-rate is 13.5 per 1000 of the population. During the ten years ending 1907 the Average Birth-rate was 23.8 per 1000 of the population.

(2) The Infantile Mortality rate is 29 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality rate was 145 per 1000 Births.

(3). The Zymotic Diseases.—Deaths from Measles (all ages), Nil; Deaths from Whooping Cough (all ages), Nil; Deaths from Diarrhoea (under 2 years), 1. Giving a Zymotic Mortality rate of 0.2 per 1000 of the population. During the ten years ending 1907 the average Zymotic Mortality rate was 0.8 per 1000 of the population.

(4). The General Death rate is 16.5 per 1000 of the population. During the ten years ending 1907 the average Death-rate was 18.3 per 1000 of the population.

(5). The Death-rate from Tuberculosis is 1.4 per 1000 of the population. During the 10 years ending 1907 the average Death-rate from Tuberculosis was 2.3 per 1000 of the population.

(6). The Death-rate from Cancer is 2.4 per 1000 of the population. During the 10 years ending 1907 the average death rate from Cancer was 1.1 per 1000 of the population.

SCHOOLS.

There were no schools closed during the year on account of Infectious Diseases.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 12 patients were admitted. Of these 6 were treated for Diphtheria, 5 treated for Scarlet Fever, and 1 for other Infectious Diseases, namely, Erysipelas.

With Diphtheria, 2 of the patients were under 5 years of age, 1 under 10 years of age, 2 between 10 and 15 years, and 1 between 15 and 25.

There were no Deaths during the year. There were no "Return" cases.

REPORT OF THE SANITARY INSPECTOR AND SURVEYOR.

(R. H. JONES, M.S.I.A.).

Water Supply.—Two schemes involving an expenditure of approximately £23,000 were completed during the year for supplying the Parishes of Llanllechid and Llandegai and Pentir.

For the former parish the source is a mountain stream, and the supply is filtered and chlorinated.

The latter two parishes are supplied from a mountain lake having an area of 32 acres. On account of the plumbo-solvent action of this water soda-ash treatment is resorted to. Steps are now being taken to close unsatisfactory private supplies and notices have already been served in 40 instances. These include a few cases where the Council's water was consumed and the existence of a so called private spring used as a pretext for not paying a water rate.

Samples collected and submitted for analysis from the four supplies controlled by the Council gave satisfactory results. Reports on samples from the Aber Village supply, which is owned and controlled by the inhabitants, were unsatisfactory. Each householder in the village has

been notified to this effect. It seems probable that a meeting will be held between representatives of the owners and the Council to decide on what action to take to provide a pure and wholesome supply.

Sewerage.—Sewers and disposal systems are a necessity throughout the district and with the improvements in the water supplies this has become more pronounced. The Council has had this matter under consideration.

Public Scavenging.—Four sites are in use for “controlled tipping” and the work is satisfactorily carried out.

Slaughterhouses.—There are seven slaughterhouses on the Register and every effort is made to be present at the time of slaughtering. No bovine are slaughtered in five of the slaughterhouses and in the remaining two only one each during the winter months. The number of animals slaughtered within the district is gradually diminishing and this is balanced by an increase in importation.

Milk Supply.—Samples are now being collected for bacteriological examination from the ninety-two Registered Farms in the district. There is a continued improvement in the housing of dairy cows but there still remains a good deal to be done to bring all buildings up to standard.

Connections have been laid to a number of farms from the Council's new water mains, but there are others without an adequate supply and where the cost, on account of distance, is more or less prohibitive. The number of “designated producers” in the district is rather disappointing. A schedule of the requirements for registration as such has been brought to the notice of each milk producer.

Housing.—During the year 62 Council Houses were built and occupied by families from condemned and overcrowded properties.

A complete survey of the housing conditions within the district is now nearing completion. The Council has already considered a number of reports and it is probable that further building schemes will be commenced in the near future.

No progress has been made for reconstruction under the provisions of the Housing (Rural Workers) Acts, 1926—1938. Since the Acts came into force only two properties have been dealt with.

Disinfection and Disinfestation.—Disinfection is carried out by means of formalin spray and fumigators. There are no arrangements for steam disinfection. If, on the report of the Medical Officer or Medical Attendant it is deemed advisable to destroy bedding and clothing in cases of tuberculosis, the Council compensates.

Eight cases of Scarlet Fever and six cases of Diphtheria were treated at the Isolation Hospital.

I have no evidence of any property within the district being infested with the bed-bug.

AETHWY RURAL, (ANGLESEY).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies ..	82	82	150	-	-	-	-	-	-	1
Retailing Milk Carts ..	18	17	-	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	-	-	-	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	8	8	130	-	-	-	-	-	-	-
Meat Shops	11	11	60	-	-	-	-	-	-	-
Retailing Meat Carts ..	8	9	-	-	-	-	-	-	-	2
Factory Bakehouses ..	-	-	-	-	-	-	-	-	-	-
Workshop Bakehouses ..	15	15	15	-	-	-	-	-	-	-
Bread Shops	-	-	-	-	-	-	-	-	-	-
Retailing Bread Vans ..	-	-	-	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	-	-	-	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries	20	20	25	-	-	-	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing..</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	43	43	39
B.—Occupying premises outside the District, and importing milk into the District	1	1	-

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920: Registered only, 0; Licensed, 0; Total on Register, 0.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	8	8	8
Licensed	-	-	-
Total on Register	8	8	8

Note.—The District is without a Public Abattoir.

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938,

Together with the Vital Statistic figures (which I assisted in preparing) given in the Annual Report for 1907.

The estimated population furnished by the Registrar General for June, 1938, is 10160.

The Estimated Population for June, 1907, was 8647.

(1). The Birth-rate is 15.1 per 1000 of the population. During the ten years ending 1907 the Average Birth-rate was 24.0 per 1000 of the population.

(2). The Infantile Mortality rate is 84 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality rate was 116 per 1000 Births.

(3). The Zymotic Diseases.—Deaths from Measles (all ages), Nil; Deaths from Whooping Cough (all ages), 2; Deaths from Diarrhoea (under 2 years), Nil. Giving a Zymotic Mortality rate of 0.1 per 1000 of the population. During the ten years ending 1907 the average Zymotic Mortality rate was 0.37 per 1000 of the population.

(4). The General Death rate is 15.05 per 1000 of the population. During the ten years ending 1907 the average Death rate was 16.1 per 1000 of the population.

(5). The Death rate from Tuberculosis is 0.1 per 1000 of the population. During the 10 years ending 1907 the average Death rate from Tuberculosis was 1.6 per 1000 of the population.

(6). The Death-rate from Cancer is 2.2 per 1000 of the Population. During the 10 years ending 1907 the average death-rate from Cancer was 0.91 per 1000 of the population.

SCHOOLS.

The following schools were closed during the year on account of Infectious Diseases :—

Llansadwrn C.S., Chicken Pox. Llangod C.S., Diphtheria.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 34 patients were admitted. Of these 21 were treated for Diphtheria, and 13 for Scarlet Fever.

With Diphtheria, 10 of the patients were under 5 years of age, 7 under 10 years of age, and 2 between 15 and 25 years.

With Scarlet Fever, 3 were under 10 years of age, 6 between 10 and 15 years, 1 between 15 and 25 years, 2 between 25 and 35 years, and 1 between 40 and 50 years.

There were no Deaths during the year. There were no "Return" cases.

REPORT OF THE SANITARY INSPECTOR AND SURVEYOR,

(CHRISTOPHER HUGHES, C.R.S.I.).

Water Supplies.—The Water Supplies of the District are derived from deep and shallow wells, many of which are furnished with pumps and are working satisfactorily.

Sewerage.—No new sewerage schemes were carried out during the year.

Scavenging.—The Scavenging of the whole district is done every two months, and the refuse is brought to Llanfair P.G., where a suitable dumping ground by controlled tipping is provided by the Llanfair Parish Council.

River Pollution.—There is no evidence of River pollution.

Meat and Other Foods.—The Slaughter Houses in the district are inspected at least once a week and the meat shops are periodically inspected. They are kept clean and the quality of meat sold is good.

Slaughter of Animals Act.—Under this Act all slaughtermen are now registered and the stunning of animals is carried out by a humane slaughtering system. All animals come under the purview of the regulations of this Act, compulsorily. The Council have now agreed to include sheep and lambs with the other animals under the provisions of this Act.

Milk and Dairies Order.—Every Cowshed and Dairy from which milk is sold is inspected periodically. Samples of milk for the sediment test are taken, and although great improvement has taken place several samples still show a little sediment. The general conditions of the Cowsheds and Dairies continue to show improvement.

Housing.—Contracts for the erection of 98 houses to be completed by June, 1940, have been signed, 21 of which were occupied during May. Clearance orders representing about 100 houses will be made this year for approval by the Ministry of Health.

Disinfection.—The Laycocks fumigators are used for disinfecting houses. There is no Steam Disinfector provided for steaming clothes and bedding. Disinfectants are given free, and when the destruction of bedding is ordered, the Council pays for the loss incurred. The Council strongly recommend that a steam disinfector should be provided in the County for use by all local authorities, and that a suitable conveyance be acquired to transport bedding, clothing, &c., to and from the disinfecting station.

HIRAETHOG RURAL (DENBIGHSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions.</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies..	125	120	60	5	5	5	-	-	-	-
Retailing Milk Carts ..	6	6	-	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	2	2	-	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	7	9	-	-	-	-	-	-	-	-
Meat Shops	5	4	-	-	-	-	-	-	-	-
Retailing Meat Carts ..	3	3	-	-	-	-	-	-	-	-
Factory Bakehouses ..	-	-	-	-	-	-	-	-	-	-
Workshop Bakehouses ..	9	9	-	-	-	-	-	-	-	-
Bread Shops	-	-	-	-	-	-	-	-	-	-
Retailing Bread Vans ..	-	-	-	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries	-	-	-	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries.. ..	40	40	30	-	-	-	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing.</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both ..	-	19	8
B.—Occupying premises outside the District, and importing milk into the District	-	-	-

SLAUGHERHOUSES IN PAST AND PRESENT USE.

In 1920 : Registered only, 0 ; Licensed, 0 ; Total on Register 0.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	7	7	7
Licensed	-	-	-
Total no Register	7	7	7

Note.—The District is without a Public Abattoir.

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938,

Together with the Vital Statistic figures (which I assisted in preparing) given in the Annual Report for 1907. (These figures apply only to the Llanrwst Rural District).

The Estimated Population furnished by the Registrar General for June, 1938, is 5458.

The Estimated Population for June, 1907, was 4370.

(1). The Birth-rate is 13.1 per 1000 of the Population. During the ten years ending 1907 the Average Birth rate was 23.6 per 1000 of the population.

(2). The Infantile Mortality rate is 55 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality rate was 127 per 1000 Births.

(3). The Zymotic Diseases.—Deaths from Measles (all ages), Nil; Deaths from Whooping Cough (all ages), Nil; Deaths from Diarrhoea (under 2 years), 1. Giving a Zymotic Mortality rate of 0.1 per 1000 of the population. During the ten years ending 1907 the average Zymotic Mortality rate was 0.67 per 1000 of the population.

(4). The General Death-rate is 15.7 per 1000 of the population. During the ten years ending 1907 the average Death rate was 16.8 per 1000 of the population.

(5). The Death rate from Tuberculosis is 0.3 per 1000 of the population. During the 10 years ending 1907 the average Death rate from Tuberculosis was 1.8 per 1000 of the population.

(6). The Death-rate from Cancer is 3.2 per 1000 of the population. During the 10 years ending 1907 the average death rate from Cancer was 1.5 per 1000 of the population.

SCHOOLS.

The following schools were closed during the year on account of Measles :—Carmel Council; Nebo Council.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 2 patients were admitted, suffering from Scarlet Fever.

1 of the Patients was under 10 years of age, and 1 between 25 and 35 years.

There were no Deaths during the year. There were no "Return" cases.

REPORT OF SANITARY INSPECTOR AND SURVEYOR.

(G. R. HUGHES, M.S.I.A.).

SANITARY CIRCUMSTANCES OF THE DISTRICT.

CERRIG-Y-DRUIDION.

This place has a piped supply of water from an open reservoir with a capacity of 56,000 gallons.

Sewerage.—This place is well sewered and the sewerage taken to an outfall works the sewerage being treated in settling tanks and passed through filters, the effluent being discharged into a neighbouring stream. The sludge is dried and disposed of to farmers.

During the year trouble was experienced with effluvia which was traced to unauthorised discharging of considerable quantities of skimmed milk into the Council's sewer. Strong representations were made to the Dairy Company and this matter was remedied, after the cleansing of tanks and filters.

Scavenging.—House refuse is collected once a fortnight and disposed of by tipping into a disused quarry at Gaerfechan.

School.—The School here has piped water supply, and closet accommodation is on the water carriage system.

CEFN BRITH.

The water supply here is piped and is obtained from the Cerrig-y-druidion pipe line.

Sewerage.—This village is part sewered, sewage being given treatment by tank and filter.

Scavenging.—Refuse is collected once a fortnight and disposed of by tipping at Gaerfechan.

GLASFRYN.

The water supplied here is also piped and obtained from the Cerrig-y-druidion main.

Sewerage.—This village is sewered and the sewerage is given tank and filter treatment.

Scavenging.—House refuse is cleared once a fortnight.

School.—Has piped water supply and closet accommodation on the water carriage system.

PENTRELLYNCYMER.

School.—Has piped water system and closet accommodation on the water carriage system.

CWMPENNAR.

School.—No piped water supply. Closet accommodation on the conservancy system.

LLANFIHANGEL G.M.

This village has a piped supply of water obtained from the Alwen main of the Birkenhead T.C.

Sewerage.—This village is part sewered and the sewage given tank and filter treatment.

Scavenging.—No refuse collection is undertaken in this village.

School.—The School has piped supplies of water and the closet accommodation is on the conservancy system.

LLANGWM.

Water supplies from stand pipes in village.

School.—Has no water supply piped into the school, but are able to avail themselves of a supply some thirty yards distant, from a stand pipe on the supply referred to. The closet accommodation here is still on the conservancy system.

DINMAEL.

Has private supplies of water which are not satisfactory from a bacteriological point of view.

Sewerage.—This village is sewered and the sewage given treatment by tank and filters.

Scavenging.—Scavenging is undertaken in this village once a fortnight.

School.—Has piped supply of water easily affected by drought. Closet accommodation is on the water carriage system which discharges into the Council's sewer.

MAERDY.

The water supply for this hamlet is from a covered well on the roadside and is provided with a semi rotary pump. The hamlet is unsewered and house refuse collection is undertaken once fortnightly.

PENTREVOELAS.

The village has a piped supply of water owned by the Voelas Estate.

Sewerage.—This village is unsewered and the drains and privies from the houses in the village discharge indiscriminately into the adjoining streams.

Representations were made to the Estate Company and they have put forward proposals for the drainage of this village, which will include the conversion of 5 privies into Water Closets. The Council have agreed to meet them with the cost of the conversions only.

Scavenging.—House refuse is collected in this village and the hamlet of Rhydlydan once a fortnight and is disposed of by tipping on rough ground about a mile outside the village.

School.—This school has piped water supplies of water and the closet accommodation is on the water carriage system.

YSPYTTY IFAN.

The Council has provided a piped supply of water for this village, the supply being obtained from springs and collected into a storage reservoir of 4000 gallons capacity. Supplies are conveyed to the village in 3 inch diameter pipes. Supplies are from 4 stand-pipes, and in four cases taken into the house. This village is partly sewered but has no outfall works.

The school for this village is on the Caernarvonshire side of the river.

NEBO.

This village has a piped supply of water collected from springs into a tank and taken to a stand pipe on the roadside. House refuse collection is undertaken once a month. The village is unsewered.

The School has no piped supply of water and the closet accommodation is on the conservancy system.

CAPEL GARMON.

This village has no piped supply of water. Supplies for part of the village are collected into a slate cistern provided with a tap.

Sewerage.—This village has been (in consequence of a serious nuisance being complained of) sewered and a small outfall works provided, consisting of settling tanks, syphon, and percolating filters.

Scavenging.—The collection of house refuse and nightsoil is carried out once a fortnight and is disposed of by tipping on the rough land outside the village.

School.—The School has no piped supplies of water and the closet accommodation is on the conservancy system.

MELIN-Y-COED.

This hamlet has no piped supply of water and supplies are obtained from a covered spring. The hamlet is unsewered.

Scavenging.—House refuse collection and nightsoil collection is undertaken once a fortnight and disposed of by tipping on rough ground outside the hamlet.

The children of this hamlet attend Nant-y-Rhiw School which has piped supplies of water and closet accommodation is on the conservancy system.

LLANDDOGET.

This village has no piped supplies of water and supplies are obtained from two springs. Both springs have been protected—provided with doors with locks fixed on them, and pumps. Refuse is collected once a month.

Llanddoget School.—This School has no piped supply of water and the closet accommodation is on the conservancy system.

PANDY TUDUR.

The village has no proper piped supply of water, supplies being obtained from springs. A source of supply near Bodwrach Farm on high land above the village is being gauged with a view to providing a satisfactory supply to this village. The village is unsewered. House refuse collection once a month is undertaken.

School.—The School some little distance outside the village has a piped supply of water, closet accommodation is on the conservancy system.

GWYTHÉRIN.

This village has no piped supply of water at present, but work is proceeding on a scheme which will ultimately provide the whole of the village with a piped supply of water. The village is unsewered and the collection of house refuse, as yet, has not been undertaken.

School.—The school has no piped supplies of water and the closet accommodation is on the conservancy system. The matter of drainage has been taken up with the L.E.A., and they propose reconstructing the drainage arrangements and at a later date when a piped supply is available, to convert the closet accommodation from the conservancy system to the water carriage system.

LLANGERNIEW.

Llangerniew has a piped supply of water owned by the Hafodunos Estate. This supply is not satisfactory and the Council have under consideration a scheme for supplies from another source.

Sewerage.—This village is partly drained by a private sewer.

Scavenging.—House refuse collection is undertaken once a month.

School.—Has piped water supplies; closet accommodation is now on the water carriage system, which is sufficient for the number of children.

EGLWYSBACH.

The water supplies in this village are comprised of one pump situated in the main street of the village, a standpipe to which water is piped from the hillside opposite. Other sources of supplies are from dip-holes on the roadside and a well under a public house. The Council have submitted plans to the Ministry for the provision of a piped water supply estimated to cost £7200.

To ease the situation during the year a temporary supply was piped down from the woods above Pentrefelin hamlet, this supply being obtained from a spring. This will be dispensed with when the above mentioned scheme will be completed.

Sewerage.—The village is not sewered.

Scavenging.—House refuse collection is undertaken once a month.

School.—Has no piped supply of water. Closet accommodation is on the conservancy system.

MURIA DISTRICT.

House refuse is collected once a month in this district which is comprised of the residential houses on the Llanrwst—Bettwsycoed Road.

There are two small schools in the district, namely :—Gosen and Carmel, are undrained and without piped supplies of water.

Drainage and Sewerage.—Most of the isolated houses and farms outside the villages have drainage systems discharging into cess-pools or septic tank installations. A good number,

however, have no drainage arrangements and these are being dealt with when met. Two new drainage systems were put in during the year as a consequence of informal action with the respective owners.

Milk.—Cowsheds and Dairies are periodically visited. During the year eight samples of Milk were taken for analysis.

Meat.—Slaughterhouses and Meat shops in the District are periodically visited.

Bread.—Bakehouses are periodically visited.

Water.—During the year three samples of water were taken for analysis from existing and proposed new sources of supply. Protection work of the smaller public supplies have been carried out during the year.

Eradication of Bed Bugs.—No cases of infestation were brought to our notice and therefore no action was necessary.

Water Supplies.—During the year of 1938, no difficulties were experienced with water supplies in the District. Instructions have been given for sampling of supplies in the ensuing year.

Housing.—Negotiations have been commenced for the acquisition of sites for the erection of a first programme of 52 houses under the Housing Act, 1938, this programme to run concurrently with a scheme for reconditioning of 20 houses under the Housing Rural Workers Act. Three houses have been completed under this act and a further six are in course of reconditioning. The Council propose reviewing their position after carrying out this programme and will, if necessary, construct a further 52 houses under the 1938 act.

Camping Sites.—Apart from occasional trailer vans putting up over night at one or two farms there are no camping sites within the district.

Swimming Pools.—There are no swimming baths or pools situated in the District.

INSPECTION AND SUPERVISION OF FOOD.

Carcases Inspected and Condemned	..	..	—
Sheep and Lambs, number inspected	..	..	—

CLOSET AND ASHPIT ACCOMMODATION.

Number of approved W.C.'s at the end of the year	..	232
Number of waste Water W.C.'s	..	12
Number of Midden Privies	..	936
Number of Bucket Privies	..	274

CONVERSIONS.

Number of Midden Privies to Bucket	..	7
Number of Privies to Water Closet	..	2
Number of W.C.'s repaired	..	2

DRAINAGE.

Old Houses properly drained for the first time	..	12
Defects in house drains	..	2

DISINFECTION AND ISOLATION.

Number of houses (a) Disinfected	..	4
(b) Disinfectants supplied	..	4
Number of cases removed to Hospital	..	4
Total number of inspections during the year	..	650
Number of Notices (a) Informal	..	10
(b) Statutory	..	Nil.
(c) Total	..	10
Number of prosecutions	..	Nil.

FACTORIES, WORKSHOPS.

Number of Workshops	..	40
Number of inspections	..	30

CAERNARVON BOROUGH, (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
	1938	1937								
Cowsheds & Farm Dairies ..	28	28	84	8	8	8	-	-	-	12
Retailing Milk Carts ..	31	30	30	4	4	4	-	-	-	-
Milk Shops (Dairy Shops)	6	7	6	6	-	-	-	-	-	-
Public Slaughter House ..	1	1	156	-	-	-	-	-	-	-
Private Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Meat Shops	19	20	60	3	3	3	-	-	-	-
Retailing Meat Carts ..	2	2	12	2	2	2	-	-	-	-
Factory Bakehouses ..	3	3	5	-	-	-	-	-	-	-
Workshop Bakehouses ..	9	9	14	2	2	2	-	-	-	-
Bread Shops	36	39	30	-	-	-	-	-	-	-
Retailing Bread Vans ..	7	7	-	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	14	14	16	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries	105	105	103	5	5	5	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	3	3	8	4	1	1	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing.</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District. and selling milk within, or outside, or both	-	26	2
B.—Occupying premises outside the District, and importing milk into the District	-	10	2

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920 : Registered only, -; Licensed, 1; Total on Register, 1.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	-	-	-
Licensed (The Public Abattoir)	1	1	1
Total on Register	1	1	1

Note.—The District possesses a Public Abattoir.

A.—POPULATION AT CENSUS 1921 AND 1931.—According to the 1921 Census figures there was a decrease of population on that of 1911 of 1618—a considerable decrease. The revised figures given by the Registrar General did not differ materially from these. This decrease was, no doubt largely due to the loss of men in the Great War and to the depression in the Slate Industry. According to the preliminary Census figures for 1931, however, there has been a small rise by 162 in the population to 8469.

B.—BIRTH-RATE AND DEATH-RATES OR MORTALITIES.—The Maternal, Zymotic and Influenza Mortalities were nil, the Infant Mortality was low, the Respiratory and Tubercular Mortalities were comparatively low, and the Birth-rate and the General Death-rate and the Cancer Mortalities were moderate.

