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COUNTY COUNCIL OF FIFE.



INSTITUTE OF SOCIAL
MEDICINE

10, PARKS ROAD,
OXFORD

ANNUAL REPORT

ON THE

**HEALTH AND SANITARY CONDITION
OF THE COUNTY AND DISTRICTS**

DURING

1931

BY

G. PRATT YULE,

M.D., F.R.C.P., B.Sc. (Pub. Health), Edin.

MEDICAL OFFICER OF HEALTH.

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To the County Council of the County of Fife.

MY LORD, LADIES AND GENTLEMEN,

I have the honour to submit my Twenty-First Annual Report of the Public Health Department for the year 1931.

The Report incorporates the Annual Report on the Medical Inspection of School Children for the year ending July, 1931, by Dr. R. A. Krause, Deputy Medical Officer (Welfare), and that for the same period on the Treatment of School Children in the Clinics of the Burgh of Dunfermline by Dr. Alister Mackenzie, Chief Medical Officer, Carnegie Dunfermline Trust. The Reports of Drs. McGillivray and Fyfe covering the public health duties in Western and Eastern Fife respectively, that of Dr. Krause on Maternity and Child Welfare work and the more important excerpts from the Annual Reports of the County Sanitary Inspectors are also included.

The incidence of the common notifiable infectious diseases of childhood was never less throughout the County than in 1931.

The Landward birth-rate was 18·9 per 1,000, that of the small burghs 17·7 per 1,000. Both in the Landward and the small burgh areas the births were less in number than in 1930.

The death-rate, corrected for transfers, of the County exclusive of the large burghs was 12·2 per 1,000, the Landward death-rate being 12·1 and that of small burghs 12·3 per 1,000. The death-rate of Scotland exclusive of large burghs was 13·0 per 1,000.

The infantile mortality rate of the Landward area was 74 as compared with 63 in 1930 : that of the small burghs was 71, the same as in 1930.

The year 1931 was, like its predecessor, a busy one as a result of the transfer to the Department of the medical services formerly associated with the Poor Law.

I have to thank my colleagues in the Department for their loyal and competent co-operation throughout the year.

I have the honour to be,

My Lord, Ladies and Gentlemen,

Your obedient Servant,

G. PRATT YULE,

County Medical Officer.

July, 1932.

Public Health Department,

Cupar, Fife.

STAFF.

County Medical Officer of Health.

G. PRATT YULE, M.D., F.R.C.P.E., B.Sc. (Public Health).

Deputy County Medical Officers.

Health Service—

G. M. MCGILLIVRAY, M.C., M.B., Ch.B., D.P.H.

G. MATTHEW FYFE, M.B., Ch.B., D.P.H.

Welfare Service—

R. A. KRAUSE, M.D., D.Sc., D.P.H.

Executive Tuberculosis Officer.

ALEX. LUNDIE, B.Sc., M.B., Ch.B., D.P.H.

Area Medical Officers.

JAS. L. NISBET, M.B., M.R.C.S., L.R.C.P.

JAS. L. CHISHOLM, M.D., M.R.C.P.E., D.P.H.

JOHN THOMSON, M.B., Ch.B., D.P.H.

A. SHEILA MACLEOD, M.B., Ch.B., D.P.H.

DORIS S. WILLIAMS, M.B., Ch.B., D.P.H.

JANE W. MACDONALD, M.B., Ch.B., D.P.H.

County Sanitary Inspectors.

C. A. ALEXANDER.

T. L. BROWN.

WILLIAM DAVISON.

ALEX. FORREST.

MARSHALL GORRIE.

ROBERT JUST.

ALEX. LUMSDEN.

J. S. E. RIDDLE.

JOHN ROSS.

ANDREW STEWART.

R. J. WIGSTON.

Medical Officers, Venereal Diseases Treatment Centres.

Dunfermline—

G. A. H. GUMLEY, M.B., Ch.B., D.P.H., M.R.C.P.E.

Kirkcaldy—

G. WISHART McINTOSH, M.B., C.M., B.Sc. (Public Health).



COUNTY OF FIFE.

Report by the County Medical Officer for the Year 1931.

CENSUS 1931.

The final report of the Fourteenth Census of Scotland, taken on 26th April, 1931, is not yet published.

The Preliminary Report of the Fourteenth Census showed the population of Fife as 276,261 (males 134,548, females 141,173), a decrease of 16,664 persons, or 5·7 per cent. compared with the population recorded at the Census, 1921.

At the Census of 1931, the burghal population of Fife was 173,173, the landward population 103,088. The population of the two large burghs of Dunfermline and Kirkcaldy was 78,828 ; that of the twenty-two small burghs was 94,345.

The population of the County exclusive of the two large burghs was 97,433 (Cupar District 24,206, Dunfermline District 47,107, Kirkcaldy District 89,530, and St. Andrews District 36,590).

VITAL STATISTICS.

The Registrar General for approximately twenty years has furnished annually a summary of the vital statistics of the district of each public health local authority to the Medical Officer of Health. Thus, there was available to the Medical Officer an official return of the more important public health statistics for each burgh and county district within his sphere of work.

As a result of changes consequent upon the provision of the Local Government Act, 1929, and consonant with a decision agreed upon by the Scottish Department of Health in conference with representatives of medical officers in December, 1930, statistics relating to individual small burghs have been discontinued, the landward area and small burghs of a county being treated as a single public health district.

In future therefore separate returns for the small burgh and for the landward area will not be available.

The decision is unsatisfactory to the extent that comparison of the statistics of one small burgh with another or with the landward area will not be practicable. In Fife, small burghs vary from 500 to 18,000 in population and it is desirable that the County Council and the Medical Officer should learn annually at least where general or particular mortality is highest.

POPULATION.

The population of the County of Fife, exclusive of the large burghs of Dunfermline and Kirkcaldy, is estimated to the middle of 1931 by the Registrar General at 196,731, a decrease of 702 compared with the Census of 1931. The estimated population of the landward area is 102,308, a decrease of 780 compared with the Census, whereas the population of the small burghs is estimated at 94,423, an increase of 78 on the Census of 1931.

BIRTHS.

During 1931, there were registered within the County of Fife exclusive of the large burghs of Dunfermline and Kirkcaldy 3,608 births (corrected) of which 246 were illegitimate. The birth rate per 1,000 of estimated population was 18·3. The illegitimate births were equivalent to 6·8 per cent. of the total births.

The number of births in the Landward Area was 1,935, of which 154 were illegitimate: the Landward birth-rate was 18·9 per 1,000 estimated population, the illegitimate births being 7·9 per cent. of the total births.

The number of births in small burghs was 1,673, of which 92 were illegitimate: the birth-rate was 17·7 per 1,000 estimated population the illegitimate births being 5·5 per cent of the total births.

In 1930, the births in the Landward Area numbered 2,090 and in the small burghs 1,713.

In 1912, the births in the Landward Area of the County numbered 2,979 as compared with 1,935 in 1931, an indication of the decrease of births in recent years.

MARRIAGES.

The number of marriages registered within the County exclusive of the large burghs of Dunfermline and Kirkcaldy was 1,043, the marriage-rate being 5·3 per 1,000 estimated population.

The number of marriages in the Landward Area was 538 and in the small burghs 505.

GENERAL MORTALITY.

The number of deaths, corrected for transfers, allocated to the County exclusive of the large burghs was 2,405, the death-rate being 2·2 per 1,000 of estimated population (12·1 when adjusted for age and sex distribution).

The deaths in the Landward Area numbered 1,242, the death-rate being 12·1 per 1,000 of the estimated population. In the small burghs, there were 1,163 deaths, equivalent to a death-rate of 12·3 per 1,000 estimated population.

A summary of the causes of death in the Landward Area and small burghs during 1931 is set forth in the attached table. The most frequent causes of death were:—Disease of the Circulatory System, 111 deaths, of which heart disease is responsible for the preponderating majority; Diseases of the Nervous System and Sense Organs, 334 deaths, the chief factor in which is cerebral haemorrhage or apoplexy; Diseases of the Respiratory System, 315 deaths, of which bronchitis and pneumonia are the chief causes and occur at the extremes of life, namely in early childhood and old age; Infectious Disease, 267 deaths, less frequent as a cause of death than Cancer, 289 deaths.

The table shows the deaths from all causes as a percentage of the total deaths of which 262 or 10·9 per cent. occur during the first year of life.

CAUSES OF DEATH. LANDWARD AREA AND SMALL BURGHS, 1931.

Cause of Death.	All Ages.										85—					
	Both Sexes	Males		F'm'l's	—1	1—	5—	10—	15—	25—		35—	45—	55—	65—	75—
Infectious and Parasitic Diseases, ..	267	130	137	29	33	21	6	39	36	24	26	16	20	16	1	
Cancer and other Tumours, ..	289	127	162	..	..	..	1	3	4	17	50	71	84	53	6
Other General Diseases, ..	50	20	30	1	3	..	1	7	3	..	5	9	12	7	2	
Diseases of Blood, ..	27	10	17	..	2	..	..	4	1	..	5	5	9	1	..
Diseases of Nervous System and Sense Organs, ..	334	172	162	10	3	6	..	6	4	11	15	59	114	83	21	
Diseases of Circulatory System, ..	411	217	194	..	1	..	3	4	12	15	24	72	131	126	23	
Diseases of Respiratory System, ..	315	154	161	50	16	4	1	11	14	15	17	37	56	56	38	
Diseases of Digestive System, ..	124	63	61	14	10	3	2	9	6	11	17	17	19	13	3	
Diseases of Genito-urinary System, ..	118	68	50	2	..	1	..	4	5	10	15	24	31	21	5	
Diseases of Pregnancy and Childbirth, ..	23	..	23	..	..	..	..	7	12	4	..	..	..	..	..
Diseases of Skin and Cellular Tissue, ..	19	11	8	7	3	..	..	..	..	2	2	1	2	..	2
Diseases of Bones and Organs of Locomotion, ..	8	4	4	..	..	..	1	..	3	1	..	..	2	1	..
Congenital Malformations, ..	24	14	10	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of Early Infancy, ..	127	71	56	127	..	..	..	..	..	..	..	..	..	..	..
Senility, ..	92	33	59	..	..	..	..	..	..	..	..	..	..	..	..
Violent Deaths, ..	135	106	29	..	11	9	4	21	10	21	17	16	13	8	27	
Ill-defined Diseases, ..	42	19	23	1	1	..	..	2	1	1	5	13	8	9	5
All Causes	2,405	1,221	1,184	262	85	44	22	117	111	132	198	340	514	446	134	
Percentage	100.0	50.8	49.2	10.9	3.5	1.8	0.9	4.9	4.6	5.5	8.2	14.2	21.4	18.5	5.6	

INFANTILE MORTALITY.

The deaths of children under one year of age in 1931 for the Landward Area and small burghs numbered 262 (140 males, 162 females), equivalent to an infantile mortality rate of 73 per 1,000 registered births.

The deaths of infants in the Landward Area numbered 143 equivalent to an infantile mortality of 74, whereas in the small burghs the infant deaths were 119, the infantile mortality rate being 71.

In 1930 the infantile mortality of the Landward Area was 63 as compared with 71 in the small burghs.

The Landward infantile mortality rate in 1930 was the lowest recorded and compared favourably with rates in excess of 100 which were of frequent occurrence in the Districts of the County prior to the establishment of the Child Welfare Service twenty years ago.

The causes of deaths of infants under one year of age in 1931 were :—Infectious Diseases 29 (measles 1, whooping cough 14, influenza 6, cerebro-spinal fever 3, tuberculosis 4, and syphilis 1) : Diseases of the Respiratory System 50 (bronchitis 14, pneumonia 34) : Diseases of the Digestive System 14 (diarrhoea and enteritis 11) : Diseases of Early Infancy and Malformations 148 : Other Defined Diseases 20 : Ill Defined Diseases 1.