C.—WATER SUPPLY.—There were no cases of lead contamination due to plumbo-solvent action reported. To prevent such lead contamination, no lead pipes should be used, unless the same are properly incased (not tin wash or ordinary tin lining) with block tin. Another method of counter-acting soft water is to use a Lime-saturating Plant, or Silica. A man is employed at Rhyd-ddu for the purpose of cleansing the village, so as to minimise the pollution of the river running past the village, which river enters Quellyn Lake, the source of the town's supply. Warning Notices have been served on the village householders. A Sewerage Scheme is now being carried out for the village.

The Council had ordered a renewed inquiry to be made into the cause of poor pressure and shortage of water supply to houses in the Northern parts of the town. A local Consulting Engineer was employed to report on the supply generally in the town, and he prepared a Scheme in which proposals were made for general improvement, including filtration and chlorination.

A Government Inquiry was held in respect to an application for sanction to a Loan. As a result, the Ministry were agreeable to chlorination, but postponed filtration until the considerable over-consumption—or rather the great leakage—of water had been reduced. The Ministry now consider that filtration should be taken in hand.

On the recommendation of the Ministry of Health, an Automatic Chlorination Recorder has been installed.

An improvement has taken place in the upper portions of the town owing to most of the mains having been scraped and cleaned, and leakages at the same time found and remedied, thus reducing the over-consumption or waste of water. But the mains may have to be renewed. The Council are considering a Scheme for renewal of some Mains and scraping and treating others.

As regards quality, while no bacilli of the typhoid-dysentery type were found on examination of the water, too many of the Colon bacilli were sometimes found. Their numbers are now being kept down through chlorination. Of 2 samples taken, both were found to be very satisfactory.

A well in an outlying farm will be replaced by piped town water.

About 450 houses have only outside water-fittings, and have no slop-stones. The number will steadily diminish with the progress of Slum Clearance.

Fire Extinguishing.—It is also important to keep up pressure for fire extinguishing purposes, etc.

D.—DRAINAGE AND SEWERAGE.—The sewers are kept in good order and are flushed automatically by means of underground flushing tanks, and by means of hosepipes from the town water mains. Certain difficulties having been overcome, the Septic Tanks at Maescadnant and Y Glyn were abolished, and the properties connected with the system of sewers. A 9 inch sewer has been carried to a point for any future extension on the Bethel Road.

Following on complaints of Flooding in different parts of the town (owing to the over-taxing of the Sewerage system), the Council engaged the services of a Consultant Engineer, who has reported on the whole system. He was also instructed to prepare plans, &c., to deal

with future developments in the outlying parts of the Borough, where building is already proceeding. A comprehensive scheme for the whole Borough was prepared by him, and a Public Inquiry into an application for sanction to a loan was held.

The said application, covering practically the whole Scheme, was granted.

Confirmation has been further received for a Scheme to improve the South Road and North Road districts, the conditions in which have been the cause of complaints for some years.

E.—PUBLIC CONVENIENCES AND PUBLIC BATHS.—The number of Public Conveniences is 11 (8 for men and 3 for women, one of which latter is situated in the Institute Buildings). A site was chosen at Castle Hill, and the work of constructing modern conveniences for each of the two sexes was completed in October, 1930. An additional convenience is required, that is, for the South Road District.

The Public Baths continue to be appreciated.

F.—PUBLIC SCAVENGING.—Public Scavenging for the whole of the town proper is done by the Corporation by direct labour, collection in most cases taking place daily, in others every other day, and in the better class houses twice a week. Some improvement has taken place through reorganisation of districts, better carting, &c. Complaints used to be received in regard to the Tipping Ground, and the Corporation erected an Incinerator or Destructor for dealing with the dry refuse.

An experiment in Controlled Tipping is now being made, but condemned meat, and the Abattoir offal, is still destroyed in a special Combustion Chamber of the Incinerator. Traders cart their own trade-refuse to the Tipping Ground, and a small charge is made for disposal. Some tradesmen expressed a desire to come to some arrangement with the Corporation, for carting. At present, one bin of 5 cubic feet is allowed per journey of refuse-cart 3 times a week. A new arrangement is at present under consideration, whereby Traders will have to pay for additional bins, &c., and special journeys.

G.—POLLUTION OF STREAMS.—Stern measures should be taken against people who may be discovered throwing rubbish into a stream (the Cadnant) running through the town, not however a source of water supply. In the meantime Handbills have been distributed once more warning the occupiers abutting on the river against this practice. Watch should also be kept on persons who carry rubbish from a distance. The river is cleansed twice a year. The river also suffers from lack of self-flushing. It is hoped to improve the present conditions by effecting certain alterations further up in the course of the river.

H.—POLLUTION OF THE AIR.—The town is fairly free from industries responsible for smoke nuisance.

I.—FOOD INSPECTION.—(a) *Milk.*—In a previous year the Sanitary Inspector made a complete report on all cowsheds in the district for the County Council, who adopted the plan of having the milk of all dairy cows examined for Tubercle Bacilli. Samples of milk are taken twice during the year from all registered herds within the District. The County Council set aside a sum of money for the taking of Biological Samples of milk from Registered Herds.

Cowsheds and Dairies are regularly inspected. Progress is being maintained in providing suitable cowsheds and dairies. 1 cowshed has been entirely re-modelled, and 3 have been provided with water for drinking and cleansing purposes.

4 Bovine animals (3 in milk and 1 other) were slaughtered by the County Authorities under the Tuberculosis Order, 1925.

Graded Milk.—4 resident vendors sell designated Milk. 2 of these produce T.T. (Tuberculin Tested) Milk and 2 are Accredited Producers. A great deal of improvement is being effected in the matter of housing of dairy cows, and also in the method of handling and cleanliness. The Sanitary Inspector took samples of T.T. Milk on behalf of the County Council. This is done monthly for Bacteriological examination, and every 3 months for Biological examination (for Tubercle).

It is well for the Council to authorise and instruct the Inspector to take samples of milk occasionally from vendors of designated and non-designated milk alike, to supplement the work of the County Council and of the County Inspector of Food and Drugs, as proper richness and especially cleanliness of milk is so important to infants, Invalids and everybody.

Inexpensive analysis (but non-statutory and not recognised as a basis of prosecution) is made at Bangor College. Last year 32 samples of ordinary, commercial milk taken by the Inspector were analysed at the College. Some of the samples attained Accredited standard.

The County Inspector of Food and Drugs also took 11 samples of milk (1 non-genuine), and 2 samples of butter, in the course of his duties. 4 Bovine animals (3 in milk and 1 other) were slaughtered by the County Authorities under the Tuberculosis Order, 1925.

Attention had to be drawn in a previous year to certain purveyors filling up their bottles during the course of transit on their daily rounds.

Free Milk.—The Town has 2 Clubs (Toc H. and Rotarian) which distribute milk to poor persons, including the less affluent school children.

(b) *Meat.*—All meat is now slaughtered in the Public Abattoir. At the said public establishment, 8 carcasses (Tuberculosis), were found to be diseased, and with the confirming authority of a Magistrate, destroyed. Also parts of carcasses with other diseases.

Since the beginning of the year 1934, the Slaughtering Act, 1933, is in operation, including (by the Council's resolution) the application of the Act to Sheep and Lambs, which had been left optional. Electric Stunners have been installed, and are used for all animals except oxen. A Demonstration had been held in advance by a representative of the N.S.P.C.A. Taking the case of pigs, after the effective stunning, and while sticking is taking place, not the slightest scream is heard, which proves the painlessness of the operation. The necessary reflex movements to allow of proper bleeding take place all the same. In the case of Oxen (which would require much stronger Electric currents, Greener's long Humane Cattle Killer is used. A Captive-bolt killer might be better (or safer) than the said type.

Condemned meat used to be buried in the Tipping Ground, but there is a special combustion chamber provided in the Incinerator or Destructor. Here also the Abattoir offal is destroyed.

The number of animals slaughtered at the Public Abattoir was 11,713, being made up of Oxen, 1227; Calves, 324; Pigs, 6104; Sheep, 11,713.

Meat Inspection.—The Slaughtering, now only at the public Slaughterhouse, is under constant supervision. In the matter of meat inspection, the public abattoir is a valuable asset. Meat is frequently examined therein, both at time of slaughtering and otherwise, usually on the busiest slaughtering days, and as often as possible besides. There is an experienced caretaker and the Sanitary Inspector is within easy reach. Friendly trade rivalry also helps to ensure the animals brought there being sound and select, but an occasional one turns out otherwise. There are no arrangements for *Marking* meat. Meat shops are systematically inspected. No meat is sold from carts.

The work in connection with the licensing of slaughterers was carried out, the number licensed being 44.

(c) *Other Foods.*—The Sanitary conditions of Bakehouses generally are in a very good condition now, but limewashing may become overdue in one or two cases. Two of the older type were discontinued and demolished. Bread, Fish, Fruit, Ice-cream, Chip, &c., Shops are periodically inspected and are improving generally.

Various kinds of Food were condemned as unfit for consumption, as follows :—(1) *Tuberculosis*—7 Bovine animals and 1 Pig; (2) *Other Diseases*—1 Sheep and 1 Pig; (3) *Cystic Livers*—288 lbs; (4) *Decomposition*—Corned Beef (48 lbs.), Potatoes (13 bags), Jaffa Oranges (1 bag), Dutch Carrots (14 cwts).

J.—SCHOOLS.—The Drains of all Elementary Schools are periodically flushed by the Corporation workmen from the Town Mains by means of hosepipes. No Schools were closed on the ground of illness.

K.—ISOLATION FACILITIES AND AMBULANCES.—(See a former Introductory Report). No shelters on Private premises are known to be used. The Welsh Tuberculosis Association have been found willing to consider applications, when these are necessary.

L.—CASES SENT TO FEVER HOSPITAL.—During the year the town suffered from the continued epidemic of Scarlet Fever and Diphtheria, and practically all the cases were sent to the Fever Hospital.

There were 55 positive notifications of the ordinary fevers, viz. :—45 of Diphtheria, 7 of Scarlet Fever, 1 of Erysipelas, 1 of Pneumonia (probably microbic), and 1 of Puerperal Pyrexia.

M.—DIAGNOSTIC, PREVENTATIVE AND REMEDIAL AIDS FOR INFECTIOUS DISEASES.—(See a former Introductory Report).

A free supply of Diphtheria Antitoxin (for prevention and treatment) is now kept at the Guild Hall, and is renewed as required. Also Swab-holders. And Laboratories are paid by the Council for examination of Throat-swabs, &c., sent to them by doctors.

N.—DISINFECTION AND DISINFESTATION.—There is a Steam Disinfector at the Fever Hospital, where articles can be taken to be disinfected. The ambulance chauffeur takes the patients to the Fever Hospital and returns to the house for the bedding and clothing, to be disinfected. The Inspector disinfects bedrooms, &c., by means of a Sprayer and a Fumigator (using Formalin as a chemical). The Council, as such, have made no arrangements for the cleansing of verminous persons, but two cases have been effectively dealt with at the Workhouse. There are Steam Disinfectors at the Fever Hospital and the Bryn Seiont Hospital or Sanatorium as well as the Small-pox Hospital. Arrangements are now in operation, by kind permission of the King Edward Memorial Association, for the disinfection at the Disinfection station attached to the Sanatorium, of bedding and clothing from Tubercle-infected houses, the Council being responsible for the conveyance only. The Steam Disinfector at the said station was utilised 10 times during the year. In 3 other cases, the householders preferred to have the bedding, &c., destroyed, without expecting compensation.

O.—ADOPTIVE ACTS AND BYELAWS.—The new Public Health Act, 1936, came into force on October 1, 1937, and all existing Byelaws will automatically lapse on July 31, 1939. A new series of Model Building Byelaws has been prepared for consideration by local authorities. The new Byelaws will enforce a better standard in both materials and construction, and gives a list of "short-lived" materials, the use of which will be subject to special restrictions.

P.—HOUSING.—It is gratifying to report that during recent years 447 new Workmen's Houses have been erected by the Council. There is still a demand for houses of a cheap type for low-paid workers and the newly-married, &c., and there is a lot of overcrowding; also of insanitary property awaiting either reconditioning or clearance. It is gratifying that the Council completed 60 more houses, these last of the Non-parlour type in accordance with the present retrenchment policy of the Government. 43 houses of a superior type were built by private persons. Rents of Council Houses are 8/- to 9/3 (Non-Parlour) and 12/6 (Parlour).

The Council adopted a Scheme to rehouse Slum Clearance tenants, at Ysgubor Goch. The Council built about 154 houses, 140 to replace Slum houses (many of these also overcrowded) and 14 to replace Overcrowded Houses. Besides the matter of structural unfitness, this will relieve a number of cases of Overcrowding at the same time.

The Council acquired further sites adjacent to Ysgubor Goch (on Maesbarcer).

They have now acquired Cefn Hendre Estate for the purpose of replacing Slum-clearance houses and Overcrowded houses. They have allocated part of the land for the purpose of building 20 houses thereon by private persons.

A private firm of builders have acquired the Cae Gwyn and Llys Meirion Estates, and have submitted a lay-out Scheme for about 85 houses.

No special difficulties in the way of providing sites have been experienced.

An exhaustive inspection of the Clearance and Improvement Areas in the Borough, together with individual Unfit and Overcrowded houses was made by the Medical Officer, assisted by the Sanitary Inspector. A Special Report was presented to the Health and Housing Committee preceded by a Preliminary and followed by a Supplementary Report, and this was adopted, and initial steps taken to carry out the recommendations. Mr. James Evans from the Welsh Board of Health, also made an investigation, accompanied by the Medical Officer and Sanitary Inspector and presented his report to the Council.

It is estimated that there are about 85 houses (including those in Clearance Areas), which are in an aged and poor condition, 267 houses of fair quality, and about 2000 of good quality. About 450 houses have no internal water fittings and slop-stones.

HISTORICAL.—The Housing Conditions were reviewed by the Medical Officer and colleagues, and the Health and Housing Committee formulated a Five-Year Programme for submission to the Ministry.

About 59 houses were included in the Improvement Areas, and about 151 in the Clearance Areas. Upon further consideration, the Medical Officer transferred a number of Improvement Areas into the Clearance Area Class. The total area in the Clearance Areas was 6350 square yards.

A number of houses were more or less seriously overcrowded. The overcrowding is accounted for by lack of suitable, roomy houses at low rentals for poor people.

Slum Clearance Public Inquiry.—The Council, on the representation of myself, supported by the other Officials, having made Clearance Orders with respect to Castle Ditch Court, Castle Street Court and a number of houses and other premises in Northgate Street, and the respective owners having appealed to the Ministry against such Orders, Mr. Hopkins, Government Architect Inspector, held a Public Inquiry into the whole matter.

As a result of the Inquiry the Ministry of Health confirmed the said Clearance Orders, almost in their entirety.

The properties have been, or are being demolished, and the dispossessed Tenants have been re-housed in the new Council Houses. In many cases their belongings had to undergo Cyanide Fumigation, but the Bedding was only submitted to Steam Disinfection (358 beddings).

During the year 30 of the condemned houses were demolished, and the sites cleared.

A second Public Inquiry was held to deal with other Slum Areas, comprising 14 houses, and a third Public Inquiry has been held since then.

The Housing (Overcrowding) Act, 1935.—Ready for the coming into operation of the Housing (Overcrowding) Act, 1935, the Sanitary Inspector made a comprehensive initial survey of the town, with regard to Overcrowded houses. Some of these houses were in the Slum Areas.

After that an Official Survey of Overcrowding was made by and under him, and 174 houses were found to be overcrowded on the basis of number of rooms, floor area, &c. 120 of these have been relieved under the various Slum Clearance Schemes, the houses being unfit as well as overcrowded. There still remain 54 cases to be dealt with in the coming new Housing Scheme, apart from some exchanges that may be made.

Such arrangements (to exchange houses, &c.) have been made with the Housing Committee and with House Agents in some cases.

Nearly one-seventh of the entire population has now been re-housed.

Individual Unfit Houses and those less Unfit.—After dealing with the Areas, and, in fact, simultaneously with them, not only Individual Overcrowded Houses, but also Individual Unfit Houses (that is odd houses, not situated in Clearance Areas, that cannot be rendered fit at a reasonable expense) will have to be dealt with.

And besides these Individual (totally) Unfit Houses, those houses which are less unfit, and which can be remedied at a reasonable expense, must be seen to.

Is the District too Urban to get a grant towards re-conditioning a house under the Rural Workers Act, 1926 ?

Self-Supporting Houses.—Besides replacement houses, the Council are considering a scheme for fresh or additional housing (self-supporting houses), as there is a demand for such houses at a reasonable rent, but there is a lot of building for better-off tenants going on by private builders, and this will indirectly relieve the demand for working-class houses.

Q.—HOSPITALS AND SIMILAR INSTITUTIONS.—The town is rich in such. These include the Tuberculosis Hospital, the Fever Hospital, the Cottage Hospital, the Workhouse (including Eryri Hospital), Home for Mental Defectives, Port Sanitary Hospital, &c. Also the Smallpox Hospital not so far out of the Borough. For the Dead the Council have a Cemetery and Mortuary.

R.—REMARKS.—In a previous year, there were 2 convictions (with fines) under the P.H. Act, 1925, for selling or exchanging toys for rags, &c.

The Corporation as a Contributory Authority under the County Council Scheme, has acquired a right to the use of the Caeathro Smallpox Hospital (formerly the sole property of the Gwyrfaai Council), and it has already proved of service in connection with a suspected (but not real) case of Smallpox, as also with a real (at least not disproved) case of Smallpox in a vagrant. As regards their own Isolation Hospital, they handed it over (on terms) to the County Council, but they still enjoy the use of it as one of the contributory Authorities.

Ambulances.—In the absence of a Public Ambulance for Accident Cases, &c., it is gratifying to know that a private person has provided a vehicle which he places at the disposal of the residents at a reasonable charge. This was used on numerous occasions during the year. For infectious cases an Ambulance is provided by the County Council.

A Fully-equipped Public Health Laboratory for North Wales?—At the time it was held out by the promoters as an inducement to subscribers that part of the North Wales Heroes Fund would be devoted towards establishing a fully-equipped Public Health Laboratory for North Wales at the Bangor University College, to help towards safeguarding the health of the generation then coming.

It may be granted that Bangor has done very useful work in the very important matter of Chemical and Bacteriological examination of Dairy Milk, but every effort should be made to have the usefulness of the said Departments extended and widened so as to include the examination of suspected Pathological specimens of blood and secretions and of deposits and discharges.

The Caernarvon Town Council took up the matter afresh a short time ago, and were encouraged by the news that fresh moneys had come earlier than expected into the University Exchequers from the accumulated funds which had been diverted by the Welsh Disestablishment Act.

It is to be hoped that the Caernarvon Council will not let the matter drop until the possibilities of such scheme have been thoroughly explored, in the interests of rescuing the inhabitants of North Wales from the inroads of Tuberculosis and other dread diseases, and probably in the interests of Welsh Budgets, as large sums of money at present leave Wales towards assisting the maintenance of such Public Health Laboratories in Runcorn, Liverpool, Manchester, &c., and, of course, London.

S.—PUBLIC HEALTH STAFF.—Working in the town is a Health Visitor (Nurse Hughes), engaged by the County Council. Also a Surveyor (Mr. Evans) and Assistants, and a Sanitary Inspector (Mr. R. Roberts).

My thanks are due to all these colleagues for information readily supplied.

PWLLHELI BOROUGH, (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
	1938	1937								
Cowsheds & Farm Dairies ..	12	12	24	-	-	-	-	-	-	11
Retailing Milk Carts ..	24	24	48	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	1	2	6	-	-	-	-	-	-	-
Public Slaughter House ..	1	1	24	-	-	-	-	-	-	-
Private Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Meat Shops	13	13	13	-	-	-	-	-	-	-
Retailing Meat Carts ..	-	-	-	-	-	-	-	-	-	-
Factory Bakehouses ..	2	2	2	-	-	-	-	-	-	-
Workshop Bakehouses ..	13	13	13	-	-	-	-	-	-	-
Bread Shops	13	13	13	-	-	-	-	-	-	-
Retailing Bread Vans ..	9	9	0	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	2	2	4	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries)	90	90	90	-	-	-	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	1	1	1	-	-	-	-	-	-	-
Offensive Trades	1	1	3	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing.</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	-	12	-
B.—Occupying premises outside the District, and importing milk into the District	-	-	11

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920: Registered only, -; Licensed, 1; Total on Register, 1.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	-	-	-
Licensed (The Public Abattoir)	1	1	1
Total on Register	1	1	1

Note.—The District possesses a Public Abattoir.

A.—POPULATION AT CENSUS 1921 AND 1931.—It may be recalled that according to the actual Census figures for 1921 there was a small increase in population on that of 1911 of 20 but the Registrar-General in his revised estimate made the change to be, not an increase, but a decrease of 265. He had to make an allowance for an influx of Summer Visitors into the town. According to the Preliminary Census figures for 1931, the population has been further reduced (by 210) to 3599.

B.—BIRTH-RATE AND DEATH-RATES OR MORTALITIES.—The Maternal, Zymotic and Influenza Mortalities were nil; the Infant, Cancer and Respiratory Mortalities were rather low, and the Birth-rate, the General Death-rate and the Tubercular Mortalities moderate.

C.—WATER SUPPLY.—It will be recalled that a new Scheme for improving (by means of a new main) the water supply to the higher levels (which include the County School, Penrallt, the higher levels of Lleyr Street, &c.), and for safeguarding (by warding off impure water) the source of supply, was carried through after a Government Inquiry into an application to borrow £3220.

The water is of a very soft nature, but no plumbo-solvent action has been detected.

In the case of soft water, to prevent possible contamination by lead, copper or zinc, ordinary cast-iron pipes are recommended between the Mains and Stopcock, but there is no objection to the use of Galvanised (that is, zinc-coated) iron pipes as long as short lengths only are used. For service pipes, Block-tin encased in lead is safer than Tin-washed, or even Tin-lined, lead, and than Tin-washed copper.

Fire Extinguishing.—Good pressure is important for fire-extinguishing purposes also.

During the summer of 1933, a prolonged drought was experienced at Pwllheli, as elsewhere, and this was continued into the following year.

To meet any future emergency the Corporation wisely availed themselves of the powers offered under the Water Supplies (Exceptional Shortage) Act, 1934, and applied to the Ministry of Health for sanction to collect water from the water-shed at Cwm Ceiliog. A Government Inquiry was held (under Mr. Thistleton Dyer, Government Engineer) and the Ministry authorised the Corporation to execute the work.

Accordingly, the supply of water to the Borough was greatly augmented by this execution of Work at Cwm Ceiliog under the Water Supplies (Exceptional Shortage Act), 1934.

If the Corporation had not availed themselves of the powers conferred under the 1934 Act, the town would find themselves with a shortage in the month of August, when the population is greatly increased by the presence of visitors. As it is, and with certain other improvements, the whole of the area is supplied with an abundant and pure supply of water.

One other improvement that took place was to extend the Main up from the County School towards Penrallt. Hitherto this district had been dependent for its supply on a Well which was liable to contamination by cattle and by the flooding of the adjoining stream.

It is now pleasing to observe that, apart from an occasional farm-house, or outlying cottage, almost every dwelling house within the Borough is connected to the Public Water Supply.

Another improvement will be to increase the delivering capacity of the old main from Murwyp to the high level zone, either by laying a new main or providing some other means, such as pressure from behind. It is feared that the said old main is gradually becoming encrusted.

The Corporation received sanction from the Ministry to proceed with the laying of a 6inch Main from the West End to the South Beach, and the work was carried out. This Main will solve the problem of the South Beach supply, as the existing 3 inch main was so encrusted that its delivering capacity was inadequate for the increasing needs of this part of the Borough. The Mains were also extended to the Morfa Garreg Council Housing Estate, and to the Manor Estate.