The most frequent causes of death of infants were :—Diseases of early infancy which include congenital debility, premature birth, injury at birth and congenital malformations ; the deaths from these causes amounted to 56·5 per cent of the total infant deaths : diseases of the respiratory system, almost entirely bronchitis and pneumonia, accounted for 19 per cent. of the total infant mortality : infectious diseases were 11·1 per cent. of the total, and whooping cough was the main factor in this category ; and diseases of the digestive system, 5·3 per cent of the total infant deaths, of which the great majority are caused by diarrhoea and enteritis.

Only one infant death in 1931 was attributed to measles. In 1930 there was but one infant death from measles and none from whooping cough in the Landward Area, the obvious explanation of the low infantile mortality rate of that year as these two diseases are, either separately or in conjunction, of all infectious disease the most frequent causes of death in young children and are thus the main factors in excessive infantile mortality.

The infantile mortality rate of the Landward Area and small burghs of the County may be regarded as reasonably satisfactory in view of the industrial conditions that prevail in the populous western mining portion. The rate for Scotland is 72 as compared with 73 in Fife.

PRINCIPAL EPIDEMIC DISEASES.

The deaths from these diseases numbered 136, the mortality rate being 0·69 per 1,000 estimated population, the same rate as prevailed throughout the Landward Areas and small burghs of Scotland. The rate in the Landward Area was 0·73 while that of the small burghs was 0·65. The higher rate of the Landward Area was in the main the result of fatal whooping cough and the occurrence of a virulent type of scarlet fever, reminiscent in its symptoms of the serious type of this infection that was prevalent thirty-five years ago.

Deaths—Principal Epidemic Diseases, 1931.

Disease.	Landward Area.	Small Burghs.	Total.
Typhoid Fever,	—	—	—
Measles,	1	1	2
Scarlet Fever,	8	—	8
Whooping Cough,	14	10	24
Diphtheria,	7	5	12
Influenza,	31	34	65
Cerebro-Spinal Fever,	6	6	12
Other Epidemic Diseases,	8	5	13
Total,	75	61	136
Rate per 1,000 Estimated Population,	0·73	0·65	0·69

DEATHS FROM TUBERCULOSIS.

The number of deaths from pulmonary and non-pulmonary tuberculosis in the Landward Area and small burghs in 1931 was 121 equivalent to a death-rate of 0·62 per 1,000. There were 55 deaths in the Landward Area and 66 in the small burghs, the respective mortality rates being 0·54 and 0·7 per 1,000.

In 1930 the deaths in the Landward Area were 51 (pulmonary 34, non-pulmonary 17), and in the small burghs 68 (pulmonary 46, non-pulmonary 22).

Deaths from Tuberculosis, 1931—Landward and Small Burghs.

Area.	All Tuberculosis.		Pulmonary.		Non-Pulmonary.	
	Number	Rate per 1,000	Number	Rate per 1,000	Number	Rate per 1,000
Landward and Small Burghs, ..	121	0·62	94	0·48	27	0·14
Landward Area, ..	55	0·54	42	0·41	13	0·13
Small Burghs, ..	66	0·70	52	0·55	14	0·15

The deaths for the Landward Area and small burghs from all tuberculosis increased by two in 1931 as compared with 1930, but both in the Landward Area and the small burghs there was a very definite decrease in the deaths from non-pulmonary tuberculosis, the deaths from the non-pulmonary type of the disease for the combined Landward and small burgh areas being 27 in 1931 compared with 39 in 1930.

It is worthy of note that the death-rate from non-pulmonary tuberculosis is diminishing more rapidly than that from pulmonary tuberculosis, and that, despite the fact that hitherto preventive measures have been concentrated in by far the greater ratio on the pulmonary disease. The fact has been stressed in former Annual Reports but a satisfactory explanation is not apparent.

The number and age distribution of the deaths from pulmonary or respiratory tuberculosis and other forms of tuberculous disease occurring in the Landward Area and Small Burghs during 1931 is shown below :—

Deaths from Tuberculosis, 1931.

Tuberculosis,	Under 5 years.	5-15	15-25	25-45	45 and over.	Total.
Pulmonary ..	1	1	23	38	31	94
Tuberc. Meningitis,	8	4	—	1	—	13
Abdominal Tuberc.	2	2	1	1	1	7
Other Tuberculosis,	1	1	2	1	2	7
All Tuberculosis, ..	12	8	26	41	34	121
Per cent., ..	9.9	6.6	21.5	33.9	28.1	100

The age distribution illustrates how pulmonary tuberculosis takes its toll during working life, the most valuable period, whereas other forms of tuberculosis are mainly a cause of death during childhood.

The death-rates for the Landward Areas and small burghs of Scotland during 1931 were :—All Tuberculosis 0.87, Respiratory Tuberculosis 0.62 per 1,000 of population.

DEATHS FROM CANCER.

The deaths from cancer and malignant tumours numbered 282 (males 126, females 156) equivalent to a mortality rate of 1.43 per 1,000. The number of deaths in the Landward Area was 136 (two in excess of the number in 1930), the death-rate being 1.33. The deaths in the small burghs were 146 (as compared with 128 in 1930), the rate being 1.55 per 1,000.

DEATHS FROM VIOLENCE.

Violent deaths numbered 135, inclusive of 19 from suicide, equivalent to a rate of 0.69 per 1,000. There were 81 deaths in the Landward

Area and 54 in the small burghs, the respective rates per 1,000 of population being 0.79 and 0.57.

In 1930, there were 80 violent deaths in the Landward Area and 63 in the small burghs.

DEATHS FROM RESPIRATORY DISEASE.

There were 315 deaths in the Landward Area and small burghs from Diseases of the Respiratory System (Landward Area 153, small burghs 162), the mortality rate being 1.60 per 1,000.