Sampling.—Samples of the Town Water were taken periodically, and in all the tests, the reports of the Analyst showed the supply to be free of dangerous germs.

D.—DRAINAGE AND SEWERAGE.—No extensions of the Sewers were made during the year.

It may be stated that all portions of the Borough are drained into the Main Sewer except the part known as Penrallt—on the other side of the hill-crest.

In this case it has not been found practicable to extend the sewer owing to the land sloping in a Northerly direction to Afon Dwyrdd. In this area there are about 17 houses of the Working class type.

In the event of a further development in this direction, it will be necessary to pump the sewage inwards into the existing sewer at Salem Terrace, or else provide a separate Septic Tank Scheme, the effluent being made to discharge into Afon Dwyrdd.

Either scheme would be likely to be expensive, as the work would entail excavation in rock.

E.—PUBLIC CONVENIENCES.—Modern, comprehensive Public Conveniences for each Sex (with closet and washbasin) are a requisite in every town, especially in these days of Bus Transport. A convenience is provided on the Maes, but additional ones are required.

F.—PUBLIC SCAVENGING.—There is a system of Public Scavenging, with daily house-to-house collection in force generally, and no accumulations are permitted. The Council considered the advisability of disposing of House Refuse by Incineration or Pulverisation, but deferred the question owing to the heavy initial outlay. The Plant would include a combustion chamber for offal and diseased meat, as at Caernarvon. An attempt is made to minimise the evil of the present site by exercising care and by spreading sand on the surface.

Trade refuse is removed along with the ordinary refuse, and without charge.

I.—FOOD INSPECTION.—(a) *Milk*.—In a previous year the Surveyor made a complete report on all cowsheds for the County Council, who were considering the question of having all dairy cows examined.

The Council discontinued their Municipal Depot for Milk, which was established to bring down the price of milk. 4 dealers sell Designated Milk. 1 of these sells T.T. Milk, and 3 dealers are Accredited Producers. All the Designated Milk comes from outside the District.

It is well for the Council to authorise and instruct the Surveyor to renew the taking of samples of milk occasionally to supplement the work of the County Inspector of Foods and Drugs, as proper richness and especially cleanliness of milk is so important to Infants, Invalids, and everybody. Inexpensive analysis (but non-statutory, and not recognised as a basis for prosecutions) is made at Bangor College. The County Inspector of Foods and Drugs took 8 samples of milk (1 non-genuine) and 1 sample of butter.

In co-operation with the Agricultural Department of Bangor College, samples of milk from all the herds within the Borough were submitted for Biological examination, and in none of the cases were Tubercle bacilli found.

2 bovine animals (cows in milk) were slaughtered by the County Authorities under the Tuberculosis Order, 1925.

(b) *Meat (Inspection and Humane Slaughtering)*.—In the matter of meat inspection, the Public Abattoir is a valuable asset. There is an experienced caretaker, and the Surveyor is within easy reach. Trade co-operation also helps to ensure meat being sound and of high standard. There is frequent and regular inspection of meat at the Abattoir.

The Humane Killer was already being used for Oxen, but at that time Humane instruments were not used for other animals. Following upon the enlargement of the Abattoir, and upon the passing of the new Slaughtering Act, Electrical Power has been installed, which is being used for the smaller animals, that is, calves, pigs, sheep and lambs, the captive bolt Killer being used for Oxen. Thus I am assured that no animal is slaughtered apart from a Humane instrument.

During the year a total of 6995 animals were slaughtered, thus :—Cattle, 716 ; Calves, 71 ; Pigs, 1883 ; Sheep, 4325.

Condemned meat is disposed of by burying in lime. It would be done, preferably, in the combustion chamber of a Refuse Destructor.

The Corporation considered the extension of the Slaughterhouse, as it was deemed too small to meet the growing needs of the town. The accommodation for pig-slaughtering required to be improved, and the lairage capacity increased.

The Inspector of the Ministry of Health visited the Borough, and suggested amendments and modifications in the plans. The Ministry also counselled delay, due probably to their economy policy, but the Council felt they must proceed with their Scheme, and the contract for extending the Abattoir was let. The slaughtering arrangements have been greatly improved, and the conditions regarding the slaughtering of pigs leave little to be desired.

(c) *Other Foods*.—The Bakehouses were on the whole found to be in good condition and well-kept and lime-washed regularly. Similarly, Fish, Fruit, Chips, Ice Cream, &c., Shops were well kept.

J.—SCHOOLS.—A new, supplementary, Central School was completed during a recent year. The existing Boys' Council School was very badly lighted, hemmed in, and otherwise out-of-date, but it has been somewhat improved.

None of the Schools were closed on the ground of illness.

K.—ISOLATION FACILITIES AND AMBULANCES.—(See a former Introductory Report).

L.—CASES SENT TO FEVER HOSPITAL.—10 Cases were sent to the Fever Hospital, viz., 7 cases of Diphtheria, 2 cases of Scarlet Fever and 1 of Whooping-Cough (with Pneumonia).

M.—DIAGNOSTIC, PREVENTIVE AND REMEDIAL AIDS FOR INFECTIOUS DISEASES.—(See a former Introductory Report).

N.—DISINFECTION AND DISINFESTATION.—For the use of Bedrooms, &c., Methods of spraying and fumigation are used. There is, of course, no Steam Disinfector for bedding, &c., such as is found in a Fever Hospital. In the absence of such, burning of bedding becomes necessary with compensation in kind. Disinfection is done free of charge. A portable " Sack " Steam Disinfector for the town or district would be valuable, unless a special Disinfecting Station (with Steam Disinfector) be established in or near Pwllheli for the use of South Caernarvonshire. (See a former Introductory Report).

O.—ADOPTIVE ACTS AND BYELAWS.—The new Public Health Act, 1936, came into form on October 1, and all existing Byelaws automatically lapse on July 31, 1939.

A new series of Model Sanitary Byelaws has been prepared for consideration by local authorities. The new Byelaws will enforce a better standard in both materials and construction, and gives a list of " short-lived " materials, the use of which will be subject to special restrictions.

P.—HOUSING.—(a) *Private Building*.—The Building Trade had been practically at a standstill, but prospects of revival appeared, and land was sold for early development purposes. Progress has been made with the building of better-class residences of the detached or semi-detached type. The building of those better-class residences indirectly improves Working Class Housing, on the principle of " moving-up " or " upward filtration."

There thus has been a decided revival of building operations on the part of private builders, but their work does not cater directly for the poorer classes.

In the past year, 13 superior houses were erected by private individuals. Despite the completed Housing Schemes, the need of Workmen's dwellings remained acute, and the Council were alive to the problem, and realised the need of houses of low rental, and a Scheme comprising 58 houses of low rental was submitted to the Ministry of Health and approved. Building

was commenced and by the end of the year 34 houses had been completed and let to tenants. The remaining 24 were completed and let early in 1939.

The site chosen is known as Morfa'r Garreg, and it may be said to be an ideal site from the Public Health standpoint.

The Estate comprises :—(1) Parlour Type—24 houses with 4 bedrooms. (2) Non-parlour : 10 houses with 4 bedrooms. (3) Non Parlour : 24 houses with 3 bedrooms.

(b) *Municipal Building*.—In a year or two after the completion of an ambitious Housing Scheme (in 2 or three stages) of 40 Parlour houses (real parlour houses, not so-called Semi-Parlour ones, and renting at 12/6 and 13/6 a week, inclusive of rates), the Council made a further application to build 18 houses, also of the Parlour type, but the Ministry adhered to its new policy of with-holding sanction from building houses other than of the Non-parlour, and less spacious type.

It is true that a greater number of Non-parlour houses than of Parlour houses could be built for the same money, but the building of a good number of Parlour houses (unless let to outsiders), would also indirectly on the principle of "moving up, or upward filtration" benefit the housing conditions of the poorest classes. A parlour, moreover, can be used as a bedroom in the case of large families, and where there are one or two Tubercular members of the family that require segregation. Besides, the difference in cost hardly counterbalances the disadvantage.

The Council resigned itself to accept Non-parlour houses, and sanction to 18 of these was obtained. The houses were built on land already held by the Council.

The 18 houses were let to tenants from the poorer quarters of the town (in anticipation of Slum Clearance). This effort proved a success, and the houses were tidily kept, and the families appreciated their improved and brighter surroundings. These non-parlour houses rent at 4/6, 5/6 and 6/- a week (rates inclusive).

This completed Scheme of 18 non-parlour houses was immediately followed by the building of 30 further similar houses. This made 88 in all.

Thus for many years the chief feature of the Municipal activities of the Borough has been the carrying out of Housing Schemes.

(c) *The New Housing Scheme*.—The Council did not erect any houses during 1936, but negotiations took place for the purchase of land at Morfa Garreg for building developments and the provision of Playing Fields. Building has been completed as stated above.

(d) *Slum Clearance*.—The Housing Act of 1930 was designed to deal with the problem of Slum Clearance. After the Act was passed, the Medical Officer made a fairly extensive inspection of the Insanitary Houses in the Borough, and presented a report, which was duplicated and circulated by the Council. The Council agreed that drastic measures were required to improve matters. Later a further review of the Housing Conditions was made by him and the Surveyor, so as to enable the Health Committee and Council to formulate and submit to the Ministry of Health a Five Years' Programme of Slum Clearance, including provision for alternative accommodation. Some Clearance Orders were made, and in spite of appeal on behalf of the landlords, were sustained by the Ministry after a Public Inquiry held by a Government Architect (Mr. R. D. Jones).

Subsequently Orders were made by the Council with respect to a number of Unhealthy Areas. Here again, in spite of appeals by the landlords in person or represented by Agents or Solicitors, the Orders were almost in their entirety sustained by the Ministry after a Public Inquiry held by another Government Architect (Mr. Hopkins).

To meet the needs (principally) of the displaced occupiers 48 houses of the Non-parlour type were built and completed, and at the end of the period these houses were occupied by the new tenants.

The then Mayor (the late E. R. Davies, Esq.), had a large and honourable share in pushing these later building schemes forward.

(e) *Individual Unfit Houses and Overcrowded Houses.*—Simultaneous with remaining Clearance Areas, the next step has been to deal with Individual Unfit Houses (Houses that can not be made habitable at a reasonable expense), and with Overcrowded Houses. The Slum Clearance Act (of 1930), did not deal with Overcrowding as such (that is, unless the house was structurally unfit as well) but the new Overcrowding Act covers this as well. 70 houses were found to be overcrowded.

Is the District too Urban to get a grant towards re-conditioning a house under the Rural Workers Act, 1926?

(f) *A particular "Unhealthy Area."*—The Medical Officer has more than once submitted a special report on an old building used for business purposes, which together with ruins of houses, and a number of defective houses, he invited the Council to declare as an "Unhealthy Area" under the Housing Acts. The said houses have by this become Lock-up Shops.

Q.—HOSPITALS AND SIMILAR INSTITUTIONS.—There is a Workhouse with Hospital facilities therein in the town. A Cottage Hospital will be a great boon to the town and to the Llyn Peninsula. It is gratifying that a recently built mansion, which has never been occupied, will be utilised for the purpose. Pwllheli will not be complete without a Cottage Hospital.

Ambulances.—Are there sufficient Ambulance facilities for Accident Cases? The Fever Hospital at Caernarvon has its own Ambulance.

R.—SHIPPING AND SETT-MAKING.—These industries were more quiet. The use of Tar-macadam is injuriously affecting sett-making.

As regards shipping, 2 foreign vessels (carrying timber) of 315 tons, and 30 coastwise vessels of a total tonnage of 3805 tons, entered port. No rats (which sometimes convey Plague, and are liable for being destroyed), were found. Chippings and other stone for road-work were shipped for export at the Gimlet Wharf.

S.—DISPOSAL OF THE DEAD.—The Borough has a Public Cemetery with, conveniently, a chapel in connection with it, but the town lacks a Mortuary.

T.—PUBLIC HEALTH STAFF.—The offices of Sanitary Inspector and Surveyor are combined in one person, Mr. Charles L. Roberts, to whom I am indebted for information readily supplied.

U.—FURTHER REMARKS.—The Municipal Housing Schemes have followed on another undertaking of the sort, viz., the Municipal Depot for Milk, which was established for keeping down the price of milk. Previous to that was the Municipal Cinema, and, long before that, the Municipal Abattoir, as well as Town Hall, &c, so that the Municipal, Corporate, and Progressive instinct in the Borough of Pwllheli is strongly developed.

After an uneventful period, the then Mayor (who died in the middle of his beneficent labours), and Corporation, led the town in greatly renewed activity, for example, in the matter of Better Housing and Amplified Water Supply, which activity it is to be hoped will be continued for a long time.

CRICCIETH URBAN DISTRICT (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions.</i>	<i>Purveyors from outside the District.</i>
	1 1938	2 1937	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies..	19	6	40	1	1	-	1	-	-	6
Retailing Milk Carts ..	7	7	7	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	3	3	6	-	-	-	-	-	-	-
Public Slaughter House ..	1	1	40	-	-	-	-	-	-	-
Private Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Meat Shops	4	4	4	-	-	-	-	-	-	-
Retailing Meat Carts ..	3	3	6	-	-	-	-	-	-	-
Factory Bakehouses ..	5	5	15	-	-	-	-	-	-	-
Workshop Bakehouses ..	3	3	9	-	-	-	-	-	-	-
Bread Shops	8	8	8	-	-	-	-	-	-	-
Retailing Bread Vans ..	5	5	5	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	8	8	16	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries.. ..	31	34	93	-	-	-	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing..</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	4	11	4
B.—Occupying premises outside the District, and importing milk into the District	-	3	3

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920: Registered only, -; Licensed, -; Total on Register, -.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	-	-	-
Licensed (The Public Abattoir)	1	1	1
Total on Register	1	1	1

Note.—The District possesses a Public Abattoir.

A.—POPULATION AT CENSUS 1931 and 1921.—It may be recalled that according to the actual Census figures for 1921, there was a great increase in population on that of 1911, of 510, but the Registrar-General gave, in a revised estimate, a smaller but still large increase of 426.

According to the Preliminary Census figures for 1931, however, the population has been reduced (by 437) to 1449. This figure somewhat justifies the remarks made by me in previous Annual Reports :—"The Registrar-General had to make allowance for an influx of Summer Visitors to the area. It is possible that the Registrar-General should have made a larger deduction."

After the "Review of Districts," there was an addition of about 50 to the population and about 620 acres to the area. There has been a further addition of 13 persons and about 170 acres (2 farms and 1 cottage).

B.—BIRTH RATE AND DEATH RATES OR MORTALITIES.—The Infant, Zymotic and Influenza Mortalities were nil, the Tubercular Mortality was comparatively low, the Birth-rate was low and the General Death-rate, and the Maternal and Cancer and Respiratory Mortalities comparatively high.

C.—WATER SUPPLY.—The town is fortunate in possessing a plentiful supply of excellent water. The supply has proved ample, not needing vexatious restrictions of use of water for gardens or motors. Steps were taken to improve the pressure at the high levels during the period of maximum use.

The Council secured an additional supply of water by constructing a new dam on Graig-Goch mountain, at an altitude of 650 feet above sea-level. This supply is fed by two mountain springs, which were analysed and found to be of the same superior quality as Ffynnon Wen. The cost of the works was approximately £1,000.

Lead contamination is guarded against in most cases by using galvanised iron pipes (short lengths) instead of lead pipes. Blocktin, encased in lead, is safer than tin-washed, or even tin-lined lead, and than tin-washed copper. Some such precautions should be taken in all cases. The mains are cast-iron. It is gratifying that all the houses within the town proper, that is, the town as it was before the extension of boundaries (and barring some outside Farmhouses) are now (after recent connections) provided with Tap Water. Several hundred of yards of new water mains were laid owing to the extension of boundary and development of the new Morannedd Estate. Not only mains, but branches and connections.

The Council have also favourably considered, and granted applications from outside the District to grant water-service from their mains.

Fire Extinguishing.—Good pressure of water is valuable for fire-extinguishing purposes also.

D.—DRAINAGE AND SEWERAGE.—Criccieth is very satisfactorily placed by Nature to dispose of its sewage, all parts being on a slope, with a natural gradient sea-ward. No further Sewerage works have been called for after the task of diverting the Eastern Sewer and constructing a Sewage storage Tank in connection with the Eastern Out-fall. Under the scheme in question the Western Sewer and Out-fall were also considerably relieved. Three houses on the Western side some time back became flooded, and steps were taken to prevent a recurrence, by duplicating a length of the Sewer.

Both Outfall Sewers are carried out to beyond the lowest outgoing Spring Tides. A Tank is attached to each outfall, and the Eastern Outfall is closed during adverse winds (South and East), so that no complaints are received of any sewage on the Foreshore.

During the last 10 years, a large number of road gullies have been disconnected from the sewers, and connected to streams and storm-water drains.

It was decided to extend the Sewer so as to serve the new houses on the newly-developed Morannedd Estate, which Estate forms part of Criccieth after a recent extension of boundaries.

This means that several hundreds of yards of new Sewers (as well as Water-mains) were laid. These were followed by branch sewers and connections.

Ventilating shafts are placed at the highest points; also automatic tanks, to regularly flush the sewers, and ample supply of water throughout the year is available.

All the houses within the town proper, that is, the town as it was before the extension of boundaries (and barring some outside Farm-houses), have now proper Water-closets.

The Surveyor is proud to testify that all the man-holes at Criccieth have now properly sealed covers.

E.—PUBLIC CONVENIENCES.—A new comprehensive (with provision for both sexes) Public conveniences was erected on the Lower Maes. Later, another was constructed on the East Side (Esplanade or Sea Wall). Another was badly required on the West Side and was provided.

F.—PUBLIC SCAVENGING.—There is a scheme of Public Scavenging in the town. An arrangement was made whereby Tradesmen paid the Public Scavenger through the Council for removing their Trade refuse. Lately it was decided to select a new Tipping Ground. Also to do the work by Direct Labour, a Motor Lorry being purchased to do the haulage.

G.—POLLUTION OF STREAMS.—The bed of the Maes Stream had to be cleared of rubbish and deposit at times.

H.—POLLUTION OF THE AIR.—The town is free from Industries conducive to Smoke Nuisance.

I.—FOOD INSPECTION.—(a) *Milk*.—In a previous year, the Surveyor made a complete report on the cowsheds in the district for the County Council, who were considering the question of having all dairy cows examined. Samples of milk have been taken most years by the County Inspector of Food and Drugs. Nevertheless, it is well that the Council have authorised and instructed their own Inspector to take samples of milk occasionally, as proper richness and especially cleanliness of milk is so important to Infants, Invalids, and everybody. This has been done, and the analysis made at the Agricultural Laboratories of the Bangor University College. Such analysis, although not done by the Public Analyst (and therefore not eligible to be the basis of prosecutions) is very valuable, and has supplied the Council, as well as the milk Dealers, (who have been informed of the main results), with valuable information. The Sanitary Inspector has been given discretion as to when to take these informal samples.

At the request of the County Council, special samples of milk were being taken by the Sanitary Inspector from all the Dairyfarms for examination (biologically) for Tubercle Bacilli, but henceforth such samples for the whole County will be taken by an official of the County Council, as well as samples of Tuberculin Tested (Certified) and Accredited Milk.

During the year, 10 samples of milk were taken by the County Inspector of Foods and Drugs, one of which did not prove genuine.

The Sanitary Inspector in a previous year attended a Milk Course at Bangor University College. The Council were impressed by his report, and secured a lady lecturer from Madryn Agricultural School to address a meeting of milk producers and their staffs.

The Sanitary Inspector keeps the Milk Carts also under observation.

T.T. (Tuberculin Tested) Milk is produced in one Farm within the District, and imported from 2 Outside farms, and one importer is an Accredited producer. Most of the Milk supply is imported from outside the District. 4 bovine animals (cows in milk) were slaughtered by the County Council under the Tuberculosis Order, 1925.

A new up-to-date Dairy on a farm has been built to replace the old one.

(b) *Meat (Inspection and Humane Slaughtering)*.—Some meat is imported from outside the District. The meat shops and meat carts were kept under supervision. Also the Slaughter-house, including visits during time of slaughtering.

The Council have purchased the only Slaughter-house in the town, and thus converted it into a Public Abattoir. This is a noteworthy act, many towns of larger size than Criccieth being without a Public Slaughterhouse.

The new Slaughtering Act has come into operation, providing for the licensing of Slaughtermen and for the use of Humane instruments, and the Criccieth Council, after a demonstration given by Inspector Rowe, of the R.S.P.C.A., have exercised their option to include sheep and lambs under the Act.

Electrical Apparatus should be installed in the Slaughter-house for the humane killing of pigs, as required by the Act.

(c) *Other Foods*.—The sanitary conditions of the Bakehouses were found satisfactory and also to be improving, and machinery is being installed. One additional bakehouse was some time back constructed, practically new throughout. Again with regard to Fish and Fruit Shops and their contents. These also were found satisfactory.

J.—SCHOOLS.—The loose chippings in the School Yards which used to constantly block the gullies were replaced by tar-chippings. Land (over an acre in extent) was acquired for the purpose of a new Playground. The School was not closed on account of illness during the year.

K.—ISOLATION FACILITIES AND AMBULANCES.—See a former Introductory Report.

L.—CASES SENT TO FEVER HOSPITAL.—2 cases were admitted into the Fever Hospital, 1 of Diphtheria, and 1 of Scarlet Fever.

M.—DIAGNOSTIC, PREVENTATIVE AND REMEDIAL AIDS FOR INFECTIOUS CASES.—(See a former Introductory Report).

N.—DISINFECTION AND DISINFESTATION.—For the use of bedrooms, &c., the Alformant lamp with Formalin Tablets is used. Also a Sprayer has been purchased. There is, of course, no steam disinfecter for bedding, &c., such as is found in a Fever Hospital. A portable "Sack" Steam Disinfecter for the District, or for a combination of Districts would be valuable (See a former Introductory Report), that is, unless a Disinfecting Station for South Caernarvonshire is decided upon. Such a station is badly needed, both of course for Tuberculosis and for ordinary Fevers.

O.—ADOPTIVE ACTS AND BYELAWS.—The new Public Health Act, 1936, came into force on October 1, 1937, and all existing Byelaws will automatically lapse on July 31, 1939. A new series of Model Building Byelaws was prepared for consideration of local authorities, and have been adopted by the Council. The new Byelaws will enforce a better standard in both materials and construction, and gives a list of "short-lived" materials, the use of which will be subject to special restrictions.

P.—HOUSING.—For several years, owing to the collapse of the Addison Scheme, and the supposed inadequacy of the Neville Chamberlain and Wheatley Schemes, not a single Working Class house was built. This made it impossible to make Closing Orders. Indeed, the shortage of houses had given a fresh lease of life to a declared "Unhealthy Area," and a number of other inferior and defective cottages. However, as the result of the country-wide and tremendous storm in October, 1927, the said "Unhealthy Areas" with its 10 houses, was irretrievably damaged, so that all but three had to be immediately vacated. These 3 houses, with the ruins of the others, and the site, were bought by the Council for road widening. Also another house pulled down for the same purpose. One inferior house was bought by the Council for demolition, and the site is left as an open space (or small "lung"). Thus 12 houses became demolished.

In the meantime, steps were taken to erect houses to re-house those tenants who had been unable to find suitable houses, and who lived under make-shift conditions.

This building of 8 houses (in two blocks of 4) was in due time completed.

Besides the Government Subsidy, certain free contributions, in money and kind, including free site and free planning, were received, reducing the burden on the rates to a penny in the pound.