The mortality rate in the Landward Area was 1.49 and in the small burghs 1.72 per 1,000.

Of the total deaths, 143 were attributed to bronchitis, 136 to pneumonia and 36 to other diseases of the respiratory system.

Respiratory diseases are destructive of life when the individual is most susceptible to infection, in early childhood and after maturity. Of 315 deaths noted above, 66 occurred at ages under 5 and 204 at years in excess of 45.

DISEASES OF PREGNANCY AND CHILDBIRTH.

The deaths from these conditions were 23, of which 11 were caused by puerperal sepsis and 12 by other puerperal causes. In the Landward Area there were 15 deaths, in the small burghs 8, equivalent to death-rates of 0.15 and 0.08 respectively.

The most important cause of death under this heading is puerperal sepsis which was responsible for 7 deaths in the Landward Area and 4 in the small burghs.

Thus, the Landward Area death-rate from a cause which hitherto has been regarded as prevenaible is much in excess of that of the small burghs for 1931.

Unfortunately, although puerperal sepsis is regarded as a condition that ought to be within preventive control, it continues, year in year out, at much the same rate of prevalence. It is less frequent on the Continent than in England and prevails at a higher rate in Scotland than in England. Doubtless, the average Scots practitioner is not less competent than his colleague of the Continent and possibly the explanation of the higher prevalence of the disease in this country will be found in conditions as yet imperfectly understood.

SMALL BURGHS.

The annexed table furnishes a summary of the more important figures relating to the small burghs.

SMALL BURGHS—VITAL RETURNS, 1931.

BURGH.	Population (estimated)	Births (corrected)	Mar'ges (regis- tered)	Deaths (corrected)	Infant Deaths	Tuber. Deaths		Deaths from Prin. Epi- demic Dis.	Deaths from Cancer	Deaths from Puer- peral Sepsis.	Deaths from Other Puer- peral Causes	Deaths from Respira- tory Diseases
						Puln.	Non-Pul					
Auchtermuchty	1,212	19	5	19	1	..	..	1	5	..	..	1
Buckhaven	17,722	386	107	183	30	5	..	10	22	1	..	31
Burntisland	5,374	93	26	73	4	3	1	2	12	..	..	10
Cowdenbeath	12,747	289	63	145	33	13	2	8	8	1	..	29
Crail	1,056	18	7	20	..	1	..	..	1	..	..	2
Culross	501	10	9	5	..	..	..	..	..	..	..	2
Cupar	4,621	70	31	77	2	..	1	1	17	..	..	9
Elie-Earlsferry	966	12	2	18	..	..	..	..	..	1	..	2
Falkland	770	7	7	9	..	1	..	..	1	..	..	..
Inverkeithing	3,207	73	8	35	4	4	1	2	4	..	..	7
Kinghorn	1,922	28	4	25	2	1	..	1	4	..	..	4
Kilrenny-Anstruther	3,332	43	15	31	1	4	..	1	2	..	..	1
Ladybank	1,148	13	4	17	..	1	..	1	5	..	..	2
Leslie	2,494	43	17	23	1	..	..	2	2	..	..	4
Leven	7,358	100	41	86	9	3	3	7	11	..	..	9
Lochgelly	9,295	189	60	119	11	5	4	20	13	..	..	16
Markinch	2,019	37	19	30	3	..	..	1	5	..	..	..
Newburgh	2,171	37	17	27	3	1	..	2	2	..	..	5
Newport	3,294	30	8	45	..	2	..	..	9	..	..	5
Pittenweem	1,632	27	4	23	1	1	..	..	1	..	..	2
St. Andrews	8,403	97	41	108	9	5	..	1	15	..	..	16
Tayport	3,179	52	10	45	5	2	2	1	7	..	..	6
All Small Burghs	94,423	1,673	505	1,163	119	52	14	61	146	4	4	162

The number of births registered in the twenty-two small burghs in 1931 was 1,673, the birth-rate being 17·7 per 1,000 estimated population. The births in 1930 numbered 1,713.

There were 505 marriages, the marriage-rate being 5·3 per 1,000. In 1930 there were 568 marriages.

The deaths numbered 1,163, equivalent to a death-rate, corrected for transfers, of 12·3 per 1,000 estimated population. In 1930, there were 1,151 deaths. The natural increase of the population (balance of births over deaths) was 510 as compared with 562 in 1930.

The infantile mortality was 71, the same figure as in 1930.

The death-rate from tuberculosis in 1931 was 0·70: that from pulmonary or respiratory tuberculosis was 0·55, the non-pulmonary tuberculosis death-rate being 0·15.

The great majority of the Burghs of Fife are so small that rates based on the annual returns of births, deaths, etc., are entirely untrustworthy. In the most populous of the small burghs, however, they serve as a fairly reliable index of the prevalence of disease and doubtless also of the sanitary intelligence and social conditions of a section of the community. In this connection, the following rates are of interest.

INFANTILE MORTALITY RATE:—Cowdenbeath 114: Tayport 96: St. Andrews 93: Leven 90.

TUBERCULOSIS MORTALITY RATE:—Leven 1·22 (pulmonary 0·61, non-pulmonary 0·61): Cowdenbeath 1·16 (pulmonary 1·01, non-pulmonary 0·15): Lochgelly 0·97 (pulmonary 0·54, non-pulmonary 0·43).

MORTALITY RATE FROM THE PRINCIPAL INFECTIOUS DISEASES:—Lochgelly 2·15: Leven 0·95.

MORTALITY RATE FROM DISEASES OF THE RESPIRATORY SYSTEM:—Cowdenbeath 2·27: Cupar 1·95: St. Andrews 1·90.

NOTIFICATION OF INFECTIOUS DISEASES.

Detailed information of the numbers of compulsorily notifiable infectious diseases recorded during 1931 is furnished in the District Reports.

In the Landward Area and small burghs, 2,724 persons were notified in 1931 as suffering from notifiable infectious diseases, of whom 1,070 (39·3 per cent.) were removed for institutional treatment. In 1930, the number of persons notified was 3,398, of whom 1,435 (42·2 per cent.) were removed for hospital treatment.

The cases notified in 1931 were:—Typhoid fever 1, scarlet fever 474, diphtheria 279, erysipelas 189, puerperal fever 22, puerperal pyrexia 37, ophthalmia neonatorum 82, chickenpox 917, malaria 2, dysentery 1,

infantile paralysis 1, encephalitis lethargica 6, acute primary pneumonia 284, acute influenzal pneumonia 83, pulmonary tuberculosis 156, non-pulmonary tuberculosis 173 and cerebro-spinal meningitis 17.

Excluding chickenpox (917), there were only 1,807 cases notified in 1931 as compared with 2,369 cases in 1930.

The incidence of the common infectious diseases has never been less throughout the County Area than in 1931, particularly so in the Eastern agricultural districts where the Fever Hospitals have never had fewer patients than during 1931.

The notification of chickenpox is, in my opinion, a useless expense to the Local Authority.

SCHOOL CLOSURE.

The closure in whole or part of any school with a view to the prevention of infectious disease was not necessary in 1931.

PUBLIC HEALTH (SCOTLAND) AMENDMENT ACT, 1925.

Under the scheme in force in terms of this Act throughout the Landward Area and small burghs 22 patients suffering from diabetes were supplied with insulin at a cost of £87 13s 3d to the County Council. Four patients refunded the cost of the insulin supplied.

The food furnished as special diet to diabetic patients involved the additional amount of £34 18s 2d.

TUBERCULOSIS SCHEME.

A succession of changes in the post of Executive Tuberculosis Officer had, as a natural consequence, a somewhat upsetting influence on the smooth working of the Scheme. In the month of April Dr. R. L. Leask left to take up an appointment as Assistant Medical Officer of Health, Dundee. Dr. H. D. Robb was appointed to fill the vacancy in the month of May but for health reasons resigned in October. In November Dr. Alex. Lundie was transferred to the post from the County Welfare Service.

Although the association with the County Public Health Department of Dr. Leask was brief and briefer still that of Dr. Robb, both men left their mark. Their conscientious and unsparing efforts to overcome their duties and the high regard which they had for the welfare of the patients under their care, was a source of great satisfaction and pleasure. Their abilities were held in high esteem by their medical colleagues and by the general practitioners of the County.

The following brief account of the organisation of the Tuberculosis Scheme may be of interest :—

Unless advised to the contrary by the practitioner in charge of a case, the Tuberculosis Officer visits and examines every case of tuberculosis notified. He is available, too, for purposes of consultation in cases where a diagnosis of tuberculosis is a matter only of suspicion.

By periodically visiting patients whose names have been entered in the Register he endeavours to advise them how best to regulate their lives to meet their condition and to keep contacts as much under supervision as the appointment of one Tuberculosis Officer for the whole County will permit.

Reports on the physical condition of patients are sent to general practitioners, if such are requested, or if special circumstances render the course desirable. The Tuberculosis Officer is empowered to arrange for the admission of patients to Glenlomond Sanatorium for treatment or for observation or if he finds that housing arrangements tend to favour the spread of infection. A copy of the Medical Superintendent's Report on the state of a patient on admission and on discharge is sent to the family doctor for his information.

In order to assist the Tuberculosis Officer in his work, the County Health Visitors are informed of cases notified in their respective Districts. These nurses visit the patients monthly and send to the Tuberculosis Officer a written report on their progress and on the state of health of other members of the family. No opportunity is lost by the Health Visitor of impressing upon patients the importance of cultivating "sanatorium habits." The arrangement has been in every way satisfactory and beneficial. During 1931 difficulties arose regarding the home visitation of only two patients. In no case were objections raised by family doctors.

Adequate although the organisation may be, it is not an easy matter for one Tuberculosis Officer to keep abreast of the volume of work which accumulates each year. As will be seen from the following table 158 pulmonary and 173 non-pulmonary cases were notified in the County in 1931. Including, however, the number of surviving cases notified in previous years the total number of patients under his supervision at the end of the year, as recorded in the Tuberculosis Register, was 1,073 (pulmonary 509, non-pulmonary 564). In view of the time and thought which must be devoted to each individual case a high degree of determination and effort is necessary if the work is to be properly carried out and records kept up to date.

Year	LANDWARD			BURGHAL		
	Pul. Tb.	Non-pl. Tb.	Total	Pul. Tb.	Non-pl. Tb.	Total
1925	129	120	249	92	73	165
1926	96	114	210	84	52	136
1927	61	86	147	82	59	141
1928	68	93	161	54	61	115
1929	72	100	172	75	68	143
1930	77	88	165	104	79	183
1931	81	88	169	77	85	162

It will be seen that while the incidence of tuberculosis in the landward part of the County remained stationary, the incidence in the burghal part fell as a result of a decline in the number of pulmonary cases. On the whole the fall in the incidence of the disease which followed the years of the war has been followed by a period of level numbers.

The admission to Glenlomond Sanatorium of 219 patients was ranged during the year from the following areas :—

LANDWARD.—Kirkcaldy District 61, Dunfermline District 31, St. Andrews District 9, Cupar District 8.

BURGHAL.—Lochgelly 18, Cupar 3, Ladybank 1, Kilrenny 1, St. Andrews, 4, Culross 1, Tayport 3, Cowdenbeath 16, Buckhaven and Methil 17, Leven 1, Inverkeithing 3, Kinghorn 3, Burntisland 2.

Three of these patients were admitted at the cost of the Ministry of Pensions. In addition 10 patients were admitted from Kinross County and 27 from areas outwith the County of Fife.

DOMICILIARY TREATMENT.—Additional nourishment was supplied during 1931 to 131 patients at a cost of approximately £308 5s or 7s 1d per patient.