A few years later, the Council took steps to erect 8 additional Workmen's dwellings (Non-parlour houses this time again, by order of the Ministry), they having at their disposal a suitable piece of land.

The rents of the two sets of houses were (in a sense) pooled. The rents of the new houses were fixed at a weekly rent of 7/6 (to cover rates), and the rents of the first lot were reduced from 10/- to 8/6 (both figures covering the rates).

Owing to the demolition of 12 houses in all, Criccieth numerically, in spite of the first 8 new houses was not as well off in the matter of Workmen's dwellings as before. So the additional 8 new houses were very welcome.

The new houses consisted of a Living-room, Scullery, bath-adjunct, and three bedrooms with a good open space in front and behind.

Later again, 3 houses were condemned as Individual Unfit Houses. A house was found to re-house one of the families, and 2 new houses were built to re-house the other 2 families.

7 new superior houses and 2 less superior ones were built by private enterprise during the past year. There are a number of other houses, in progress of building.

In a previous year, 2 Workmen's houses underwent considerable improvements (Dormer Windows, etc.), and 2 or 3 others less considerable improvements.

During 1938 one grant towards re-conditioning a house (under the Rural Workers Act, 1926) was made by the County Council.

As the result of a careful inspection of those houses in the town considered as doubtful in standard, the Medical Officer, at the inception of Slum Clearance, presented a Report classifying a number of them as Less Inferior and More Inferior respectively.

Later the Medical Officer presented a report under the Slum Clearance Act, grouping some houses as Improvement Areas, and leaving others to be treated individually. The Ministry of Health, for some reasons, did not favour the scheduling of Improvement Areas, but advised that all the doubtful houses be dealt with individually.

Besides houses being structurally defective, 13 families were found under the Survey, to be living under Overcrowded conditions, according to the Standard of the Overcrowding Act (Some cases, however since relieved), and there were several houses more or less inferior. These facts proved the shortage of houses in the town still. More new Workmen's dwellings were wanted to raise the standard of Health and Housing.

Slum Clearance.—The Medical Officer of Health presented a report to the Council representing 13 houses to be Unfit for habitation. The Council made Demolition Orders with respect to 4 Individual Houses and Clearance Orders with respect to 9 houses situated in Areas. The Demolition Orders were not contested by the Owners, and the Council submitted the Clearance Orders to the Ministry of Health for confirmation.

A Public Government Inquiry was held on 23rd February, 1939, and as a result, the Clearance Orders were confirmed.

Land for Houses.—The Council had purchased land for building, and had prepared a scheme for erecting 12 new houses, including some houses with 4 bedrooms. These houses were completed, and are being used to replace condemned houses and to relieve overcrowding. Some houses were both unfit and overcrowded.

The Slum Clearance Act did not deal with overcrowding as such, but the Housing (Overcrowding) Act covered this omission.

Two new Workshops have been built to replace old ones.

Q.—HOSPITALS AND SIMILAR INSTITUTIONS.—There is no Hospital or other similar institution in the town itself.

Are there sufficient facilities for Accident Cases ? There is a Stretcher. There should be an Ambulance within easy reach.

R.—FIRE BRIGADE.—The Fire Brigade has been re-constituted, and a Book of Rules, etc., printed. Regular practice takes place.

S.—PLAYING FIELDS.—A generous lady has further placed the town under obligation by presenting land for the purpose of Playing Fields, for the use of children and adults, and, of course, for the benefit of visitors as well as residents. Swings and other Facilities have been installed. It is contemplated installing similar Facilities adjacent to the new batch of Council Houses.

T.—PUBLIC HEALTH STAFF.—The offices of Sanitary Inspector and Surveyor are combined in one person, Mr. Gwilym Williams, to whom I am indebted for information readily supplied.

PORTMADOC URBAN DISTRICT (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
	1938	1937								
Cowsheds & Farm Dairies..	34	31	68	-	-	-	-	-	-	3
Retailing Milk Carts ..	9	6	-	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	2	1	-	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	3	3	-	-	-	-	-	-	-	-
Meat Shops	9	9	34	-	-	-	-	-	-	-
Retailing Meat Carts ..	-	-	-	-	-	-	-	-	-	-
Factory Bakehouses ..	4	3	16	-	-	-	-	-	-	-
Workshop Bakehouses ..	6	10	22	1	-	-	1	1	-	-
Bread Shops	10	-	-	-	-	-	-	-	-	-
Retailing Bread Vans ..	4	-	-	-	-	-	-	-	-	-
Factories(including Factory Bakehouses & Laundries)	24	14	51	-	-	-	-	-	-	-
Workshops(including Workshop Bakehouses and Laundries.. .. .)	51	65	100	-	-	-	-	-	-	-
Workplaces	2	2	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	2	2	10	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	-	34	-
B.—Occupying premises outside the District, and importing milk into the District	-	3	-

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920 : Registered only, 5; Licensed, 0; Total on Register, 5

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	3	3	3
Licensed	-	-	-
Total on Register	3	3	3

(2 only in 1939)

Note.—The Borough is without a Public Abattoir.

A.—POPULATION AT CENSUS 1921 AND 1931.—It may be recalled that according to the 1921 Census figures there was a decrease in population on that of 1911 of 260. The revised figures given by the Registrar-General showed a still further decrease by 106. The Registrar-General had to make allowance for the presence of Summer Visitors in the Area.

According to the Parliamentary Census figures for 1931, the population has been further reduced (by 198) to 3986.

B.—BIRTH-RATE AND DEATH-RATES OR MORTALITIES.—The Maternal, Zymotic and Influenza Mortalities were *nil*, the Respiratory Mortality was low, the Birth-rate and the Tubercular Mortality were moderate and the general Death-rate and the Cancer Mortality comparatively high.

C.—WATER SUPPLY.—The water supply is in the hands of a private company, the source of water being Tecwyn Lake. Some time ago a new tank was provided near Llyn Tecwyn, and the water mains were scraped by means of an appliance ("a devil") driven by water-pressure, with beneficial results as regards cleanliness of the water and pressure (for extinguishing fires, as well as for more immediate purposes). Also a dual main was provided from beyond Penrhyn in the direction of Portmadoc, which increased the supply to Portmadoc and District.

At present the Waterworks Company are considering the question of augmenting the Water Supply. They are negotiating for the purchase of another lake.

In a previous year the Water Mains to Borthygest and Morfa Bychan were scraped by the Water Company. A second line of Main from Borthygest to Morfa Bychan was laid in order to provide water to the Garreg Wen Estate, and to increase the supply to Morfa Bychan.

Glanmorfa Terrace, near Portmadoc.—These houses were without an adequate amount of wholesome water within a reasonable distance. A scheme was carried out consisting of a Service Tank by the house called Ty Cerrig, connected by a pipeline to a fountain at the side of the Main Road, to serve 21 houses. They are, however, without *internal* water supply, as also 10 houses in Morfa Bychan, and 6 in other places.

No cases of lead contamination of water possessing plumbosolvent action came to notice.

Fire Extinguishing.—As indicated, good pressure is important for fire-extinguishing purposes also.

Water Sampling.—Samples are taken regularly by the Water Company. Samples as follows were taken by the Council Surveyor :—(1) *Glanmorfa Terrace*, (a) From Tap, which showed traces of Zinc ; (b) From the source, which was satisfactory. (2) *Ty'n'rardd Spring* : (a) Chemical, satisfactory ; (b) Bacteriological, satisfactory.

D.—DRAINAGE AND SEWERAGE.—The "Cut" receiving the discharge from Outlets is deepened annually from Portmadoc to Tremadoc at a cost of about £70 (half the amount being returned by the Tremadoc Estate).

The Council, on the recommendation of the Surveyor, have invited an outside engineer to tender for the preparation of a scheme for the construction of a sewer alongside the Cut.

The following Schemes for reconstruction of Sewers are under consideration by the Council :—Lombard Street, Back Lombard Street, Cae Ysgoldy, Church Street and Railway Place.

E.—PUBLIC CONVENIENCES.—These are as follows :—

Portmadoc—(a) Park (both sexes), (b) Under Town Hall (men only). A Public Convenience required by the Railway Station (Great Western). Urinal by Harbour Bridge removed owing to insanitary condition.

Borthygest—(a) Parking Ground (both sexes) ; (b) Behind Ivy Terrace (men only).

Morfa Bychan—Bus Terminus (two Elsan closets during summer). Additional Public Conveniences required.

Tremadoc—Public Convenience required.

Additional conveniences are required in the District, for example, Tremadoc and Morfa Bychan, and near the G.W. Railway Station, Portmadoc.

F.—PUBLIC SCAVENGING.—Work continues to be done by direct labour. The refuse is removed in a covered tipping motor waggon, and deposited in a disused mine near Tremadoc, etc. The system includes the emptying of Dry Closets, Ashpits and Cesspools. The System is in force at Portmadoc, Tremadoc, and Borthygest and Glanmorfa Terrace. It was not considered practical for the more rural parts to participate in the advantage, but property-holders at Morfa Bychan made out a case for a partial system of Public Scavenging there. The motor waggon is a success, and a new one was procured to replace the old one, which was in constant use for 7 years.

The system has been to the advantage of the District both financially and sanitarily.

G.—POLLUTION OF STREAMS.—The Cut (a tidal stream), which receives the contents of sewers (the sewage, however, being largely carried off by the out-going tide) is periodically cleared, but the condition is to receive more drastic treatment. This Cut is referred to above.

H.—POLLUTION OF THE AIR.—The town is free from industries responsible for Smoke Nuisance.

I.—FOOD INSPECTION.—(a) *Milk*.—The Surveyor in a previous year made a complete report on all cowsheds in the district for the County Council, who were considering the question of having all the dairy cows examined. Two local dealers have received a licence to sell milk under the designation "T.T. Milk (Certified)" as also a purveyor from a neighbouring District.

Another local dealer sells Accredited Milk.

All licences to sell designated milk are issued by the County Council.

Preliminary to admitting the Milk Vendors on the New Registers, all the Cowsheds were inspected minutely, and notices served in 35 cases. As a consequence, the majority of the cow-keepers provided new drainage, liquid tanks, manure pits, additional ventilation and light, new flooring, water supply, and improved yards.

After some trouble the Surveyor obtained application for registration, not only from persons selling milk, but those selling butter and cheese, and a complete list was sent forthwith to the County Council in order that the Council might, when desired, proceed with an inspection of cattle.

The County Inspector of Food and Drugs took samples of all Milk in a former year and testified that the samples were all genuine, and paid a tribute to the good work done in the District by way of sanitary improvements to the Cowsheds generally, which had resulted in a superior standard of purity and cleanliness in the production of Milk.

The Surveyor also has been authorised and instructed to take samples of milk every 6 months in order to supplement the work of the County Inspector of Food and Drugs, and to satisfy the Portmadoc Council. Proper richness and especially cleanliness of milk is important to Infants, Invalids and everybody.

All the local Councils are now expected to do this.

Inexpensive analysis (non-statutory, and not recognised as a basis for prosecutions) is made at Bangor College.

Samples of Milk at the request and on behalf of the County Council were taken in a previous year from 35 herds, and in each case were found (by biological examination) to be free from Tubercle Bacilli. This process was repeated. In future this sampling for the County Council will be done by an official of their own.

The Surveyor is fairly satisfied that the employees are healthy and free from Tuberculosis. Not one bovine animal was slaughtered by the County Authorities under the Tuberculosis Order. 1925. 8 samples of Milk were taken by the County Inspector of Food and Drugs, all of which were found to be genuine.

(b) *Meat (Inspection and Humane Slaughtering).*—Meat is periodically inspected at time of slaughtering. Similarly Meat Shops are periodically inspected. There are no Meat Carts or Meat Stalls.

Some years ago, the Council, after a very successful Demonstration of the practical use of Instantaneous, Painless or Humane Killers, adopted the Humane Slaughtering Bye-law (Model Bye-law 9 B), enforcing the use of Humane Killers. This has been carried out in the case of oxen and large pigs.

The new Slaughtering Act came into operation enforcing the Humane Slaughtering of oxen, including calves. The Act also required that pigs should be electrically stunned and made instantaneously unconscious before using the knife, where electrical power was available, as at Portmadoc.

Unfortunately the Council had not extended Humane Slaughtering to all pigs. Neither had they exercised their option to make the Act applicable to sheep and lambs. But, happily, after listening to a representative from the Society for the Prevention of Cruelty to Animals, Humane Slaughtering is now extended to all animals alike.

"Newell's" slaughterhouse has by the owner's consent become a Semi-public one, and in time it is hoped to prevail upon all the butchers to kill there, conditionally on its being brought up-to-date. Electrical Power should be installed for the humane killing of calves, pigs, sheep and lambs, if not oxen as well. Some Councils use the Humane Cattle-killer instead of Electricity for oxen (to save Electric Current perhaps).

Condemned meat is disposed of under the direction of the Sanitary Inspector.

(c) *Other Foods.*—The Sanitary condition of the Bakehouses was found to be satisfactory. Lime-washing, &c., is enforced. Periodical inspection of Bread, Fruit, Fish, Chips and Ice Cream Shops are made.

J.—*SCHOOLS.*—All the Schools were in a former year inspected and reported upon, and the Education Committee responded by remedying defects in Lavatories, Windows, Ashpits, Eaves, Gutters, &c. No Schools were closed during the year on the ground of illness.

Some time ago the Snowdon Street Schools playground was tar-macadamised. This was done by the Council on behalf of the County Education Committee, at a cost of £400.

A large new Central School is now in progress of construction.

K.—*ISOLATION FACILITIES AND AMBULANCES.*—See a former Introductory Report. Shelters or private premises do not appear to be used to any extent.

L.—*CASES SENT TO FEVER HOSPITAL.*—3 cases of Scarlet Fever were admitted.

M.—*DIAGNOSIS, PREVENTATIVE AND REMEDIAL AIDS FOR INFECTIOUS DISEASES.* (See a former Introductory Report).

It may be said here that a supply of Diphtheria Antitoxin is always kept by the Council. Also Swab-holders. Where doctors take Throat-swabs, etc., the cost of examination is paid by the Council direct to the laboratory.

The latest teaching is to use much stronger doses than heretofore of Antitoxin.

N.—*DISINFECTION AND DISINFESTATION.*—For disinfecting bedrooms, &c., Cromesol liquid disinfectant and Formaldehyde tablets are used. Carbolic Acid is supplied *gratis* in Infectious cases. There is, of course, no Steam Disinfector for bedding, &c., such as is found in a Fever Hospital. In the absence of such, burning of bedding materials, &c., may at times be necessitated, with or without compensation. A portable "Sack" Steam Disinfector for the town or district would be useful unless a special Disinfecting Station (with a Steam Disinfector) is established at Pwllheli (or somewhere nearer) for South Caernarvonshire. (See a former Introductory Report).

O.—ADOPTIVE ACTS AND BYELAWS.—Revised Bye-laws covering all the usual matters were adopted and sealed 8th June, 1926.

The new Public Health Act, 1936, came into force on October 1, 1937, and all existing Bye-laws automatically lapse on July 31, 1939.

A new series of Model Building Byelaws has been prepared for the guidance of Councils. Byelaws based upon these have been adopted by the Council. The new Byelaws will enforce a better standard in both materials and construction, and they give a list of "short-lived" materials, the use of which will be subject to special restrictions.

Tents, Vans, &c., are now dealt with under the Public Health Act, 1936.

P.—HOUSING.—14 houses were erected by private enterprise during the year, including some wooden bungalows or summer residences. The Medical Officer has his qualms as to the desirability of these wooden bungalows: also of using discarded houses as summer residences. Apart from the question of the type of house, it may be said that there is ample land suitable for development at Morfa Bychan and Borthygest.

HISTORICAL.—The Council, a few years ago, adopted a Scheme for building 25 workmen's dwellings. These were to be of the Parlour Type, with 3 bedrooms. They were to be built in blocks of 2.

The Council applied to the Ministry for consent to a loan to erect these houses, but the Ministry adhered to its new policy of with-holding sanction from building houses other than those of the non-parlour type.

It is true that a greater number of non-parlour houses than of the parlour houses could be built for the same money, but the building of a good number of parlour-houses (unless let to outsiders) would also indirectly on the principle of "moving up or upward filtration" benefit the housing conditions of the poorest classes. A parlour moreover can be used as a bedroom, in the case of large families, and where there are one or two Tubercular members of the family that require segregation. Besides, the difference in cost hardly counterbalances the disadvantage.

Private Building of Houses.—Privately-built Houses help to reduce the Housing Shortage. Such private houses are being built in various parts of the District. For example, 42 such houses have been built, or are in building, by one private person on the Meadow Estate at Portmadoc.

Self-Supporting Houses.—Apart from Replacement Houses (houses to replace Slum Houses and Overcrowded Houses), it might be desirable to build a number of self-supporting houses (with a parlour, &c.). It would require the Ministry's consent, although the Council would not receive grants. They would expect the Council to carry through the Slum Clearance and Overcrowding Act first, or at least *pari passu*.

After the collapse of the Addison Scheme, no fresh efforts towards a Municipal Housing Scheme had been made. While there may have been no acute *numerical* or *quantitative* shortage there was no doubt a *qualitative* shortage, that is, there were a number of defective houses which could be deserted or closed were a number of municipal houses erected.

Arguments that were adduced for going in for a Housing Scheme were (1) that the G.W.R. had complained of a dearth of houses for their employees (2) that newly-married couples had to go to rooms (3) that landlords were pestered with applications, and (4) that Portmadoc Council was about the only Urban Council in North Wales that had not gone in for a Housing Scheme. Occupants of unfit houses complained to me that they could not get other houses with more accommodation and in better state of repair. The Medical Officer made a fairly exhaustive inspection of the Housing conditions and presented a Report to the Council.

The Slum Clearance Act, 1930.—In September, 1934, the Medical Officer represented 7 small areas in the district as Clearance Areas. These comprised (in addition to some derelict or dilapidated outbuildings), 23 houses, 17 of which were inhabited. At one time it seemed as if the principal owner and the Council would come to terms as to agreed demolition, with selling of the site by the owner to the Council for rehousing purposes.

The Council made formal Clearance Orders with respect to the condemned areas, and a Public Inquiry was held by a Government Architect. The result was that the Council's Clearance Orders were confirmed, practically in their entirety.

Housing Schemes.—Land was purchased by the Council at Portmadoc and Tremadoc for the purpose of re-housing (to the extent of 22 houses), viz., 16 for Portmadoc and 6 for Tremadoc, and such houses were completed.

A New Housing Scheme.—The Council have purchased over 10 acres of land for the erection of up to 128 houses to meet Overcrowding and other Housing demands. 28 Council Houses are to be erected as soon as possible. Special difficulties have arisen when dealing with lands suitable for building. It has taken the Council roughly 2 years to purchase the above-mentioned 10 acres.

Individual Unfit Houses.—After having dealt with the Areas, the next step will be to deal with certain Individual Unfit Houses (that is, houses that cannot be made habitable at a reasonable expense) and with Overcrowded Houses.

The only two cellar dwellings in the district have been closed, following condemnation.

Overcrowded Houses.—*The Overcrowding Act, 1935.*—Under the New Overcrowding Act less overcrowded conditions than heretofore and imperfect separation of the sexes are regarded as Overcrowding, so it was necessary to make a survey of the relation of the size of houses to the number, ages and sex of inmates throughout the district. Government Grants will be available towards relieving Overcrowded conditions if an undue burden on the rates can be proved. 49 houses have been discovered to be more or less overcrowded according to the Standard of the new Act.

Houses out of Repair.—Besides totally unfit houses, those houses which are less unfit, and which can be remedied at a reasonable expense, must be seen to. It seems there is a difficulty in getting some owners to carry out repairs, and occasionally it may be difficult to get a Contractor to do the work for the Council, in default of the owner undertaking to do the work.

In the last resort the Surveyor is authorised to do the work as far as practicable.

The former Unhealthy Areas at Britannia Place and Saw Mill Terrace and Garth Terrace have been remedied and new W.C.'s and drains been provided, but they will have to be kept under observation. There were practically no habitable workmen's dwellings empty at the end of the year.

Not one grant towards re-conditioning houses (under the Rural Workers Act, 1936) was made (in this part-rural district) in 1938.

Q.—HOSPITALS AND PUBLIC INSTITUTIONS.—There is a Cottage Hospital in the town—the Madoc War Memorial Hospital. It also acts as a Maternity Home.

At Cookes' Explosives Works, Penrhyndeudraeth, there is kept a modern motor ambulance; Portmadoc Council and adjoining Authorities having contributed towards its purchase. The Fever Hospital at Caernarvon has of course its own ambulance.

R.—SHIPPING—The ships that enter the District during the year were 6 foreign vessels with a total tonnage of 829 and 19 coastwise vessels, with a total tonnage of 1778. No rats (which sometimes convey Plague, and call for being destroyed) were found. Neither were any other defects found.

The foreign shipping in number was the same as, and in tonnage lower, than in the previous year. The coastwise shipping in number was much lower, and in tonnage was lower.

S—PUBLIC HEALTH STAFF—The offices of Sanitary Inspector and Surveyor are combined in one person. Mr Morgan Thomas was the Officer until towards the end of 1934, when he resigned owing to poor health. He, however, accepted the post of Consulting Surveyor to the Council, but his health got worse, and he died in 1938, much regretted by numerous friends. Mr. Thomas was succeeded as Surveyor and Sanitary Inspector by Mr. E. Ifor Price. I am indebted to Mr. Price for information readily supplied.

GWYRFAI RURAL DISTRICT, (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions.</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
	1938	1937								
Cowsheds & Farm Dairies ..	144	148	257	9	9	8	-	-	-	1
Retailing Milk Carts ..	80	81	145	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	1	1	1	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	35	39	413	4	4	2	-	-	-	-
Meat Shops	38	49	231	-	-	-	-	-	-	-
Retailing Meat Carts ..	24	28	127	-	-	-	-	-	-	-
Factory Bakehouses ..	3	3	6	1	1	1	-	-	-	-
Workshop Bakehouses ..	27	30	56	9	9	9	-	-	-	-
Bread Shops	130	140	108	-	-	-	-	-	-	-
Retailing Bread Vans ..	12	15	12	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	14	18	14	2	2	2	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries)	141	160	140	9	9	9	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing..</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	2	80	1
B.—Occupying premises outside the District, and importing milk into the District	-	1	-

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920: Registered only, -; Licensed, -; Total on Register, -.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	-	-	-
Licensed	38	39	35
Total on Register	38	39	35

Note.—The District is without a Public Abattoir.

A.—POPULATION AT CENSUS 1921 AND 1931.—It may be recalled that according to the Census figures for 1921, there was a considerable decrease in population on that of 1911 of 4062. The revised figures given by the Registrar-General did not differ materially from these. This decrease was due to the loss of men in the Great War and to the depression in the Slate Industry.

According to the Preliminary Census Figures for 1931, there has been a further small reduction (of 245) to 23,947.

B.—BIRTH-RATE AND DEATH-RATE AND MORTALITIES.—The Maternal, Cancer, Respiratory and Influenza Mortalities were moderate, the Infant and the Zymotic Mortalities were not very high, and the Birth-rate and the General Death-rate and the Tubercular Mortality were comparatively high.

C.—WATER SUPPLY.—The Council have decided that all their Water Supplies should be sampled twice a year. The Water Supply is being improved at Brynaerau, Pontllyfni, Aberdesach, Swan, Saron, (in South Gwyrfai), Llanfaglan and Foryd.

The Nant Peris new Water Supply is rapidly nearing conclusion.