Under ordinary circumstances such articles of food as milk, eggs, butcher meat and oatmeal are supplied. Preparations such as cod-liver oil and malt are also allowed partly on account of their medicinal and partly on account of their nutritive value.

Within reasonable limits no attempt is made to regulate the supply of additional nourishment on the basis of family or personal income. Since tuberculosis, by sapping vitality, is in itself a potent cause of unemployment and consequent poverty, an endeavour is always made to ensure that the diet of every patient is sufficiently nutritive to maintain strength. Grants of food, therefore, have often to be continued over long periods.

LUPUS (Tuberculosis of the Skin).—Eleven patients suffering from lupus were granted travelling facilities during 1931 to enable them to attend Edinburgh Royal Infirmary for treatment at a cost of £17 10s 4d.

Under the Scheme of the County Tuberculosis Authority for the supply of drugs and dressings to tuberculous patients, forty-seven medical practitioners prescribed for 330 patients at a cost of £75 14s 10½d. The average cost per patient was 16s 8d and the average cost per doctor was £5 17s 4d.

Report by Dr. Alex. Lundie, Executive Tuberculosis Officer on work done during 1931 :—

This report deals with work done chiefly by two predecessors, the latter having taken up duty in November, 1931. The breaches in

the continuity of the service were adequately met and are only reflected in a reduced number of old cases and homes visited during the year.

The principal weapons available for dealing with tuberculosis continue to be enlightened public opinion and the health conscience of the people. These are still in process of development, although far from mature.

There is a danger of interest in the prevention of tuberculosis waning, owing to the lessened incidence of the disease reported from year to year. One only requires to see it at close quarters to be reminded that it is as virulent as ever and as much to be dreaded.

The importance of early notification cannot be reiterated too often. Consultations between the family doctor and the Tuberculosis Officer prior to notification are being increasingly taken advantage of and possibly some patients prefer that course to be adopted. There are people still to be found who, wilfully or ignorantly, try to conceal their trouble, foolishly hoping it will blow over in time. Three such cases occurred in the last twelve months. Of these three, two died, one having accepted Sanatorium treatment at the eleventh hour; the other absolutely declined it. The third is still alive.

Occasionally a patient, on the slightest breath of suspicion by the doctor as to the true nature of the disease, is inclined to dismiss him and call in another, whom he hopes to be more lenient. Fortunately this rare contingency can be met by consultation which brings about a reasonable state of mind.

The examination of contacts is comparatively easy in cases of recent occurrence or of deaths. There are cases, however, that have been quiescent for years and recrudescence of the disease may occur in them with fresh opportunity of spread to the family. The detection of these cases presents a problem which is being kept in view.

The advantage of Sanatorium treatment has generally been eagerly embraced this year. There are always patients glad to take the place of others who decline. The stigma of having suffered from tuberculosis is being lost sight of in view of the obvious benefits of restored health and a measure of immunity from further attack.

Many thanks are again due to the County Health Visitors for their valuable work in visiting homes and teaching the principles of health to the people. Their visits appear always to be welcomed.

Last year 50 cases (8 pulmonary, 42 non-pulmonary) were considered to have reached quiescence. One hundred and thirty-three (10 pulmonary, 32 non-pulmonary) cases were considered non-tuberculous. Only 32 had been notified, the rest having been under observation. Twenty-seven (19 pulmonary and 8 non-pulmonary) out of the 133 non-tuberculous cases had been under observation in Glenlomond. Forty-three (23 pulmonary, 20 non-pulmonary) notified cases removed from Fife and were taken off the register.

The following tables give a summary of the work done in 1931. Examinations made under the County Tuberculosis Scheme during the year :—

New Cases.		Old Cases Revisited.		Contacts.	Homes visited.	Ex-service men seen in office.
Pul.	Non-Pul.	Pul.	Non-Pul.			
161	170	749	659	158	1,779	1

Cases examined prior to Notification.

	Tuberculous	Non-Tuberculous	Still under Observation	Total
Pulmonary ..	23	5	6	34
Non-Pulmonary ..	13	2	6	21

Notified Cases (Pulmonary).

Non-Tuberculous Removed from Register.		Still on Register.			Total.
		Sputum.		Not. Exam.	
Home.	Sanatorium.	T.B. Pos.	T.B. Neg.		
10	7	67	7	36	127

Notified Cases (Non-Pulmonary).

Localisation of Disease.	No. of cases seen.	Admitted to Glenlomond.	Diagnosis not confirmed.
Superficial Glands	93	25	10
Abdomen	60	15	21
Spleen	5	3	—
Hip-Joint	3	1	2
Other bones and joints ..	15	2	4
Lupus	3	2	1
Other parts	18	3	2
Total	197	51	40

Deaths (New Cases).

	Notified after Death.	Notified before death, within.					Total.
		1-7 days	1 mth.	2 mths.	3-6 mths.	6-12 mths.	
Pulmonary,	1	2	12	9	16	11	51
Non-Pulmonary,	1	6	5	2	5	—	19

TREATMENT OF VENEREAL DISEASES.

The joint scheme for the treatment of venereal diseases provide for the needs of the entire County, including the large Burghs. Patients from the West of Fife attend the centres at the Public Health Dispensary, Market Street, Dunfermline, and the Dispensary, Dunnikie Road, Kirkcaldy, while those from the East of Fife attend the Public Health Institute, 55 Constitution Street, Dundee. There is, of course no hard or fast rule in the matter. Patients from any part of the County may attend any of the three centres, but considerations of transport invariably cause patients to orientate towards the centre nearest their own homes.

In common with the arrangements which obtain in all venereal diseases clinics throughout the British Isles, indeed throughout the world, many patients, who are not domiciled in the County, receive advice and treatment free of charge in the three centres under the County Scheme. The arrangement is both necessary and desirable since in these days of rapid transport and occupational interchange it is only by the widest co-operation that the universal scourge of venereal diseases can be held in check.