The supply is likely to be early improved at Rhydlydan to Tanrallt, Capel Ucha, Ceunant, Pontrug, and Cwmyglo (Upper). The water supply is inadequate or unsatisfactory at Pantglas, Gyrn Goch, Lower Llanrug, Brynrefail, &c.

The Council have decided to chlorinate the Water-Supply at Beddgelert, Clynnog, etc.

Marchlyn Scheme.—The consideration of a big scheme of water-supply from a stream flowing from the Marchlyn Lake for the adequate supplying of the parishes of Llanddeiniolen, Llanrug and Llanfairisgaer was renewed by the Council and a Public Inquiry was held under a Government Engineering Inspector (Mr. Fyffe). Sanction to a loan was received, and the work was completed. The District Council, County Council and the Government gave liberal grants.

The Main Llanberis Water-supply was analysed on account of a sharp, short outbreak of Dysenteric Diarrhoea. A Chlorinating Plant has since been installed. Chemical analysis of the Branch Main, Bwlan to Brynrhedyn, has disclosed an excessive amount of Zinc, arising from galvanized iron pipes. The real cause is that the water of Ffynnon Wen has an unusual Zinco-solvent action. A lime-saturating Plant is being introduced to counteract this.

Re Fire Extinguishing.—Water pressure is good on the whole, and there are Fire Hydrants and Hosepipes. But are there trained Fire-Brigades, apart from the brigade of 6 at Llanllyfni?

D.—DRAINAGE AND SEWERAGE.—The Drainage and Sewerage was improved at Beddgelert by installation of new plant at the Disposal Works. Talysarn has had a new Storm-water Sewer. Improvements also at Deiniolen and Bontnewydd with minor improvements in other localities.

Sewerage is being improved at Rhosgadfan (Sewers and Sewage-disposal Works).

Sewerage is likely to be early improved at Llandwrog, Bwlchyllyn, Swan, Village of Llanwnda, Bethel, Rhiwlas, Deiniolen, Llanrug, Portdinorwic.

Sewerage should receive early consideration at Llanberis, Cwmyglo, Rhosisa, Llanllyfni, Dinas Dinlle, Part of Groeslon (from Dyffryn Terrace to Brynteg, including Llanffynnon etc.). New Sewage-disposal works being contemplated at Cesarea.

There is a proposal before the Council to engage Major Walters of Birmingham to draw out a comprehensive Scheme of Sewerage-disposal for the whole of Nantlle Vale.

DINAS : Sewerage and Sewage-disposal works should be provided for this locality as soon as possible.

All sewage should be properly treated before being discharged into the rivers Llyfnwy, Gwyrfai, Caledffrwd, Rhythallt, Seiont, &c.

As a consequence of houses having been supplied with water, many have happily also been connected with sewers and a great number of dry closets have been converted into water closets. In some places in spite of the existence of sewers and water supply, houses and perhaps terraces remain unconverted.

E.—PUBLIC CONVENIENCES.—There are only about 6 Public Conveniences in the District (Penygroes, Beddgelert, Dinas Dinlle, Talysarn, Port Dinorwic, Llanberis. Additional Public Conveniences are required, especially at Penygroes (additional), Deiniolen, Cwmyglo, Waenfawr and Llanrug. Also in the other villages (Groeslon, Llanllyfni, Carmel, Clynog, Aberdesach, Bethel, Saron, Rhiwlas, etc.). Motor Transport has made the matter more urgent. No village should be without conveniences for both sexes.

F.—PUBLIC SCAVENGING.—Public Scavenging is at last in operation very nearly throughout the District, that is, in all the villages and in several outlying cottages. It requires improvement in Upper Cwmyglo.

The Council have started Scavenging the Northern Division with the help of a motor waggon. They have procured one properly covered Dennis Lorry (3½ tons). It is proposed doing the work (including clearing of closet pails) once weekly throughout the Northern District.

There is still considerable lack of uniformity in the work, as between the 2 Divisions and levelling-up would seem to be required; for example, one village may be scavenged once or twice a week (that is, 4 or 8 times a month), another only twice a month, (in some places only once a month or once in 2 months, and in one Division the Public Scavenger does not handle the closet pail directly).

The aim should be to get all villages alike as far as possible under a weekly or bi-weekly removal of pail-closets and house refuse, and so abolish all existing middens, thus 2 or 3 Tipping grounds would be sufficient for the whole District), but this should not be made an excuse for delaying sewerage schemes, and the conversion of dry closets into water closets.

The Council do not remove Trade Refuse, but Tradesmen have the free use of the Council's Dumping grounds. They would acknowledge to some extent the Council Contractors for carting the same. Private Cesspools are not emptied by the Public Scavenger.

G.—POLLUTION OF STREAMS.—Owing to the absence of treatment of the sewage there is naturally pollution of the rivers and streams, for example, the rivers Llyfnwy, Gwyrfai, Caledfwrdd, Rhythallt, Seiont, &c. That is, at Pontrhythallt, Talysarn, Llanllyfni, Bethel, Clwtybont, etc. An improvement was carried out at Bethel. Owing to the continued defective disposal at Beddgelert, the Sewage System discharged into the Glaslyn river, but the restoration of the Disposal Plant has obviated this. It is intended taking up the question of stream pollution in the various districts immediately.

House-dwellers should not throw injurious matters into streams, and drinking water for animals should be safe-guarded.

J.—POLLUTION OF THE AIR.—The District is fairly free from Industries conducive to Smoke Nuisance.

I.—FOOD INSPECTION.—(a) *Milk*.—In a previous year the Sanitary Inspectors made a complete report on all cowsheds in the District for the County Council, who were considering the question of having all dairy cows examined.

The Milk and Dairies Act and Order, 1926, is being gradually enforced and Registration with improvements, is being insisted on. Some farmers only sell milk from April until October. The cowsheds and dairies are periodically inspected. Flooring, Drainage and Ventilation have been already improved in several instances. In the case of Defects, owner and occupier are notified and pressed to co-operate in giving immediate attention. The Council have authorised and instructed the Sanitary Inspectors also to take samples of milk occasionally to supplement the work of the County Inspector of Food and Drugs, as proper richness and especially cleanliness of milk is so important to infants, Invalids and everybody. Inexpensive analysis (but Non-Statutory and not recognised as a basis for prosecutions), is made at Bangor College.

9 farmers produced Designated Milk. 4 of these produced T.T. Milk and 5 were Accredited Producers. The Sanitary Inspectors would like to assist producers to raise the standard of milk so that applications for Licences to sell Designated Milk would come from a greater number of them in the near future.

136 samples of milk were taken during the year for Bacteriological examination.

Monthly Samples of milk used to be taken by the Sanitary Inspectors of Certified and Grade A (T.T.) Milk, and Bimonthly samples of Grade A milk, on behalf of the County Council, but the County Council have now made their own arrangements. But as above stated, the Sanitary Inspectors will continue to take samples of all commercial milk for the information of this Council—2 or 3 times annually.

There is already an awakening among those vendors anxious to sell milk for the use of school-children under the "Milk for Schools Scheme" and some excellent improvements have been obtained. Besides structural improvements in the cowsheds and dairies, the vendors have procured costly sterilizing apparatus (for sterilising cans and bottles). It is hoped that the Accredited Milk Scheme will also induce great improvements that will result in raising the standard of milk.

It is gratifying to report that the Gwyrfai Council some time ago decided to instruct their Officers to take samples of milk, not only for examination for dirt and adulteration and for the more common varieties of microbes, but also for Tubercle Bacilli, this latter work being done on behalf of the County Council. The examination was done and the tests made at the Biological Laboratory of the University College of Bangor. This was a step in the right direction and very necessary work. In the first year 138 samples were taken, and all but 2 of them were free from Tubercle Bacilli. A second round of samples was taken, and this practice has been continued, but the County Council have now their own Inspector to take the samples.

Last year the County Inspector of Food and Drugs took 26 samples of milk (all genuine), and 7 of butter (1 not genuine).

An attempt is made to maintain observation on employees in the milk trade (and also the meat trade) in the matter of health and freedom from Tuberculosis.

26 cattle (2 cows in milk, 5 others) were slaughtered by the County Authorities under the Tuberculosis Order, 1925.

(b) *Meat (Inspection and Humane Slaughtering).*—Regular weekly visits to slaughterhouses are aimed at, but owing to the scattered nature of the District, the work of supervision is very laborious. All the butchers advise as to the days and hours of slaughtering. As many as possible of the slaughterhouses are inspected on day of slaughtering, but as a rule the slaughtering by all takes place on the same day or days, so that all cannot be inspected the same week. During the year the Register of Time of Regular Slaughtering was brought up to date, and an average of 40 per cent are inspected weekly. There is urgent need for at least two Public Abattoirs in the District, one in the Nantlle Vale (where there are 15 private slaughterhouses), and one in the Cwmyglo neighbourhood (for the use of Llanberis, Deiniolen, and Llanrug), both being populous districts. The Caernarvon Abattoir would serve the centre, and in fact is now used by Gwyrfai butchers to some extent, but many butchers are as yet not very favourably disposed to the idea of a Public Abattoir. The Southern Sanitary Inspector (Mr. Closs Parry) prepared a report on the subject for the Llanllyfni Parochial Committee accompanied with an estimate of the expenses, which estimate discouraged the Council. The Council are now giving their renewed consideration to the idea. Meat Shops and Meat Carts are also inspected weekly or as regularly as possible. Before the passing of the new Slaughtering Act, too little progress was being made in the matter of Humane Slaughtering. Several butchers possessed the Humane Killer (but the use of this was too often limited to cattle, instead of being extended to calves, pigs and sheep). And even in the case of cattle, poleaxing (with its occasional ghastly initial failures) was done by many butchers, and a few resorted to pithing, a reprehensible method.

While the new Slaughtering Act has made it compulsory to use Humane Instruments in the case of oxen and calves, it has unfortunately left to the decision of the Local Council to make them compulsory in the case of sheep and lambs. The enactment with respect to oxen and

calves is being enforced and obeyed generally, by means of either a captive-bolt or a loose-bullet Humane Killer and by electricity. The Council did not exercise their option in favour of including sheep and lambs, but happily they have now agreed to do this.

It is compulsory to include pigs where electrical power is reasonably obtainable. Electrical power is now obtainable in nearly all the villages. There are signs that the officers of the N.S. Prevention of Cruelty to Animals are watching whether the provisions of the Act are being carried out by Butchers and by the Council.

Condemned meat is disposed of by burying deep (6 feet at least) in the Council's dumping ground or elsewhere, away from dwellings and water-courses, and sometimes by burying in quicklime, especially in the case of carcases.

Efforts are made to inspect Meat-shops (also Stalls and Stores) and Meat Carts on parts of Thursdays, Fridays and Saturdays. A good standard of cleanliness is generally noted in these. It is felt that the standard of meat sold in the District has improved and continues to do so, and that the butcher has come to appreciate the service of the Inspectors, whose advice is sought in the matter of doubtful meat (as it is also with other doubtful food). A better understanding has come to exist.

(c) *Other Foods*.—Bakehouses and Bread Shops are visited regularly, and are found generally very tidy, clean and well kept, and satisfactory as regards cleanliness and freedom from accumulations, air space, ventilation, &c. In a previous year three Bakehouses were modernized, by providing modern ovens and installing a water supply with proper cleansing arrangements.

Weekly visits or Surprise visits are made to Chipshops and places where Fish, Fruit, Ice-cream, &c., are sold. These places are kept in a very cleanly state.

The Inspectors are often called in by the shopkeepers when they suspect anything wrong in either fish or fruit, which shows they are anxious to supply the public with good and sound foodstuffs.

J.—SCHOOLS.—*Llanberis*.—Your Medical Officer had visited and made an adverse report. Temporary improvements were carried out, and a new school decided upon, which is now completed.

Bad Drainage and defective Water supply to Bettws Garmon School were notified to the Education Authority, and the work was taken in hand.

Dinorwic Schhol.—It was decided to convert the dry closets into the Watercarriage system.

Brynaerau Council School was closed for a period on account of Whooping Cough.

K.—ISOLATION FACILITIES.—The County Council maintain a Fever Hospital, with an Ambulance at Caernarvon. They have also a Smallpox Hospital about 3 miles from Caernarvon, viz., at Cae Athro (in the Gwyrfa District).

At one time hardly any Tuberculosis Shelters were seen in the District, which seemed a pity. Recently the King Edward Memorial promised to supply them in a limited number of cases recommended by their Officers, and the offer has been availed of in some cases.

L.—CASES SENT TO THE FEVER HOSPITAL.—202 cases of Fever notified, viz., 149 of Diphtheria, 43 of Scarlet Fever, 7 of Erysipelas, 2 of Pneumonia and 1 of Enteric Fever. Practically all the cases were admitted into the Fever Hospital, although the overflow cases at Caernarvon had to go to Bangor or Conway or Anglesey.

M.—DIAGNOSTIC, PREVENTATIVE AND REMEDIAL AIDS FOR INFECTIOUS DISEASES.—(See Introductory Report).—Stocks of Diphtheria Antitoxin and Swab appliances are kept at the home or Office of the Sanitary Inspectors and at the Council Offices. The Council has now passed to make them free for all, as a preventive and necessary health measure. Heretofore they were reserved for the "poorer" (as opposed to the "richer") inhabitants. Swab-holders are also kept, and the Council pay the Laboratories for the examination of Swabs.

N.—DISINFECTION AND DISINFESTATION.—For the use of bedrooms, &c., sulphur or formalin fumigation (by means of “fumers”) and the formalin sprayer are used. Disinfectant Soap and Fluids are also supplied free. The Council is without a Steam Disinfector, but recently the King Edward Memorial agreed to place the Disinfector at Bryn Seiont at the disposal of the Gwyrfaï Council in cases of Tuberculosis and this facility has been availed of in some cases. In 80% cases of death from Tuberculosis, the bedding is destroyed, and compensation paid in necessitous cases. In fever cases, the one at the Caernarvon Fever Hospital might perhaps be made available by arrangement with the County Officials. A portable “Sack” Steam Disinfector might be practicable for this District. (See Introductory Report).

Re disinfection of bedrooms, &c., after a patient has left home for a Sanatorium, or after death, better means have been devised to let the Sanitary Inspector know at the earliest moment of the departure or death of such person.

O.—ADOPTIVE ACTS AND BYELAWS.—The New Public Health Act, 1936, came into force on October 1st, 1937, and all existing Byelaws automatically lapse on July 31, 1939. A new Series of Model Building Byelaws were prepared for the guidance of Councils, and these have been adopted. The new Byelaws will enforce a better standard in both materials and construction, and they give a list of “short-lived” materials, the use of which will be subject to special restrictions.

The Ministry's Model Byelaws re Tents, Vans and Sheds have been under consideration by a Sub-Committee of the Council, but there has been some delay in their adoption.

P.—HOUSING.—There was a shortage (more or less acute) in several localities of houses which were reasonably habitable, and with moderate rentals suitable for working men. Overcrowding was the result. Landlords are sometimes unwilling to let houses to large families. The difficulty is to provide dwellings at a maximum rent of 5/- or 6/- weekly for the quarry district. The usual rents in the District are very low, ranging only from £3 to £12 per annum, or an average of £6 to £10. Rents of over 5/- or 6/- a week are considered prohibitive by quarrymen. There were a great number of dwellings which might have been, but for the shortage, condemned as unfit. Ground damp is the great enemy on old cottages, due to the absence of damp-proof course.

A large number of houses are without proper drains and gullies and water-closets, and without internal water-supplies and a Slop-stone, and of course very few houses have a Bath.

Efforts were made by the Sanitary Inspectors to help the families to find a more roomy dwelling, and often Estate Agents are interviewed.

The Council had 6 new houses to their credit (at Clwtybont) since 12 or 15 years or more, “But what was that between so many.” In July 1939, 504 houses are owned by the Council.

In the past year 11 applications to the County Council under the Rural Workers Act, 1926 were considered favourably, and a grant given. This number of applications is a great advance on previous years. Have the Parishes been sufficiently informed of these facilities? The County Council have now removed their condition that these re-conditioned houses had to be let to tenants earning not more than £2 5s. 0d. per week.

Historical : Housing Survey.—As required by the Housing Act, 1930 (the Slum Clearance Act), a general survey was made at the time by the Sanitary Officers with respect to Housing Conditions within the District. 113 houses were found that were not reasonably fit for habitation and that could not be repaired at a reasonable cost and that therefore should be condemned and presumably demolished.

The Council considered the report, and decided that at least 100 new houses ought to be built, say within 5 years and that 20 houses should be built by them immediately, 10 at each end of the District.

Sites were secured, and a start made at Penygroes and Deiniolen. Fortunately, the Wheatley Grant (on the point of being withdrawn), was available for these. Some difficulty was experienced in coming to an agreement with the owners on the price of the land. These 20 houses were completed.

The Council made a claim with respect to 104 houses for the Supplementary Grant to be made under the Housing (Rural Authorities) Act, 1931 (which Act provided for a total grant of two million pounds for England and Wales towards houses for Rural Workers), but the National Advisory Committee, after a visit from Mr. James Evans, Inspector of the Welsh Board of Health, only saw their way to allocate a Supplementary Grant for 13 houses. These again were completed. These commanded the Wheatley Grant as well as the Supplementary Grant. The adjoining County of Anglesey benefitted to the extent of about 200 new houses under the Supplementary Grant.

The Slum Clearance Act, 1930 : Preliminary Work.—A fresh review of the Housing Conditions under the Slum Clearance Act, 1930, was made, and Clearance Areas, Improvement Areas and Individual unfit Houses were Scheduled with a view to demolition of a number of houses, and building new houses to be inhabited largely (but not necessarily entirely) by the dispossessed tenants. Strange to say, the Ministry decided against treating any Areas as Improvement Areas, except in large towns, which your Medical Officer regards as unfortunate, and indeed unfair to such small local Authorities. Now every house in such an "Improvement Area" must be taken on its own merits. Thus in such an Area, there is now no provision for making 2 houses into one, or say 12 houses into 9, and for building new houses to make up for the reduction in the number of houses. Thus, two small and deficient houses (destitute say of a bedroom with a fireplace or destitute of a pantry, or of a scullery) can not be made into one well-appointed house.

Clearance Orders made by the Council, followed by a Public Inquiry.—After careful and repeated inspections by your Medical Officers, assisted by the Surveyor and 2 Sanitary Inspectors and temporary Assistant, your Medical Officer made Formal Representations to you as a Council of a number of Areas (Clearance Areas) considered by him as requiring demolition.

You as a Council adopted the said Representations and made a Clearance Order with respect to each area, and passed on these Orders for consideration and confirmation by the Ministry of Health. There were 19 areas comprising 85 houses. A Public Inquiry was held under Mr. Hopkins (Government Architect) into the subject-matter of the provisional Clearance Order. Opposition to all the proposed Orders except two was made at the Inquiry by the House-owners personally, or by their Agents or Solicitors.

On the days following the Inquiry, Mr. Hopkins, in company with the Clerk of the Council and others visited all the properties in dispute. The result of the Inquiry was that practically all the Council's Clearance Orders were confirmed.

New Houses for Re-housing.—Of course areas can not be demolished and cleared until a sufficient number of houses have been built by the Council (or secured by the tenants) to replace the vacated houses.

Action with respect to further Clearance Areas, to Individual Unfit Houses and to Overcrowded Houses—

(a) *Further Clearance Areas.*—There are further Unhealthy Areas which have been, or which await to be represented as Clearance Areas for the purpose of having fresh Clearance Orders made by the Council, or in which areas the houses can be taken individually.

(b) *Individual Unfit Houses.*—Besides Areas, there are a large number of Individual Unfit Houses (that is, houses that cannot be made habitable at a reasonable expense) that will have to be dealt with. The term "Reasonable Expense" is not further defined in the Act. It is a term that allows a certain amount of difference of opinion.

There are about 333 of these Individual Unfit Houses.

(c) *Overcrowded Houses.* *The Overcrowding Act, 1935.*—Besides glaring cases of Overcrowding, less crowded conditions than heretofore are regarded as Overcrowding, so it was necessary to make a survey of the relation of the size of the houses to the number of inmates throughout the District. Some cases of Overcrowding are relieved in the process of Slum Clearance, with

the building of houses for replacement. Government Grants are available under the Act towards relieving Overcrowded houses. As many as 223 (not counting 76 "Review cases") have been scheduled in the Southern Sub-District, and 270 in the Northern Sub-district.

Overcrowding often necessitates the use of living rooms for sleeping purposes, and renders Isolation in cases of Fever or Tuberculosis out of the question.

Overcrowding is aggravated during the Summer months, as several of the houses take in visitors. Ordinary lodgers also aggravate overcrowding. They are sometimes asked to remove by the Sanitary Inspectors.

Overcrowding Survey in England and Wales, 1936.—According to this Survey, Gwyrfai is one of the twenty most overcrowded Rural Districts. With a population of 24,347, the number of Overcrowded Families is 513, or a percentage of Working-class families of 8.2.

(d) *Housing Programme.*—The Council undertook a large Housing Programme. 21 at Llanrug; 80 at Llanberis; 10 at Dinorwic; 19 at Rhiwlas; 10 at Portdinorwic; 22 at Bethel; 132 at Deiniolen; 18 at Cwmyglo; 14 at Waenfawr; 45 in the parish of Llandwrog; 55 in the parish of Llanwnda; 37 in the parish of Clynog; 6 in the parish of Beddgelert. 60 in the parish of Llanllyfni (including Nebo).

There is great difficulty, including long delay, in getting sites for new houses owing to a great discrepancy between the price of owners and that of the District Valuer. The Council passed a resolution to ask for a Compulsory Purchase Order for a number of sites, and secured such an Order after a Government Inquiry. This has had a wholesome effect.

Housing of Tubercular Families.—A great defect in the system of subsidising houses is that while grants are given towards replacing Slum and Overcrowded houses, no grant is offered towards re-housing Tubercular families, who live in houses which may not be technically overcrowded, but are overcrowded in truth, owing to special need of isolation.

A separate bedroom for the patient is necessary in such families and perhaps a special sitting-room as well.

Q.—HOSPITALS AND PUBLIC INSTITUTIONS.—The Caeathro Smallpox Hospital, now in the hands of the County Council, is situated in the District. Also a Quarrymen's Hospital at Llanberis. There is an Orphanage at Bontnewydd, with separate wings for boys and girls.

A Mortuary should be provided in the Nantlle Vale district, and in the Northern Division.

Ambulances.—Are there sufficient Ambulance Facilities for Accident Cases? In any case there is a Private Ambulance at the Mona Hotel, Caernarvon, and Paragon Garage, Penygroes.

R.—PUBLIC HEALTH STAFF.—There are two (combined) Sanitary Surveyors and Sanitary Inspectors, Mr. W. O. Hughes and Mr. Closs Parry, to both of whom I am indebted for information readily supplied. There is also Mr. D. H. Roberts (aided by Assistants), as Engineer and Surveyor to the Council. Mr. W. J. Jones and Mr. R. H. Roberts (Water Inspectors) complete the Sanitary Staff.

LLEYN RURAL DISTRICT, (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
	1938	1937								
Cowsheds & Farm Dairies ..	120	120	382	21	21	14	-	-	-	1
Retailing Milk Carts ..	36	35	30	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	-	-	-	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	25	31	107	-	-	-	-	-	-	-
Meat Shops	22	21	46	-	-	-	-	-	-	-
Retailing Meat Carts ..	21	21	-	-	-	-	-	-	-	-
Factory Bakehouses ..	4	4	6	-	-	-	-	-	-	-
Workshop Bakehouses ..	14	11	29	3	3	3	-	-	-	-
Bread Shops	29	21	-	-	-	-	-	-	-	-
Retailing Bread Vans ..	-	5	-	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	10	12	28	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries	94	92	144	-	-	-	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing.</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	-	111	9
B.—Occupying premises outside the District, and importing milk into the District	-	1	-

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920: Registered only, -; Licensed, -; Total on Register, -.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	-	-	-
Licensed	31	31	25
Total on Register	31	31	25

Note.—The District is without a Public Abattoir.