The following table outlines in brief the work of the year, but the figures do not represent the total incidence of the diseases in the County since it is known that several private practitioners, who are competent to do so, undertake the treatment of patients. Since venereal diseases are not notifiable and since all suffering from venereal diseases do not attend the centres, the exact number of these patients cannot be given but five private practitioners were supplied with doses of salvarsan substitute for the treatment of syphilis alone.

Centre.	New Patients			Total.	Total Routine Attend'ces	Diseases.				
	Domiciled in Fife County	Domiciled in Large Burghs	Domiciled Elsewhere			Syphilis	Gonorrhoea	Mixed Infections	Soft Sores	Non V.D.
Dundee ..	31	..	..	31	595	7	14	2	..	8
Kirkcaldy ..	128	128	19	275	5,344	64	97	6	18	90
Dunfermline	136	75	10	221	9,548	57	94	3	12	55
	295	203	29	527	15,487	128	205	11	30	153

It is of interest to note that 56 per cent. of the total number of patients examined were resident in the County, exclusive of the large burghs.

An indication that popular opinion has awakened to the dangers of venereal diseases is afforded by the fact that 29 per cent. of the total number of patients examined were found not to be suffering from any of these diseases.

Educational work was continued. During the winter months arrangements were made in conjunction with the Secretary of the Scottish Branch of the British Social Hygiene Council for public lectures on the dangers of venereal diseases. Addresses were given and cinematograph films were shown at Cowdenbeath, Cardenden, Lochgelly, Kelty and Methil by Dr. G. A. H. Gumley, Medical Officer, Public Health Dispensary, Dunfermline. The total attendance for the five lectures, which were open to both sexes, was approximately 350.

In order to facilitate the attendance of necessitous patients at the treatment centres, travelling expenses are allowed in certain cases. The cost of railway transport under the arrangement amounted to £4 7s 1½d in 1931 as compared with £24 9s 11d in 1930 and £19 2s 11d in 1929.

The following paragraphs summarise the work carried out at the centres during the year:—

DUNDEE CENTRE.—Dr. Averill, the Medical Officer in charge of the Public Health Institution, 55 Constitution Road, reports that 31 new patients from Fife County (22 males, 9 females) attended the Centre compared with 51 in the previous year. The majority of the

patients came from the Burghs of Cupar and St. Andrews. Seven were suffering from syphilis, 14 from gonorrhoea, 2 from mixed infection and 8 were found not to be victims of any of these diseases. The total number of salvarsan and bismuth injections made was 100 and 125 respectively.

The Centre makes admirable provision for the needs of the patients attending.

KIRKCALDY CENTRE.—The Dispensary, Dunnikier Road, Kirkcaldy is under the charge of Dr. G. W. McIntosh, Medical Officer of Health of the Burgh. His assistant, Dr. Annie F. Fulton, is responsible for the treatment of female patients.

In his Annual Report on the health of the Burgh, Dr. McIntosh states that 275 (194 males, 81 females) new patients attended the Centre as compared with 282 in the previous year. Sixty-four were suffering from syphilis, 97 from gonorrhoea, 6 from mixed infections 18 from soft sores and 90 were found to be free from infection. One thousand five hundred and sixty-four doses of salvarsan substitute were administered.

Five males and 7 females were treated in hospital, the total in patient days numbering 404. Of the 64 new cases of syphilis fully 10 per cent. had acquired the disease from their parents. The number of patients who ceased to attend before completing a course of treatment was 73 or 22 per cent. One thousand two hundred and sixty-one examinations of pathological material were carried out—285 by the staff of the Centre and 976 at the University College Laboratory Dundee.

The services rendered by the Centre at Kirkcaldy were of great value to the County.

DUNFERMLINE CENTRE.—In the sudden death of Dr. W. P. S. Johnson, Medical Officer of the Centre, the County Public Health Administration suffered a great loss. Unsparing in his devotion to duty, and brilliant in the execution of his work, Dr. Johnson has earned the high regard of his colleagues. A man of wide understanding he had also gained the respect and trust of his patients. His passing is mourned by all with whom he came in contact.

The unsatisfactory nature of the premises at Market Street has been the subject of comment in previous reports. Not only is the accommodation provided insufficient but the building is badly situated in that the only approach is overlooked by dwellinghouses so that patients are subject to the scrutiny of tenants and passers-by. This arrangement seriously detracts from the usefulness of the Centre.

Towards the end of the year proposals to close the Centre and to centralise resources at the Kirkcaldy Centre came under discussion. After full investigation the County Council decided that such a course was inadvisable in view of the needs and circumstances of the area concerned. The decision was a wise one but an improved Centre at Dunfermline is much needed. At one period it was hoped that the extensions which are being made at the Dunfermline Cottage Hospital would be sufficient to incorporate a new venereal diseases centre. The hope, however, was not realised, and at the moment the future of the Centre at Dunfermline is bound up in the comprehensive problem of the hospital accommodation in the West of Fife.

In spite of the disadvantages of the Centre the record of work for the year makes creditable reading. The total number of new patients was 221 (160 males and 61 females). There were 57 cases of syphilis, 4 of gonorrhoea, 3 of mixed infections, 12 of soft sores and 55 persons were found to be free from infection. The total number of routine attendances was no less than 9548—a sure indication that the value of the treatment provided is being appreciated by the patients. That the Centre has made its mark in the locality is further emphasised by the fact that 57 per cent. of the new patients attended unrecommended by medical practitioners or other persons.

The following detailed report on the work of the Centre during 1931 was submitted by Dr. G. A. H. Gumley who took up duties in October in succession to Dr. Johnson :—

“ I have the honour to submit to you a report of the work carried out at the Dunfermline Centre, under the Venereal Diseases Scheme for the County of Fife, during the year 1931.

New Cases.—In the course of the year 221 new patients were examined, being 160 males and 61 females. These figures show on comparison with those for the preceding year a decrease in respect of males of 23, and a decrease in respect of females of 24.