A.—POPULATION AT CENSUS 1921 AND 1931.—It may be recalled that the census Population of 1921 as compared with that of 1911, was practically stationary. The actual Census figures for 1921 were more by 183 than those of 1911, but the Registrar-General, having to make allowance for the influx of Summer Visitors, made the true figures to be less by 159 than those of 1911. According to the Preliminary Census figures for 1931, there has been a further reduction (by 513) to 16,441. Since the recent "Review of Districts," the estimated population has risen to 18,203.

B.—BIRTH-RATE AND DEATH-RATE OR MORTALITIES.—The Birth-rate and the Tubercular Mortality were comparatively low; the Infant, Zymotic, Cancer and Respiratory Mortalities were moderate, and the General Death-rate and the Maternal and Influenza Mortalities were comparatively high.

C.—WATER SUPPLY.—A more adequate supply is wanted in various places, not only for Dietetic and Cleansing purposes, but to assist Drainage, and to allow of conversion of Dry into Water Closets. For example at Moelfre, Penrhos, Llangian, Llanengan, Sarn Bach, Bwlchtoecyn, Llanaelhaearn, Llangybi, Pentrefelin, Garn, Llaniestyn, Pengroeslon, &c.

Fire Extinguishing.—Good pressure of water is necessary for fire-extinguishing purposes also.

Nevin and Morfa Nevin.—The Council 2 or 3 years ago sought rights to water from the Llithfaen side of the Eifl Mountain, but encountered difficulties with one or two riparian owners.

They also hesitated from fear of the expense such a distant source would involve, and decided to make a more determined attempt to secure a nearer source, or to develop the resources of the existing gathering ground, but these efforts proved disappointing. The Ministry again suggested that Nevin, in conjunction with Llithfaen, should consider afresh the Eifl Mountain Scheme, but Nevin considered a fresh source of its own from Garn Fadryn, and Llithfaen received Government consent to a separate scheme for itself.

Nevin, having after all abandoned the Garn Fadryn Scheme, is also now abstracting water from the Eifl Mountain source, and supplying the hamlet of Pistyll on the way.

Edeyrn, Pistyll, Morfa Nevin will also benefit from the Supplementary Nevin Scheme.

Llithfaen.—A Public Inquiry under Dr. Carlyle was held into a scheme of £2400, but sanction to a loan was for a time withheld for further consideration of whether Llithfaen and Nevin could not combine on the Original scheme, but Llithfaen received consent to its own part of the scheme, and the work was carried out. Facilities at a later stage to connect having been given to Nevin (with Pistyll, Morfa Nevin and Edeyrn), an additional storage tank must be constructed at Llithfaen.

Abersoch.—Arising from a public meeting a Private Company sprang up, formed of numerous resident shareholders. A scheme was planned to utilise the water from a neighbouring stream. The Company, owing to some opposition, promoted a Private Bill in Parliament, which became an Act, and the works were undertaken and completed. The Company have now offered to sell the Works to the Llyn Council.

Llanbedrog, Mynytho and Aerodrome (at Penrhos).—The supplies here were very inadequate to meet modern requirements and a high standard of health. A scheme was decided upon and an Engineer engaged. A Public Inquiry, held by Mr. Gregson Williams, into an application for sanction to a loan of £4800 took place. Sanction was granted and the work was carried out and completed. Extensions have also been made since.

The Council, anxious to oblige, ventured to undertake to supply the new Government Aerodrome with sufficient water. To enable them to do this, and to maintain supply for Llanbedrog itself, it was found necessary to launch a new Water Scheme, which benefits Mynytho as well, and perhaps, in time, Llangian, Llanengan, Sarn Bach and Bwlchtoecyn.

Trevor.—A good source was acquired, and a scheme prepared to place before the Ministry of Health. Sanction to the loan of £4500 was received, and the work carried through. Continued

progress was made with making the necessary connections, and much progress was latterly made in converting the remaining dry into water closets, so that there are no dry closets left.

Efailnewydd and Llannor.—An excellent source was found, and a scheme submitted to the Ministry for supplying both Efailnewydd and Llannor. This was approved of, and the works were carried out at a cost of £2500, assisted by Government Grants. This has also facilitated the path towards proper drainage—a crying need at Efailnewydd. Also at Llannor.

Rhydyclafdy.—The Village Authorities joined the School Authorities in utilising and paying towards the Water-works.

Aberdaron.—Aberdaron depended largely on the river water, which was very suspicious. An Engineer was engaged, and a scheme of £5000 formulated, which after a Public Inquiry held by Mr. Carlyle, received the sanction of the Ministry. Liberal grants were made by the District Council, the County Council and the Government, and the work was completed.

Sarn and Botwnnog.—The villages and schools were badly in need of water. A scheme of £5700 was formulated and after a Public Inquiry held by Mr. Fyffe received the sanction of the Ministry. Liberal grants were made by the District Council, the County Council and the Government, and the work was completed.

Bryncroes.—Bryncroes and its school are obtaining a new Water Supply by joint action of the Lley Council and the County Education Committee.

Chwillog.—A scheme of £5000 was formulated, and a Public Inquiry held by Mr. Stuart and Mr. Evans. Sanction was received, and the work was carried out.

Pencaenewydd.—A scheme of water-supply for the village sanctioned by the Ministry was carried out.

Pentrefelin.—A scheme of £779 was formulated, and a Public Inquiry held by Mr. Stuart and Mr. Evans, but the Ministry demanded better protection of the suggested source from pollution, and a different source has been adopted for preparing a scheme.

Penmorfa.—Increased storage is required, especially in view of the Sewerage Scheme that has been decided upon.

Edeyrn.—Water obtained from the Supplementary Nevin Scheme.

Garn.—A scheme of £600 was formulated, and a Public Inquiry held by Mr. Stuart and Mr. Evans, but the Ministry considered the volume of water inadequate. A small scheme was carried out to supply the new Council Houses, but a proper scheme for the whole of Garn is necessary.

Llanystumdwy.—Plans were made for extending the Chwillog water to Llanystumdwy, and have been carried out.

Llanaelhaiarn.—Plans have been made to take the old works over and to construct storage tanks and to relay the Main. Water will be extended to the group of houses called Tyddyn Drain.

Llangian and Llanengan.—The Saethon (Mynytho) water supply is about to be extended to these villages.

Similarly, Llangybi, Mcelfre, Penrhos, Llanestyn, Pengroeslon, Llangian, Llanengan, Sarn Bach, Bwlhtocyn, &c., are in need of more water, both for domestic purposes and as a preliminary to better drainage.

Isolated Houses.—It is considered that isolated houses, away from the Public Supply, should have good spring water, or a shaft or at least a rainwater tank to hold 1500 gallons.

Sampling.—Routine sampling of water-supplies is being carried out, with satisfactory results. No cases of lead contamination by water possessing plumbo-solvent action came into notice. 2 Wells or Pumps were repaired or protected.

14 samples of water were taken.

D.—DRAINAGE AND SEWERAGE.—A sewerage scheme to follow the new water works is badly needed at Llanbedrog. Besides Llanbedrog, drainage improvements have been wanting or are wanted at Sarn, Bottwnog, Llithfaen, Edeyrn, Abersoch, Abererch, Efailnewydd, Llannor, Chwilog, Llanystumdwy, Pentrefelin, Garn, Prenteg, Pencaenewydd, Llaniestyn, Tydweiliog, Mynytho, &c.

Morfa Nevin.—Sewerage for Morfa Nevin was badly needed and a Scheme was carried out. Some of the cesspools were very foul.

Engineers were engaged and a scheme prepared arranging for taking the sewage to the sea as a more satisfactory method in the future interest of Edeyrn. A Public Inquiry, held by Mr. Gregson Williams, into an application for sanction to a loan of £11,000 took place. This was granted. A 9 inch sewer, starting from extreme west of Nevin, was laid, with branches entering at Morfa Nevin. This runs through the village of Edeyrn and discharges into the sea at Abergeirch.

Nevin.—A terrace in Nevin was drained for the first time. This will be an inducement to more building.

There is a Sewage-disposal System consisting of a 9 inch sewer with a 12 inch cast iron outfall to the sea at the north-east side of Nevin Bay, and working satisfactorily.

Edeyrn.—Sewerage is badly needed here, and was borne in mind when considering the Morfa Nevin Scheme. The village should be sewered into the Morfa Nevin Sewer, which runs through the village. The necessary water supply is already obtained from Nevin.

Trevor.—The existing sewer has been extended and the outfall now discharges into the sea, which is very satisfactory. The undrained parts of Trevor have been supplied with a 6-inch sewer, and the whole village is now satisfactorily sewered, and all the dry closets converted into water-closets.

Llanaelhaiarn.—A sewerage scheme has been carried out, the sewage emptying into two septic tanks, and thence passing to a rotary distributor (or circular filter), the effluent discharging into a stream. A man has been appointed to look after the management of the tanks. All the dry-closets have been converted into water-closets..

Abererch.—There was much dissatisfaction arising from the incompleteness of the sewerage system, and its reaction on the School. Fresh negotiations with the predominant landlord were started. Subsequently the said landowner had the existing sewer at the bottom of the village extended upwards to drain the upper part of the village as well. No tank with filter has yet been installed. The Council has agreed to take over the present sewer, and a scheme has been prepared for a sewage disposal tank and will be sent to the Ministry.

Abersoch.—Improvements in the way of taking in unsewered areas and in improving the method of discharge were badly needed. A Public Inquiry (under Mr. Fyffe) was held into an application for sanction to a loan of £3750 for carrying out the scheme. The work was held up owing to conflicting opinions as to the route and the question of pumping, but a decision was arrived at. In addition to the Northern outfall (direct into the sea), a second southern system is being carried out, with septic tank and filter and also discharging into the sea, about a mile to the south of Abersoch village.

Llanbedrog.—The sewerage here should receive early consideration, the new water-works having paved the way. The Council's Engineer has been instructed to prepare a scheme for this village.

Aberdaron.—The sewerage has been improved. The village is sewered on both sides of the river, with a 6-inch pipe leading to a settling tank, from which the effluent discharges into the tidal part of the river.

Sarn.—A drainage scheme here should receive early consideration. There is great need of a sewer,

Fourcrosses.—Treatment and discharge of the sewage is to be improved, but there has been considerable delay owing to difficulty in coming to terms with the landowner of a proposed new site for the plant. There has been a Public Government Inquiry into the new scheme, the effluent to discharge into the main river (Erch), instead of into a mill-race.

Chwillog.—A Government Inquiry was made into a proposed Sewerage Scheme. Sanction was withheld on account of the unsatisfactory results of the float tests. Another scheme has been submitted substituting disposal works for the sea outfall.

Llithfaen.—A scheme has been prepared, but application for sanction was delayed owing to the heavy expense that would fall on the Parish. A way out has been found by the Council deciding the pool all Old and Future Sewerage debts, and a Public Inquiry is expected.

Penmorfa.—The sewerage is likely to be early improved at Penmorfa. A sewerage scheme has been submitted and a Public Inquiry has been held. Additional water will be wanted.

Tydweiliog.—Instead of the existing obsolete tank, receiving sewage from a private sewer, a new tank discharging at the same outfall into the river will be constructed, which will serve not only the new Council houses to be constructed, but the whole village and school.

Mynytho.—The new tank and filters that have been constructed for the new Council houses will deal also with the rest of the village.

Efailnewydd.—There is no sewer in this village, but it is badly needed. A scheme is in course of preparation by the Engineer.

Llannor.—The village is without a sewerage system, though it is badly needed. The Council has instructed the Surveyor to prepare a scheme.

Llanystumdwy.—There is a sewerage scheme on the Criccieth side of the village, but the sewage enters the river Dwyfor without treatment. A complete scheme for the village with disposal works has been submitted to the Ministry. This will serve the new Council houses and all the other houses and the school as well.

Prenteg.—There is a surface-water sewer serving this village, discharging into a ditch, but a complete sewerage scheme is badly required. Such a scheme will have to be expensive: some means of lifting (or driving along) the sewage will be necessary.

Garn, Dolbenmaen.—Here also there is a surface-water sewer serving part of the village, but a complete sewerage scheme is required. A new water scheme would be required concurrently.

Better sewerage is also wanted at Pencaenewydd, Llaniestyn, Brynceir, Afonwen, Llwynhudol, Llangybi, Pentrefelin, Bottwnog, &c. The necessary water has been obtained for Prenteg, Efailnewydd, Llannor, Bottwnog, and for Chwillog and Pencaenewydd, &c., but not for some other places as yet, but water schemes are in prospect for Pentrefelin, and should be prepared for Llaniestyn and Garn, &c.

E.—PUBLIC CONVENIENCES.—All the larger villages should be supplied with these.

The Surveyor designed and completed such a convenience at Nevin as previously at Aberdaron, with provisions for both sexes. There is also a public convenience at Trevor.

A site for a convenience was at last fixed upon at Abersoch, and a convenience constructed.

There are only urinals at Llanaelhaiarn and Garn.

Proper conveniences are badly needed at Sarn, Llanaelhaiarn, Llanbedrog, Penmorfa, Garn and other places, now that the motor bus traffic has become so general.

F.—PUBLIC SCAVENGING.—Public Scavenging was in force at the larger villages. It should be extended to Sarn, Llannor, Llanystumdwy, Pencaenewydd, Afonwen, Brynbachau, Llangybi, Tyddyn Drain (Llanaelhaiarn), Penygroes, Rhoslan. Been commenced at Pentrefelin (weekly) for the first time.

Scavenging requires improvement at Tydweiliog.

Two or more covered motor wagons, conveying to two or more public tipping grounds by the Council direct, and not through contractors would be a great improvement.

In some cases, emptying of closets is not included, which is a great defect.

Weekly removal required at Efailnewydd instead of monthly.

G.—POLLUTION OF STREAMS.—There were complaints of pollution of the stream at various villages, e.g., Sarn, Llanystumdwy, &c. As above stated, public scavenging should be extended to all the villages, which would tend to keep the streams clean. Signboards have been put up at various times. Rivers and streams in the vicinity of villages have had to be cleansed.

H.—POLLUTION OF THE AIR.—The District being almost purely agricultural, there has been no smoke Nuisance from Industries.

I.—FOOD INSPECTIONS.—(a) *Milk*.—In a previous year the Sanitary Inspectors made a fairly complete report on the cowsheds in the District for the County Council, who were considering the question of having all dairy cows examined. The Milk and Dairies Order, 1926, is being administered as regards Registration and Inspection. The Cowsheds and Dairies are being periodically inspected. The Council again considered the question, and decided in favour, of authorising and instructing the Sanitary Inspectors to take samples of milk for analysis in order to supplement the work of the County Inspector of Foods and Drugs, as proper richness and especially cleanliness of milk is so important to infants, invalids and everybody. Inexpensive analysis but non-statutory, and not recognised as a basis for prosecuting is made at Bangor College. 14 farmers in the District produced designated milk. 8 of these produced T.T. Milk and 6 others were Accredited Producers. The milk is also sold in Pwllheli and Criccieth and Portmadoc, as well as in the Lleyn District (Nevin and Abersoch, &c.).

35 Bovine animals (22 in milk and 13 others) were slaughtered by the County Authorities under the Tuberculosis Order, 1925.

The County Council adopted the plan of having the milk of all dairy cows examined for Tubercle Bacilli, and the two Sanitary Inspectors assisted by taking the samples and sending them to the Laboratory at Bangor for the Biological test. Also by taking sample of Graded Milk; but in future all samples on behalf of the County Council will be taken by an official of their own.

28 samples of milk (7 not genuine) and 1 sample of butter, were taken by the County Inspector of Foods and Drugs.

(b) *Meat (Inspection and Humane Slaughtering)*.—Meat is periodically inspected at times of slaughtering and in the shops. The "slaughtering days" of the butchers have been ascertained throughout the District.

There is a Slaughterhouse of modern design, erected by the Granite Quarry Company, at Trevor. One of the Surveyors (Mr. Turner) suggested to the Council the provision of five public abattoirs in the Lleyn District, to do away with the private ones. The Council deferred consideration pending the re-distribution of Parishes. This redistribution having been concluded the matter should be taken up seriously.

The Slaughtering Act is in force making it compulsory for slaughter-men to be licensed.

Humane Instruments are also made compulsory in the case of oxen and calves. Unfortunately the Council have not exercised their option to include sheep and lambs as well.

Unfortunately also pigs are left out of the Act unless Electric power is reasonably obtainable, but it is available in many of the localities, for example Trevor, Llanbedrog, Abersoch, Nevin, Morfa Nevin, and Humane Slaughtering should be insisted upon.

(c) *Other Foods*.—The Bakehouses, &c., were inspected and found fairly satisfactory. Lime-washing, &c., is enforced.

J.—SCHOOLS.—Botwnnog and Llangwnadl Non-provided Schools were closed on account of Whooping Cough,

Where there is a scarcity of water in the villages (as above), the local schools, of course may also suffer, for example, Llangwnadl, Rhiw. At Abererch the dry closets were in great need of conversion into water-closets. Due to lack of water or Sewerage or both, many schools have only dry closets, for example, Edern, Tydweiliog, Llangwnadl, Llidiardau, Rhiw, Mynytho.

K.—ISOLATION FACILITIES AND AMBULANCES.—(See Introductory Report)
Are there sufficient Facilities for Accident Cases?

L.—CASES SENT TO FEVER HOSPITAL. 10 Cases were sent to Hospital, 5 of Scarlet Fever, 3 of Diphtheria, and 2 of suspected Diphtheria.

M.—DIAGNOSTIC, PREVENTATIVE AND REMEDIAL AIDS FOR INFECTIOUS DISEASES.—(See Introductory Report).

N.—DISINFECTION AND DISINFESTATION.—In country districts far from a Disinfecting Station and Steam Disinfector, expensive feather beds, bolsters, pillows, mattresses, wearing apparel, &c., after a dangerous Infectious Disease, call for being destroyed by burning with or without compensation. In the past year an average of about £2 10s. 0d., was paid in compensation.

A separate (from the Caernarvon one) Disinfecting Station should be established in this end of the County. Such a stationary disinfector would probably be more reliable than the portable (or "Sack") Steam Disinfector as devised by Colonel Lelean for use in the late Great War, and suggested for home public health by Professor Wynne, of Sheffield. (See Introductory Report).

O.—ADOPTIVE ACTS AND BYELAWS.—The New Public Health Act, 1936, came into force on October 1, 1937, and all existing Byelaws automatically lapse on July 31, 1939. A new series of Model Building Byelaws has been prepared for the guidance of the Local Authorities, and have been adopted by the Council. The New Byelaws will enforce a better standard in both materials and construction, and gives a list of "short lived" materials, the use of which will be subject to special restrictions.

P.—HOUSING.—There is an acute shortage of healthy houses of the working class type to meet the need of new tenants and to replace insanitary dwellings, as not many Working-class houses are built. Owing to the collapse of the Addison Scheme and the supposed inadequacy of the Neville Chamberlain and Wheatley Schemes, not a single Council House was built.

3 grants towards re-conditioning houses (under the Rural Workers Act, 1926) were made by the County Council. Have the Parishes been sufficiently informed of the facilities?

Many years ago several houses claimed and qualified for the Neville Chamberlain Subsidy Scheme of £6 a year for 20 years. In fact, the District at that time compared very favourably with other Districts in the matter of private building of Workmen's Dwellings, that is, of Dwellings within the size of Workmen's Dwellings (but not necessarily occupied by the ordinary "working man").

On the other hand, in spite of hard pleading on my part, the Council (or Sanitary Committee) declined to make a claim (until it was too late) for the Supplementary Grants under the Housing (Rural Authorities) Act, 1931, towards building houses for Rural Workers. These grants would have been in addition to an ordinary grant available under the Wheatley Act, 1924, and would have enabled the houses to be let for about 2/6 a week, the same to cover rates. Parliament had set aside a sum of Two Million Pounds to be drawn upon for the purpose. Another County—Anglesey—has benefitted to the number of about 200 new houses under this Scheme.

Later, the Council contemplated building a number of Workmen's Dwellings on the strength of the Wheatley Grant alone, and appointed a Committee to each of the two Divisions of the District to prepare a Scheme. The Fourcrosses Division were very slow in moving, and the Sarn Division also ceased to move the moment the said Wheatley Grant was withdrawn.

The reason given for the withdrawal of the Wheatley Grant was that the cost of building had come down enormously, and that money could be borrowed at a low interest, so that self-supporting houses could be built by Councils. In my opinion the working-men of Lleyrn could

not pay a full economic rent for such houses. I do not know whether the Council could have afforded to spend money from the rates to make up the deficit.

A new hope of improvement came under the Slum Clearance Act of 1930, and the Overcrowding Act of 1935.

The Slum Clearance Act, 1930, and the Overcrowding Act, 1935.—The Slum Clearance Act 1930, placed unfit houses in 3 categories, viz., (a) Houses in Clearance Areas; (b) Houses in Improvement Areas; (c) Individual Unfit Houses.

At first we hesitated to treat small groups or rows of houses as Clearance Areas, preferring to regard these as possible Improvement Areas. We soon learnt that in Rural Districts and small towns the Ministry did not favour the scheduling of groups of houses as Improvement Areas, limiting such Improvement Areas to large collections of houses in big towns.

We therefore thought of taking action under the "Individual Unfit" clause. After a trial it was thought to be very slow work to deal with solitary houses here and there over such a large area, and there would be the difficulty of having to build 8 new houses one by one over the said large area—a rather uneconomic method.

Clearance Areas.—We therefore sought out all the "Clearance Areas" in the district, and inspected and scheduled these. Bearing in mind that a block of 2 or more houses would form an Area, we came across quite a number of such areas, very defective in structure, each area containing from 2 up to 12 (say) houses.

Before taking more formal steps, the Council instructed the two Sanitary Inspectors to write the owners, stating that a serious view was being taken of the state of properties and asking them were they prepared to render such properties habitable, even should the expense of doing so be in a sense "unreasonable."

Very little active response was made to the chance thus offered to the house owners, so the Council was constrained to make Provisional Clearance Orders with respect to 28 such Areas. Owners of 5 of these Areas did not protest to the Ministry of Health so the Clearance Orders made with respect of these 5 Areas became automatically confirmed by the Ministry. A protest was lodged with the Ministry with respect to the other 23 areas, so that a Public Inquiry by an Architect of the Ministry became necessary. This took place at the end of that Summer and the Council's Clearance Orders were practically all confirmed.

Sites for Houses.—Just as Clearance Orders were provisionally made by the Council, so Sites for erecting houses were provisionally selected by the Council. Such sites having been secured, and Housing plans approved, the work of building has started in earnest.

By the end of 1938, 20 houses (14 at Nevin and 6 at Fourcrosses) had been completed. Since then 62 houses have been built (Mynytho 26, Aberdaron 4, Edeyrn 8, Llanaelhaearn 6, Chwilog 6, and Garn 12).

Individual Unfit Houses.—Individual Unfit Houses (viz., Houses that cannot be rendered habitable at a reasonable expense) remain to be dealt with.

The Slum Clearance Act does not give a more precise definition of these Unfit houses than the term "unreasonable expense."

In the last resort the County Court Judge may have to give his verdict as to what constitutes "unreasonable and reasonable expense."

They should be considered immediately in connection with Overcrowded Houses, and with Houses for Agricultural Needs under the Housing (Financial Provisions) Act, 1938.

Overcrowded Houses—the Overcrowding Act, 1935.—Under the Overcrowding Act, less crowded conditions than heretofore have to be regarded as Overcrowding, including defective sex-separation, so that it became necessary to make a careful survey of the relation of the size of house to the number and age and sex of the inmates, throughout the District.

The total number of houses found to be overcrowded in the First Survey was 213. Notices have been served under this Act.

Government Grants will be available towards relieving Overcrowded Houses.

Acquisition of Sites.—Suitable land for building is not difficult to find, but great delay is caused by disagreement as to the value between the owners and the District Valuer.

Q.—PUBLIC INSTITUTIONS.—There are no Hospitals or similar Public Institutions in the District. A Cottage Hospital in the neighbourhood of Pwllheli or just outside the town, would be a boon, and active steps are being taken to provide such, a mansion having been left for such an object by a deceased lady-resident.

R.—PUBLIC HEALTH STAFF.—There are two Sanitary Inspectors, each being a Sanitary Surveyor as well, viz., Mr. J. T. Turner for the Sarn Division, and Mr. D. Lloyd Jones for the Fourcrosses Division. I am indebted to both of them for information readily supplied.

DEUDRAETH RURAL DISTRICT (Merionethshire)

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions.</i>	<i>Purveyors from outside the District</i>
	1	2	3	4	5	6	7	8	9	10
	1938	1937								
Cowsheds & Farm Dairies..	34	34	42	8	8	4	-	-	-	2
Retailing Milk Carts ..	11	12	22	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	-	-	-	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	11	12	36	2	2	1	-	-	-	-
Meat Shops	13	13	13	-	-	-	-	-	-	-
Retailing Meat Carts ..	6	5	15	-	-	-	-	-	-	-
Factory Bakehouses ..	5	5	18	2	2	2	-	-	-	-
Workshop Bakehouses ..	5	5	15	2	2	1	-	-	-	-
Bread Shops	11	11	22	3	3	2	-	-	-	-
Retailing Bread Vans ..	8	8	24	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries	9	9	30	5	5	3	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries.. .. .	20	20	65	11	11	4	-	-	-	-
Workplaces	4	4	16	-	-	-	-	-	-	-
Home-workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing.</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both ..		32	2
B.—Occupying premises outside the District, and importing milk into the District		2	

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920 : Registered only, - ; Licensed, - ; Total on Register, -.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	3	3	2
Licensed	9	9	9
Total on Register	12	12	11

Note.—The District is without a Public Abattoir.

A.—POPULATION AT CENSUS 1921 AND 1931.—According to the 1921 Census figures, there was a decrease in population as compared with 1911 of 422—a moderate decrease. The revised figures given by the Registrar General made the population still less by another 200.

The decrease was partly due to the loss of men in the Great War, and partly to the depression in the Slate Industry.

According to the Preliminary Census figures for 1931, however, there has been a tiny rise (by 50) in the population to 7417.

B.—BIRTH-RATE AND DEATH RATES OR MORTALITIES.—The Birth-rate and the Tubercular Mortality were low, the Cancer Mortality was rather low, the Infant Mortality was moderate, the General Death-rate was not high, and the Zymotic, Respiratory and Influenza Mortalities were also moderate.

C.—WATER SUPPLY.—The Ministry of Health is now calling on all Councils to periodically and systematically take samples of water for analysis from all their undertakings. The Deudraeth Council has resolved to do this twice a year.

(1) *Penrhyndeudraeth and Minffordd*.—These places are supplied by the Portmadoc Water Company with water from Llyn Teewyn.

(2) *Harlech District*.—Harlech (with Llanfair) was at last provided with an augmented water supply from a mountain lake (Llyn Fedw), and the work completed (Spring 1936).

The supply of water for Harlech and adjacent part of Llanfair village was, owing to the great increase in building of private residences, liable in dry weather to prove insufficient. (See Llanfair District below). It was necessary to augment the water supply to meet the increasing demands and to provide the higher-situated houses with better pressure. During the 1933 drought it is said the Reservoir was unofficially replenished from a private-owned stream.

Llyn Fedw was at last fixed upon, and the necessary Plans and application for sanction to a Loan sent up to the Ministry. The Deudraeth Council were prepared to assist the Llandanwg and Llanfair Parishes to some extent, but the Ministry expected a much higher grant from the District Council and the County Council to meet their own grant. At last terms were agreed upon.

(3) *Llanfair District*.—The Llanfair area participates with Harlech in the new Water supply. A new supply was badly needed for Llanfair village and School. It took 20 minutes for some residents to carry one journey of drinking water from the nearest well.

(4) *Pensarn and Llandanwg*.—These two hamlets also participate in the new Harlech and Llanfair supply.

(5) *Llanbedr*.—This village is served with a supply from the Dyffryn Waterworks. As the village was situated partly in the Deudraeth and partly in the Dolgelley Rural Districts, the two Councils acted together in purchasing the old waterworks and increasing the supply.

Llanbedr village is supplied by meter, so there is not an unlimited supply for watering gardens, or washing cars, &c. For these purposes the water of a ditch running at the back of houses is used. This ditch receives slop-water from two houses, and further on is fouled by cattle. It is replenished through a pipe from the river. Notices are being issued, but it is a question whether it should not be covered over, or indeed abolished, by cutting off the supply from the river.

(6) *Gwynfryn*.—This hamlet (in the parish of Llanbedr) is without an adequate water supply. A scheme for obtaining water from Llanbedr (to replace the present supply) and for Gwynfryn was the subject of a Public Inquiry under Messrs. Connell and Owain Evans, but it seems that the Dolgelley District Council are under an obligation to supply this village with water, and that this will be acted upon. Excluding an entirely new supply it will be up to Dolgelley District to join in supplying Gwynfryn with water, and in improving the supply at Llanbedr. An entirely new water supply might be more satisfactory.

(7) *Talsarnau*.—An improved supply was much needed, as the pressure of water got very low in summer. Recourse had then to be made to a doubtful source, or water had to be carried from far-removed wells in pails. It was decided to tap (with necessary purification) a mountain stream. A scheme was prepared by the Surveyor and a Government Inquiry held under Messrs. Connell and Owain Evans. Sanction to a loan was received, and the work was completed, constituting a great improvement.

(8) *Glanywern*.—This little hamlet midway between Ynys and Talsarnau had also to be considered. It now participates in the new Talsarnau supply.

(9) *Eisingrug*.—Similarly with this tiny hamlet.

(10) *Ynys*.—The water supply of this hamlet had to be improved in quantity and accessibility. It now participates in the new Talsarnau supply.

(11) *Trawsfynydd*.—Further connections were made, and all the houses in the village are now supplied with water from the Council's mains, but there are a number of houses (12) without a separate tap, but which draw water from stand pipes.

(12) *Gellilydan*.—A village comprising over 24 houses and a School. Arising from a report by the Medical Officer of Health (passed on to the Parish Council by the District Council) the Parish Council and Surveyor discovered a convenient source of a new water supply at Cae Glas Farm. The Surveyor prepared a Scheme, which was sent to the Ministry for their approval and sanction to a loan. Owing to a disagreement between the Council and the Ministry on the Language Question the work was carried out by means of current revenue only. This water has allowed of a sewerage scheme (see below). The inhabitants were at first exercising their minds what they should do with their age-long benefactors—the old wells.

(13) *Maentwrog*.—The predominant landlord had the water supply overhauled. A new tank was built, and the supply pipes relaid for a portion of the length between the tank and village. But an additional water supply would be necessary if a much-needed sewerage scheme were decided upon.

(14) *Garreg*.—The School was connected with a supply, and the supply protected and made more accessible to the villagers but an additional source was found necessary, and this again needs to be supplemented against dry periods. A scheme has been prepared and is now under consideration. A penny rate on the Parish yields a very low figure, so the scheme will be subsidised by the District and probably County Councils. The supply of the majority of the houses is from stand-pipes, and not direct from the main.

(15) *Rhyd*.—This village, comprising 17 houses and School, is provided with a new water supply, which is a great improvement on the old system.

(16) *Llandecwyn Parish* does not possess a scheme of water supply, but three houses are supplied from Llyn Tecwyn, the source of the Penrhyn and Portmadoc supply.

No cases of lead contamination by water possessing plumbo-solvent action were found.

Fire Extinguishing.—Good pressure of water is important, not only for ordinary needs, but for fire extinguishing purposes.

Penrhyndeudraeth has newly had a fire station and appliances (with stand-pipes and hydrants) The Council has been in communication with Festiniog and Portmadoc Councils with respect to the services of a fire brigade for the District.

D.—DRAINAGE AND SEWERAGE.—(1) *Minffordd*.—The greater portion of the village is drained by means of 9-inch stoneware pipes into the Penrhyndeudraeth main sewer, which now discharges into the river Dwyryd at Briwet Bridge. The portion known as Lower Minffordd is drained into a septic tank with filters and the effluent discharged into the river Glaslyn.

(2) *Penrhyndeudraeth*.—A scheme for better sewerage and better sewage disposal at Penrhyndeudraeth was passed by the Ministry of Health and the work completed in the beginning

of 1936. A Public Inquiry under an Engineering Government Inspector (Mr. Calvert) had been held, and alternative situations for the outfall were placed before him, the one chosen being just below Briwet Bridge. There were several areas outside the prescribed distance of 100 feet from the sewers, and there was partial obstruction with oozing near the G.W.R. Station, and the state of the existing outfall was very unsatisfactory. The new scheme, after the amicable withdrawal of formidable opposition, diverts and extends the outfall into deep and running tidal water.

Several extensions were carried out, and the process of extending to outlying groups of houses, which previously had no proper drains, was continued in the past year.

Unfortunately, many closets at Penrhyn and Minffordd remain unconnected with the sewers, although the latter are available. Pressure can be applied in the case of proved defective dry closets.

(3) *Trawsfynydd*.—There are here 4 independent systems of sewerage and sewage disposal. The disposal of sewage was improved by providing settling tanks and filters at 2 places. Previously, the drains discharged in the open or into ditches. Tanks have been provided at Ty'n y Pistyll, at Ty Llwyd (for Ty Llwyd Terrace and Ardudwy Terrace), and at Llainwen. The tanks were provided and sewerage relaid so as to facilitate the conversion of dry into water closets among other reasons.

Gellilydan.—A new drainage scheme was required for the village and School, the arrangements being primitive, adequate sanitary conveniences not being present. Plans were prepared by the Surveyor for the proper drainage and sewerage of the place, and the work has been completed, but the School closets have not yet been converted into water closets.

A comprehensive water scheme had already been carried out—a needful preliminary, (see under “Water Supply” above).

(5) *Maentwrog*.—Similarly, the method of sewage disposal, &c., at Maentwrog is unsatisfactory, the sewage not receiving proper treatment. Further, the sewerage system is not suitable to allow of conversion of dry into water-closets. Improved sewerage and water schemes are necessary.

(6) *Llanfair*.—With the completion of the water scheme, an associated sewerage scheme is being contemplated for Llanfair, the latter being made possible by the former, and being much required. The existing drainage is not suitable to allow of conversion of dry into water-closets. Early improvement is expected.

(7) *Harlech*.—The disposal of sewage at Harlech is by Land Irrigation. The arrangements have not been quite satisfactory, but electric plant is now being installed. Early extension of sewerage into the Llanfair end of Harlech is expected.

(8) *Garreg*.—Following upon a further improved water supply, a proper sewerage system should be provided, with separate drain for each house, and allowing for conversion of dry into water-closets.

E.—PUBLIC CONVENIENCES.—There is a public urinal at Harlech (not sufficient). Harlech is greatly in need of further conveniences for both sexes. These are about to be provided. Conveniences for Trawsfynydd and Penrhyndeudraeth (for both sexes) and Maentwrog (men only), have recently been constructed. Conveniences are much needed at Garreg (Llanfrothen), Talsarnau, Llanbedr, &c. The new motor bus system of transport makes the matter more urgent. Plans are being prepared for Talsarnau. Trawsfynydd had a difficulty in procuring a site, but this difficulty was overcome. The Surveyor designed modern conveniences for the place, which have been completed.

F.—PUBLIC SCAVENGING.—Public scavenging (including emptying of dry closets and ash-receptacles, but not cesspools, is in force at Minffordd, Penrhyndeudraeth, Talsarnau, Harlech, Llanbedr, Llanfair, Llanfrothen (Garreg and Rhyd), Maentwrog, Gellilydan and Trawsfynydd, that is, practically throughout the district. The work is done by contract, the terms being

weekly removal, and the contract being renewable every 3 years by open tenders. Gwynfryn Village has now been included in the system of public scavenging. Removal of trade refuse is left for arrangement between trader and scavenger.

The public scavenging has been improved by collecting weekly instead of fortnightly, but all the ashpits should be abolished in favour of suitable covered ashbins.

The Deudraeth Council has secured a Tipping-ground for Penrhyndeudraeth, but the respective contractors are responsible for securing suitable sites in the other areas.

G.—POLLUTION OF STREAMS.—No action was taken with regard to pollution of rivers or streams. There is sewage pollution at Maentwrog, &c.

H.—POLLUTION OF THE AIR.—The District is an agricultural one, free from smoke nuisance.

I.—FOOD INSPECTION.—(a) *Milk*.—No special action was taken by the Council, apart from the work of the County Council, with a view to detecting adulterated or unclean or infected (for example Tuberculous) milk. In my opinion the Sanitary Inspector should be authorised or instructed to take samples in order to supplement the work of the County Inspector of Food and Drugs, as proper richness and especially cleanliness of milk is so important to infants, invalids and everybody. The Pwllheli, Criccieth, Caenarvon, Gwyrfa, &c., Councils have done this. Cleanliness should be a special concern with local Councils. It may be stated, however, that the Deudraeth Inspector has taken a number of samples on behalf of the County Medical Officer of Health, in connection with Graded Milk.

Inexpensive analysis (but non-statutory, and not recognised as a basis for prosecutions), is made at Aberystwyth and Bangor College. The County Inspector of Food and Drugs took 4 samples of Butter and 12 samples of Milk during the year ended 30th June, 1939. All samples were certified genuine.

Occasional visits to milk shops and milk carts were paid. 5 cattle were slaughtered under the Tuberculosis Order, 1925, in 1931. No figures for 1932. 3 in 1933. 5 in 1934, 10 in 1935, 16 in 1936, and 16 in 1937. 5 animals slaughtered between 1st April, 1938 and 30th June, 1939.

No Graded Milk was being produced in the District until 1935, when one vendor received a Licence to sell Grade A. (T.T.) Milk, and 1 to sell Grade A. Milk. Several vendors sell bottled milk, but not specially designated. In future, commercial milk is to be classified into (1) Tuberculin Tested; (2) Ditto Pasteurised; (3) Ditto Certified; (4) Accredited (Pasteurised or not); (5) Pasteurised (whether Accredited or Ungraded).

At present 4 vendors sell Tuberculin-tested Milk (Certified).

Licences for such selling are issued by the Merionethshire County Council.

(b) *Meat*.—Inspections of slaughterhouses and during slaughtering hours were made. The butchers have certain fixed days for slaughtering. A centrally-situated Public Abattoir would greatly facilitate matters, or perhaps two would be necessary. It would allow of strict regulation and early and frequent inspection of meat and the control of outlying villages. Meat shops, carts and stalls were also inspected. Should any meat be condemned, the same is buried, and the Council bears the expense. Some trouble was at one time caused by butchers slaughtering in unlicensed and unregistered buildings, and in an open field, but action was taken, as far as the law allowed.

Humane Slaughtering.—It is gratifying that a Humane Slaughtering Act has been passed. Also that the Deudraeth Council at a meeting to which they had invited the R.S.P.C.A. Inspector for the County, decided to include sheep and lambs within the operation of the Act. It was hoped that all the butchers had loyally adopted the methods thus made compulsory, but an Inspector of the R.S.P.C.A. drew the attention of the Council to a butcher who had slaughtered without Humane Instruments. The butcher was seriously reprimanded and cautioned.

Shooting or Electrocution, before using the knife, ensures instantaneous unconsciousness and a painless death. It is compulsory to electrocute Pigs, when electric power is reasonably obtainable.

(c) *Other Foods*.—Periodical visits were paid to Bakehouses, Fruit Shops, &c., and these establishments were found satisfactory on the whole, but in Bakehouses regular limewashing has sometimes to be insisted upon.

J.—SCHOOLS.—Brontecwyn School was closed for a few days on account of infectious colds.

Talsarnau School and Schoolhouse, fabric and contents, greatly suffered from the historic storm of October, 1927. Installation of water-closets (with proper drainage and sewer) are lacking. There is absence of sunshine and sunlight, and the floors have become uneven from subsidence. The County Council agreed to erect a new school and a new schoolhouse. The new schoolhouse has been built, but the erection of a new school is lagging. It is to be hoped that the difficulty of obtaining a suitable site will soon be solved.

Llanfair School has been supplied with water. The dry closets at Llanbedr School are to be converted into water-closets. The sewer has been extended for the purpose. Also a sewer to be provided at Garreg. A sewerage scheme has been completed for Gellilydan village, and the School closets been converted. The Trawsfynydd School closets have also been converted. Bronaber and Maentwrog Schools also have only dry closets.

At Maentwrog means of treatment of the sewage from the sewer should be provided as a step towards the conversion of dry into water-closets. Also an ample water supply provided.

K.—ISOLATION FACILITIES.—See Introductory Report. Fever Hospitals are badly needed for the District. Deudraeth District is the only one among my 8 districts which is not in connection with either a General Isolation Hospital or a Smallpox Hospital. Possibly one hospital for the ordinary Fevers, situated in a central position, in the neighbourhood of Dolgelley, say, on the Trawsfynydd side would be sufficient. A conference of County Council and all the District Councils has been held at Dolgelley, and the principle of a Fever Hospital been passed, the said Hospital to be provided and run by a joint committee of the County Council and all the District Council. A Scheme has been formulated and passed by the County Council.

The Trawsfynydd Dam Constructing Works, after pressure from the Council, arranged to send any infectious cases to the Vale of Conway Isolation Hospital (Groesynyd). The Trawsfynydd Artillery Camp have sent cases to the Caernarvon Isolation Hospital.

As regards Tuberculosis Shelters, are in very little use. The King Edward Memorial Association are prepared to supply Shelters on the advice of their Tuberculosis Physician in a limited number of cases.

L.—CASES SENT TO FEVER HOSPITAL.—In previous years, in the absence of a County Fever Hospital, the heavy expense of sending cases to a hospital in another County (Caernarvon) had to be undertaken (not by the Council) in three instances. In 1930 the Caernarvon Hospital admitted a case of Observation Anthrax from the Trawsfynydd Military Camp by special arrangement. In 1933 a non-Typhoid case from Penrhyn was kindly admitted to the Caernarvon Fever Hospital for observation. In 1934, 2 cases were sent: 1 of Scarlet Fever and 1 observation case (the latter from the Trawsfynydd Camp). The Camp has also sent other cases (German Measles, &c.).

A former Epidemic of Diphtheria.—In the late Autumn of 1930 an epidemic of Diphtheria started in Penrhyndeudraeth and neighbourhood, which did not die out until the beginning of March in the following year. 68 cases in all were notified, in some instances 2 or 3 cases from the same house. The number of deaths were fortunately not very numerous, but the absence of a fever hospital was a great handicap.

During 1937, 48 cases of Scarlet Fever were notified, but there was no fever hospital available to receive any of the cases.

M.—DIAGNOSTIC, PREVENTIVE AND REMEDIAL AIDS FOR INFECTIOUS DISEASES.—(See Introduction to Report).

N.—DISINFECTION AND DISINFESTATION.—For Disinfection, &c., fumigation and the Formalin Spray are used. There is no Steam Disinfector for disinfecting purposes, such as would be present in a fever hospital or a Tuberculosis hospital. Bedding was destroyed in

some cases with compensation to the extent of £3 per case. A portable "Sack" Steam Disinfector would be useful. (See Introductory Report for the previous year).

Verminous persons are dealt with at the Poor Law Institution.

O.—ADOPTIVE ACTS AND BYELAWS.—Some years back the old semi-urban Bye-laws respecting New Buildings and applicable to Penrhyn and Harlech only, were revised by the Council, and duly confirmed by the Ministry of Health. Also the extension of Bye-laws of the Rural type to parishes not hitherto covered by them.

The New Public Health Act, 1936, came into force on October 1st, 1937, and all existing Bye-laws automatically lapsed on July 31, 1939. A new series of Model Building Bye-laws has been prepared for consideration by Local Authorities to replace the existing 3 series of Urban Rural and Intermediate. These have been adopted.

The new Bye-laws will enforce a better standard in both materials and construction, and gives a list of short-lived materials, the use of which will be subject to special restrictions.

P.—HOUSING.—There is a general shortage of reasonably habitable workmen's dwellings throughout the District, the shortage being acute in some places like Harlech, Llanbedr and Penrhyn and acute or moderate in Trawsfynydd, Llanfair, Talsarnau, Minffordd, and parishes of Llandecwyn, Llanfrothen and Maentwrog (including Gellilydan). Not a single Council House was built until 1934 under the Housing—Rural Authorities—Act, 1931). This made it well-nigh impossible to serve Condemnatory Notices. The Council at one time intimated to the Ministry that they were prepared to subsidise workmen's cottages to the number of 20, on the terms offered in the Neville Chamberlain scheme of a refund by the Treasury to the Council of £6 a year for a period of 20 years, and this led to the building of some subsidy houses many years back, but these were private, not Council houses.

After the collapse of the Addison Scheme, no fresh efforts, unfortunately, towards a publicly owned housing scheme were made by the Council, but a number of villas and better-class houses have been built in the Harlech area by private persons. Sufficient advantage was not taken by the Council of the substantial Wheatley Grants, which were later unfortunately withdrawn, but 12 houses were built in 1934, as above stated, with the help of these Grants, under the Housing—Rural Authorities—Act, 1931.

Insanitary Property and Slum Clearance.—In 1937 (a) not one house was reconditioned with the aid of a grant from the County Council under the Rural Workers Act, 1926, but 3 grants of £60 each were made in the financial year ended 31st March, 1939. These were in respect of Maentwrog district. Have the Parishes been sufficiently informed of these facilities? The County Council have a number of Small Holdings in the District.

(b) As regards existing houses, the chief difficulty in the way of rendering them habitable is the cost of repairs and the comparatively low rental, and inability to pay higher rent to cover interest on outlay. Also the difficulty of carrying out drastic repairs while the house is occupied.

Many of the older houses have their back against the earth, and some are otherwise damp; and have no through ventilation, and are devoid of a proper pantry and scullery (including washing accommodation). Many consist of only one living room (with or without a scullery), and 2 bedrooms thus involving overcrowding which in turn accentuates the unfitness. The average age of the prevalent type of houses is from 80 to 120 years.

The Council made a claim for the Supplementary Grants to be made under the Housing (Rural Authorities) Act, 1931 (which Act provided for a total grant of Two Million Pounds for England and Wales), with respect to 50 houses which they hoped to build, but the National Advisory Committee, after a visit from Mr. James Evans, Inspector of the Welsh Board of Health, only saw their way to promise a Supplementary Grant for 10 houses. These 10 houses thus qualified for Supplementary Grants as well as Wheatley Grants. Two others had to be undertaken with the help of the Wheatley Grant alone. News came that the Supplementary Grants had been with-held on the supposed grounds that the existing local funds were sufficient, so that not a penny piece of the Two Million Pound Fund towards houses for Agricultural Workers came to Deudraeth. Compare this with Anglesey. The Council however, had, in my opinion, a

moral claim to the money. The 12 houses were spread over this large district as fairly as possible (viz., 2 each at Llanbedr, Llanfair, Harlech, Talsarnau, Llandecwyn and Llanfrothen).

The Council should endeavour to build a good number of houses not only to meet slum clearances and overcrowding, but to meet agricultural and other needs. Absence of houses means driving away from, instead of bringing people back to the land.

(c) *The New Housing Act, 1938.*—By this Act, equalised grants are available for replacing both structurally-unfit houses and overcrowded houses, and also for providing houses for the agricultural population to meet other needs, such as agricultural development.

(d) *Self-Supporting Houses.*—The Council have contemplated building Self-Supporting Houses in the parishes of Penrhyndeudraeth (including Penrhyn and Minffordd) and Llandanwg (including Harlech).

(e) *Housing Sites.*—It was found that sites were not so readily available throughout the District, as was at first thought.

(f) *The Slum Clearance Act, 1930, and Replacement Houses.*—Your Medical Officer, having in company with the Surveyor (Mr. Morris Jones) made a survey of the whole District, scheduled 45 groups of houses as Unhealthy Areas, subdividing them into 15 Improvement Areas and 30 that might be classed as possible Demolition Areas (or Clearance Areas). (The Government however later decided not to consider Improvement Areas, except in large towns).

Of these latter 30 your Medical Officer formally represented 16 areas as Clearance Areas and recommended that you as a Council should make Clearance Orders with respect to the same. This you did and presented them at a Public Inquiry presided over by Mr. R. D. Jones, A.R.I.B.A., Government Architectural Inspector, and practically all the Orders were upheld.

To replace the houses in the Condemned Areas (Clearance Areas) 31 houses have been completed, viz., 8 at Harlech, 7 at Llanfair, 4 at Maentwrog, 8 at Penrhyndeudraeth, and 4 at Trawsfynydd.

(g) *Remaining Unhealthy Areas.*—After dealing with the 16 Clearance Areas, there remain about 29 Unhealthy Areas. The Ministry having abandoned the term "Improvement" Areas, these Areas must be considered afresh, and perhaps some of the houses be considered individually.

(h) *Individual Unfit Houses.*—That is, houses that cannot be rendered habitable at a reasonable expense. These may be solitary houses, or houses included in blocks or in areas as above-mentioned.

(i) *Overcrowded Houses : The Overcrowding Act, 1935.*—The Slum Clearance Act does not deal with overcrowded houses as such, (that is unless the houses are structurally unfit besides), but the new Overcrowding Act, 1935, is largely designed to deal with such houses. In some cases, the building of a new house to replace a structurally unfit house will at the same time relieve Overcrowding both conditions being present in the same house.

The overcrowding at Penrhyndeudraeth (17) houses, shows the extent of shortage of houses.

The following is a Summary of the Survey of Overcrowding :—

(1) Total No. of Houses in the District	..1750
(2) No. of houses Inspected for Overcrowding	..1251 (Workingclass Houses).
(3) No. of houses found Un-crowded	..1215
(4) No. of houses found Over-crowded	.. 36

(j) *Further Replacement Houses.*—Besides new houses to replace some or all of the houses to be demolished in the Clearance Areas, other houses will be required to replace any Individual Unfit Houses that may be condemned and (ordinarily) demolished, and also a number to remedy conditions of Overcrowding discovered in the said Survey.

As already stated a number of houses may be both structurally unfit and overcrowded at the same time.

The greater heed paid to sex-separation will involve an increase in the number of bedrooms in a house, with possibly a decrease in the size of some of them. In the latter event, a greater heed to the means of ventilation will have to be paid.

Q.—WORKHOUSE AND MENTAL DEFECTIVE INSTITUTION.—Such Institutions are contained in the District.

R.—HOSPITALS FOR ACCIDENTS AND GENERAL CASES.—There are none within the District itself. Deudraeth and Portmadoc have joined hands in arranging ambulance facilities.

S.—SWIMMING POOLS.—There are no swimming pools in the District that need inspection.

T.—PUBLIC HEALTH STAFF.—The Offices of Sanitary Inspector and Surveyor are combined in one person, Mr. Morris Jones (Harleeh), to whom I am indebted for information readily supplied.

CONWAY BOROUGH (CAERNARVONSHIRE)

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions.</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies..	27	26	72	-	-	-	-	-	-	-
Retailing Milk Carts ..	35	35	3	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	6	4	95	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	6	6	301	-	-	-	-	-	-	-
Meat Shops	12	12	244	-	-	-	-	-	-	-
Retailing Meat Carts ..	8	7	-	-	-	-	-	-	-	-
Factory Bakehouses ..	5	5	32	-	-	-	-	-	-	-
Workshop Bakehouses ..	10	10	-	-	-	-	-	-	-	-
Bread Shops	28	28	-	-	-	-	-	-	-	-
Retailing Bread Vans ..	20	20	-	-	-	-	-	-	-	-
Factories(including Factory Bakehouses & Laundries)	8	8	-	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries.. ..	60	60	30	-	-	-	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	9	27	-
B.—Occupying premises outside the District, and importing milk into the District	-	5	-

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920 : Registered only, - ; Licensed, - ; Total on Register, -.

	In Dec. 1935	In Dec. 1936	In Dec. 1937
Registered only	-	-	-
Licensed	6	6	6
Total on Register	6	6	6

Note.—The Borough is without a Public Abattoir.

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938.

together with the Vital Statistic figures (which I assisted in preparing) given in the Annual Report for 1907.

The estimated Population furnished by the Registrar General for June, 1938, is 8,989.

The estimated Population for June, 1907, was 6,000.

(1) The Birth-rate is 12.7 per 1000 of the population. During the ten years ending 1907 the Average Birth-rate was 22.5 per 1000 of the population.

(2) The Infantile Mortality Rate is 52 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality-rate was 149 per 1000 Births.

(3) The Zymotic Diseases : Deaths from Measles (all ages), 1 ; Deaths from Whooping Cough (all ages), 0 ; Deaths from Diarrhoea (under 2 years), 1 ; Deaths from Diphtheria (all ages), 2. Giving a Zymotic Mortality-rate of 0.4 per 1000 of the population. During the ten years ending 1907 the average Zymotic Mortality-rate was 1.03 per 1000 of the population.

(4) The General Death-rate is 14.2 per 1000 of the population. During the ten years ending 1907 the average Death-rate was 18.7 per 1000 of the population.

(5) The Death-rate from Tuberculosis is 0.7 per 1000 of the population. During the 10 years ending 1907 the average Death-rate from Tuberculosis was 1.7 per 1000 of the population.

(6) The Death-rate from Cancer is 2.1 per 1000 of the population. During the 10 years ending 1907 the average death-rate from Cancer was 2.3 per 1000 of the population.

SCHOOLS.

There were no schools closed during the year on account of Infectious Diseases.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 41 patients were admitted. Of these 19 were treated for Diphtheria, 12 treated for Scarlet Fever, and 9 for other Infectious Diseases, namely : Septic Throats 7, Puerperal Pyrexia 1, and Erysipelas 1.

With Diphtheria, 4 of the patients were under 5 years of age, 10 between 10 and 15 years, 2 between 15 and 25 years, and 2 between 25 and 35 years and 1 between 40 and 50 years.

With Scarlet Fever, 1 was under 5 years of age, 2 between 10 and 15 years, 7 between 15 and 25 years, and 2 between 25 and 35 years.

There were 4 Deaths during the year, 2 from Diphtheria, 1 from Puerperal Pyrexia and 1 from Erysipelas.

There were no "Return" cases.

Of the Diphtheria patients 1 was from outside the District.

Of the Scarlet Fever patients 13 from Caernarvon were from outside the District.

SANITARY INSPECTOR'S REPORT.

(MR. REES GRIFFITHS, A.R.SAN.I., M.S.I.A.).

Housing.—The Council's Five Years Slum Clearance Scheme was completed during the year. The last of the tenants were rehoused in July. 37 Families consisting of 150 persons are now happily rehoused on the new housing estate at Plas Newydd.

The Council adopted the course of prosecuting the head of one family for failing to keep the house in a satisfactory condition. The Magistrates decided in favour of the Council and made an order for possession. Regular visits to the houses on this and other estates are made for the purpose of maintaining compliance with the Council's conditions of tenancy. These conditions are strictly observed in the majority of houses.

The demolition of slum areas has been affected partly by the Council and partly by the respective owners. No houses are now standing which were the subject of Clearance Orders.

Milk.—Sampling of herds has been continued by the County Council's Health Department.

Rats and Mice.—The following activities during Rat Week have supplemented the usual services which are regularly given by this department throughout the year.

Visits have been made to slaughterhouses, warehouses, workshops and various other places, where the presence of rats may be reasonably suspected. Careful enquiries and observations are conducted into the possible source of rat infestation, and its extent. The approval of the Health Committee and Council, a small reward has been offered to the working staffs at those places, for the production of every rat caught and killed.

By the introduction of this scheme, it was expected that we should be overwhelmed with dead rats, but it is gratifying to report that the response to date has been very small, and has resulted in very few captures. It may be assumed therefore that rat infestation is not so acute in this area.

A Cyanogas Rat Apparatus has been purchased for fumigating rat burrows, holes and runs. This method is only suitable for use in fields, open spaces, and outdoor use generally. It is applied immediately a new burrow has been discovered on or near the refuse tip. Regular inspection of banks in the vicinity, and the application of this and other methods has so far prevented the establishment of colonies at the Morfa Bach controlled tip.

The free distribution of poison biscuits and powder, with recipes for use, has been maintained. There has been a considerable falling off in demands for these facilities and complaints of rat infestation have been much fewer since the demolition of old properties in the town. Old drains which were sealed off after that process, were more often than not found to have been defective, and had served as a safe and ready means of transit for generations of marauding rats.

Meat and Foods.—No change has taken place in the good quality of meat generally offered for sale. The private slaughterhouses are well conducted and clean, the use of the humane killer has now been accepted as regular procedure.

House Refuse Collection.—Refuse collection continues to be carried out by direct labour, with controlled tipping as the means of disposal. Financial provision has been made in this year's estimates to meet the increased volume of refuse which has to be handled during the holiday season.

Camping.—The district continues to become more popular each year as a camping centre. The L.M.S. have extended the line of railway caravans on the Conway Morfa and the sanitary arrangements are properly maintained.

A modern water carriage sanitary system has been erected by the Council for the use of campers on the municipal camping ground. It is proposed to extend these facilities for next year. Privately owned camps are regularly inspected and licences issued only when proper facilities for campers are provided.

Disinfestation.—Much demand for assistance under this head has been removed by the demolition of old property under Slum Clearance Schemes. Occasional requests are made for remedies against beetles, bugs, and particularly ants in new houses. No re-infestation has yet been discovered in new houses which have been occupied by tenants from Clearance Areas.

BOROUGH ENGINEER'S REPORT, 1938.

(MR. E. O. FOULKES, A.M.I.St.E.).

Water Supply.—The Conway and Colwyn Bay Joint Water Board. The common supply of water from the constituent districts from Llyn Cowlyd, a natural lake situated in the heart of the Caernarvonshire mountains. The analysis of the water proves it to be most excellent for domestic use. Extensive reconditioning of mains has been carried out in the Pydew and Deganwy areas with beneficial results. A £2000 scheme for water supply extension is now in hand.

Sewerage.—Six hundred and fifty yards of new sewers have been laid during the year.

Playing Fields.—The Council are considering the erection of public conveniences and additional playing equipment.

Public Conveniences.—Three new conveniences have been completed during the year, viz., Deganwy Beach, Llandudno Junction and Conway Morfa.

Physical Training Campaign.—The Borough Council are preparing a scheme for the layout of land at Bodlondeb to submit to the National Fitness Council.

Re-housing.—The Plas Newydd rehousing estate has now been completed and comprises thirty-nine dwellings to rehouse the displaced tenants from all the clearance areas included in the five year programme.

The Council have acquired sufficient land to extend this estate should additional houses be required.

SUMMARY :

Plas Newydd Estate—

12 one-bedroomed tenement, living room, scullery W.C and bath	..	5/3
19 3-bedroomed non-parlour	do.	7/3
6 4-bedroomed non-parlour	do.	7/9
2 5-bedroomed non-parlour	do.	8/3

Other Estates—

16 4-bedroomed parlour type	do.	do.	do.	..	17/-
96 3-bedroomed parlour type	do.	do.	do.	..	14/3
40 do. do.	do.	do.	do.	..	14/6
24 do. do.	do.	do.	do.	..	14/6
4 do. do.	do.	do.	do.	..	13/9
148 do. do.	do.	do.	do.	..	12/8
92 3-bedroomed non-parlour	do.	do.	do.	..	11/-
6 Bungalows 2-bedroomed	do.	do.	do.	..	10/8

465 Total

BETTWSYCOED URBAN, (CAERNARVONSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions.</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies ..	10	10	20	-	10	10	-	-	-	-
Retailing Milk Carts ..	5	4	15	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	-	-	-	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	1	1	29	-	-	-	-	-	-	-
Meat Shops	1	1	29	-	-	-	-	-	-	-
Retailing Meat Carts ..	2	3	10	1	1	1	-	-	-	-
Factory Bakehouses ..	1	-	2	1	1	1	-	-	-	-
Workshop Bakehouses ..	1	2	3	1	2	2	-	-	-	-
Bread Shops	3	4	6	-	-	-	-	-	-	-
Retailing Bread Vans ..	4	4	8	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	6	2	10	4	4	4	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries)	4	4	9	1	2	2	-	-	-	-
Workplaces	7	-	9	2	2	2	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing..</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	7	7	1
B.—Occupying premises outside the District, and importing milk into the District	3	3	-

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920: Registered only, -; Licensed, 0; Total on Register, -.

	In Dec. 1935	In Dec. 1936	In Dec. 1937
Registered only	-	-	-
Licensed	1	1	1
Total on Register	1	1	1

Note.—The District is without a Public Abattoir.

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938

Together with the Vital Statistic figures (which I assisted in preparing) given in the Annual Report for 1907.

The Estimated Population furnished by the Register General for June, 1938, is 747.

The Estimated Population for June, 1907, was 1168.

(1) The Birth-rate is 10.7 per 1000 of the population. During the ten years ending 1907 the Average Birth-rate was 20.6 per 1000 of the population.

(2) The Infantile-Mortality rate is 0.00 per 1000 Births. During the ten years ending 1907 the Average Infantile Mortality-rate was 129 per 1000 Births.

(3) The Zymotic Diseases.—Deaths from Measles (all ages), Nil; Deaths from Whooping Cough (all ages), Nil; Deaths from Diarrhoea (under 2 years), Nil. Giving a Zymotic Mortality-rate of 0.00 per 1000 of the population. During the ten years ending 1907 the Average Zymotic Mortality-rate was 1.7 per 1000 of the population.

(4) The General Death-rate is 16.05 per 1000 of the population. During the ten years ending 1907 the average Death-rate was 14.6 per 1000 of the population.

(5) The Death-rate from Tuberculosis is 4.01 per 1000 of the population. During the 10 years ending 1907 the Average Death-rate from Tuberculosis was 2.1 per 1000 of the population.

(6) The Death-rate from Cancer is 1.3 per 1000 of the population. During the 10 years ending 1907 the average death-rate from Cancer was 1.2 per 1000 of the population.

SCHOOLS.

There were no schools closed during the year on account of Infectious Diseases.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 1 patient was admitted suffering from Erysipelas.

REPORT OF THE SANITARY INSPECTOR AND SURVEYOR.

(MR. CYRIL MORGAN, M.S.I.A.).

Water Supply.—Water supply is obtained from Elsi Lake, which is situate 721 feet above sea level. The watershed is free from human habitation and an abundant supply of water is obtained throughout the year. The Council have approved of a scheme for the filtration and chemical treatment of the water and it is anticipated that work will commence in the near future.

Infectious Diseases.—Cases are removed to Groesynydd Isolation Hospital. The district was free from any epidemic. Infectious bedding and clothing are steam disinfected at the Isolation Hospital, and disinfectants are supplied for cleansing purposes.

Scavenging.—Household refuse is removed satisfactorily by contract. The whole district is scavenged weekly. Hotels and Restaurants are scavenged twice weekly during the summer months. The Public Highways are scavenged daily.

Milk Supply.—Sampling of herd milk under the Tuberculosis Order has been carried out directly by the County Council, therefore no records are available. The cowsheds and dairies are visited frequently and all are periodically limewashed and kept in clean condition. All milk carts are inspected regularly and are found to be kept in clean condition. One producer outside the district is licenced to sell T.T. milk.

Meat and Other Foods.—All bakehouses are visited frequently, and are periodically lime-washed and kept in clean condition.

One slaughterhouse is registered and is found to be clean and well kept at all times. The offal is satisfactorily disposed of and sound meat is being sold and handled in a hygienic manner.

Foodstuffs in all shops and in retail vans are inspected, and few verbal notices are necessary.

Housing.—One new working class, and one superior class house were built during the year.

Rats and Mice.—Every effort was made to destroy rats in Council properties, including refuse tips, sewers and culverts, &c., and much success was obtained. Advice and assistance were given to farmers, householders and tradesmen to destroy rats.

Disinfestation.—As no displacement of families took place under Housing Acts, there was no cause to disinfect dwellings or other articles.

Sewerage.—All sewers are periodically inspected and are scavenged and flushed regularly.

Public Conveniences.—These are regularly inspected and are kept in a clean condition.

LLANRWST URBAN (DENBIGHSHIRE).

Besides these pages specially devoted to this District, equally important matter relating to the District is contained in the Introductory Report, and in the series of Large Tables appertaining in common to all the Sixteen Combined Districts.

REGULATED ESTABLISHMENTS.

<i>Those premises situated within the District.</i>	<i>No. on Register.</i>	<i>No. on Register previous year.</i>	<i>No. of Visits or Inspections.</i>	<i>No. of Premises found Defective.</i>	<i>No. of Informal Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Statutory Notices.</i>	<i>No. of these complied with.</i>	<i>No. of Prosecutions</i>	<i>Purveyors from outside the District.</i>
	1	2	3	4	5	6	7	8	9	10
Cowsheds & Farm Dairies ..	10	10	15	-	-	-	-	-	-	-
Retailing Milk Carts ..	5	5	-	-	-	-	-	-	-	-
Milk Shops (Dairy Shops)	2	1	-	-	-	-	-	-	-	-
Public Slaughter House ..	-	-	-	-	-	-	-	-	-	-
Private Slaughter House ..	5	5	7	-	-	-	-	-	-	-
Meat Shops	6	6	15	-	-	-	-	-	-	-
Retailing Meat Carts ..	-	-	-	-	-	-	-	-	-	-
Factory Bakehouses ..	2	2	18	-	-	-	-	-	-	-
Workshop Bakehouses ..	10	10	9	-	-	-	-	-	-	-
Bread Shops	12	12	16	-	-	-	-	-	-	-
Retailing Bread Vans ..	-	-	-	-	-	-	-	-	-	-
Factories (including Factory Bakehouses & Laundries)	-	-	-	-	-	-	-	-	-	-
Workshops (including Workshop Bakehouses and Laundries	27	27	30	-	-	-	-	-	-	-
Workplaces	-	-	-	-	-	-	-	-	-	-
Home-Workers' Premises ..	-	-	-	-	-	-	-	-	-	-
Offensive Trades	-	-	-	-	-	-	-	-	-	-
Common Lodging Houses	-	-	-	-	-	-	-	-	-	-

<i>Milk Dealers on the Register.</i>	<i>Retailing only.</i>	<i>Retailing & Producing..</i>	<i>Wholeselling & Producing</i>
A.—Occupying premises within the District, and selling milk within, or outside, or both	-	-	-
B.—Occupying premises outside the District, and importing milk into the District	-	-	-

SLAUGHTERHOUSES IN PAST AND PRESENT USE.

In 1920 : Registered only, 0 ; Licensed, 0 ; Total on Register, 0.

	In Dec. 1936	In Dec. 1937	In Dec. 1938
Registered only	5	5	5
Licensed	-	-	-
Total on Register	5	5	5

Note—The District is without a Public Abattoir.

SUMMARY OF VITAL STATISTICS FOR THE YEAR 1938.

Together with the Vital Statistic figures (which I assisted in preparing) given in the Annual Report for 1907.

The estimated Population furnished by the Registrar General for June, 1938, is 2429.

The Estimated Population for June, 1907, was 2775.

(1) The Birth-rate is 19.7 per 1000 of the population. During the ten years ending 1907 the Average Birth-rate was 24.4 per 1000 of the population.

(2) The Infantile-Mortality rate is 62 per 1000 Births. During the ten years ending 1907 the average Infantile Mortality rate was 178 per 1000 Births.

(3) The Zymotic Diseases :— Deaths from Measles (all ages), Nil ; Deaths from Whooping Cough (all ages), Nil ; Deaths from Diarrhoea (under 2 years), Nil. Giving a Zymotic Mortality-rate of 0.00 per 1000 of the population. During the ten years ending 1907 the average Zymotic Mortality-rate was 1.1 per 1000 of the population.

(4) The General Death-rate is 18.1 per 1000 of the population. During the ten years ending 1907 the average Death-rate was 20.5 per 1000 of the population.

(5) The Death-rate from Tuberculosis is 1.2 per 1000 of the population. During the ten years ending 1907 the average Death-rate from Tuberculosis was 1.9 per 1000 of the population.

(6) The Death-rate from Cancer is 1.2 per 1000 of the population. During the ten years ending 1907 the average death-rate from Cancer was 1.0 per 1000 of the population.

SCHOOLS.

There were no schools closed during the year on account of Infectious Diseases.

BACTERIOLOGICAL ANALYSIS.

(See Introductory Report).

ISOLATION HOSPITAL.

During the year 1938, 2 patients were admitted. Of these, 1, between 10 and 15 years of age was treated for Diphtheria. The other was an Observation Case.

There were no Deaths during the year.

There were no "Return" Cases.

REPORT OF THE SANITARY INSPECTOR AND SURVEYOR.

(MR. GRIFFITH EVANS, F.F.S.C.).

Water Supply.—Sample of waters taken at the source of supply (Crafnant Lake) was taken during the year—both Chemical and Bacteriological. Both of which were found satisfactory.

Scavenging.—The system of collecting refuse is working quite satisfactorily. Covered lorry is occupied for four days per week, thus moving the refuse regularly once a week.

Disinfection.—Every house in case of Infectious Disease is disinfected. Clothing and bedding taken to Groesnydd Isolation Hospital for steam disinfecting.

Housing.—11 new houses were built by private enterprise during the year 1938, and 73 by the Council. The 73 were houses under the 1930 Act.

Eradication of Bed Bugs.—All furniture, &c., has been fumigated and well cleansed before being removed into the new houses.

Sanitary Conveniences.—No alterations have been made to the existing conveniences. They are all supplied with an efficient water flushing system, and are swilled out every morning with disinfectant.

Refuse Disposal.—The town refuse is now tipped on low level land owned by the Council. Plans have been prepared and submitted to the Committee for the erection of a proper Refuse Destructor, the cost of which is estimated at £900.

THE REPORT OF THE COUNCIL'S MEAT INSPECTOR.

I have the honour to submit herewith my Annual Report on Meat Inspection in the Llanrwst Urban Area for the period ending October 31st, 1938.

It is with some gratification that I am able to present to you a clean bill of health in so far as the fitness of meat for human consumption is concerned, and to report that no meat or carcase has come to my notice which has called for condemnation.

An outbreak of Foot and Mouth Disease in the vicinity in August last involved extra vigilance and inspections of animals prior to slaughter, and, fortunately, no trace of the disease was encountered.