Of the 221 new cases :—

66 were recommended by medical practitioners.

125 were unrecommended.

9 were transferred from other treatment centres.

8 were recommended by Parish Authorities.

12 were seen at Springfield Asylum.

1 was recommended by a County Health Visitor.

New patients were recruited from the various areas in the following numbers :—

Aberdour	1	Kinglassie	1
Blairhall	1	Kinross	2
Bowhill	1	Kingseat	1
Buckhaven	1	Lassodie	2
Burntisland	1	Limekilns	1
Cardenden	4	Lochgelly	19
Crombie	1	Lochore	12
Cowdenbeath	24	Lumphinnans	3
Crossgates	2	Milnathort	1
Crosshill	1	Newcastle	1
Cupar (Springfield)	12	Portknockie	1
Dunfermline	61	Oakley	2
Glasgow	3	Portobello	1
Glencraig	8	Rosyth	13
Hillend	1	Saline	2
Hill of Beath	5	South Shields	1
Inverkeithing	11	Valleyfield	4
Jamestown	1	Wellwood	1
Kelty	14		

Incidence of disease among new patients.—The undernoted figures show the results of examination of the 221 new patients :—

42·53 per cent. were found to have gonorrhoea alone.

25·79 per cent. were found to have syphilis alone.

1·35 per cent. were found to have both syphilis and gonorrhoea.

5·43 per cent. were found to be suffering from soft sore.

9·54 per cent. were found to be suffering from minor, non-specific venereal infections.

15·34 per cent. were found to be suffering from conditions other than venereal diseases.

Hospital Cases.—The number of cases admitted to the West Fife Infectious Diseases Hospital for the purpose of isolation or treatment was 17, being 4 more than in the year 1930. Of this number 11 were males and 6 were females.

Of the 11 males—

Two were suffering from syphilis.

Eight were suffering from gonorrhoea.

One was suffering from soft sore requiring operative procedure.

Of the 6 females—

Four were adults suffering from syphilis.

Two were children suffering from gonorrhoeal vulvo-vaginitis.

The total number of days in hospital was 551, representing an average stay in hospital of 32·41 days.

The cases admitted to hospital comprised cases of syphilis in an acute contagious stage of the disease, and cases which required for their satisfactory treatment and progress, absolute rest, adequate diet and general nursing care. Some of these latter were cases of gonorrhoea complicated by prostatic abscess, epididymitis or arthritis, and the excellent results obtained by treatment in hospital fully justified the additional cost incurred.

Bacteriological and Serological Examination.—A very complete examination has been carried out as a routine procedure in all cases and specimens of pathological discharges, blood, etc., have been submitted, as in former years, for examination and report, to the Bacteriological Laboratory, University College, Dundee.

During the year 1,144 specimens were sent for examination. This figure shows a decrease of 221 on that of the previous year.

Treatment.—The hours of opening of the clinic remain as before. As a rule cases of syphilis are seen once weekly by the Medical Officer, are weighed on the occasion of each attendance, urine is examined and treatment prescribed and administered. In the case of gonorrhoea an oft sore, patients are seen twice weekly by the Medical Officer, during the acute stage of the disease, and once weekly thereafter. In addition, these latter patients attend once, twice or thrice daily for prescribed dressings, etc. This latter treatment is in the capable and experienced hands of the medical orderly.

The total attendances at the centres during the year under review were 9,548, a decrease of 153.

All the approved methods of diagnoses and treatment are utilised at the clinic. The amount of treatment given by injection was as follows :

Neo-salvarsan and other arsenical preparations—832 injections.

Sodium thio-sulphate, 441 injections.

Bismuth preparations, 1,627 injections.

Making a total for the year of 2,900 injections.

Premises and Equipment.—The premises now in use at Market street must be considered cramped and badly situated. The approach is short and opening from a main road. It is overlooked by dwelling-houses and patients coming to the clinic are subject to the scrutiny of tenants and passers-by.

A quiet and comparatively secluded approach by a path exists to the west but this is now closed by a gate in the early evening. An endeavour to have this pathway left open until a later hour is very desirable.

A small electric cautery apparatus is undoubtedly desirable but the provision of this would of necessity entail the introduction of electric

light and power circuits to the building. A proper couch for the resting of patients who may feel faint is essential but the present premises are so small that there is insufficient floor space to allow of this provision being made.

In other respects the equipment available at the centre for the treatment of all but exceptional cases, may be considered satisfactory in the meantime.

Results.—The end results of treatment continue to be very satisfactory. No patient is discharged as cured until he has been subjected to a careful scrutiny and test of cure. Treatment is frequently prolonged but the majority of patients continue to attend regularly until discharged.

A small percentage of defaulters undoubtedly exists and with the clinic situated virtually in a *cul-de-sac* and devoted wholly to the treatment of venereal diseases it says much for the attitude of patients and staff, that this percentage is not greater than it is.

As the presence of incompletely cured disease in defaulting patients is a grave menace to the health of themselves and others the time is approaching when some method of control will require to be formulated. In the meantime it is difficult to follow up these cases without breach of the confidence essential to the success of the scheme. This difficulty applies chiefly to the case of males. In regard to females it has been possible to get a message sent through the mediation of the Health Visitors.

Propaganda.—During the year films have been exhibited and an address given in various areas throughout the County. At these lectures an endeavour has been made to cultivate a rational attitude to the disease, and the results in the long run will amply repay the trouble taken.

In submitting this report I must express my appreciation of the valuable assistance rendered by the Medical and Nursing Staff at the West Fife Infectious Diseases Hospital, and to the nurse and medical orderly at the Centre my indebtedness for their constant co-operation throughout the year.

Details of Statistics.

	New Cases.		Syphilis, Gonorrhoea, Sy. & Gon. Soft Sore.						Conditions other than V.D.		Total number of New Cases.	Routine Attendances.		
	M	F	M	F	M	F	M	F	M	F				
1931.														
January ..	22	7	2	0	16	5	0	0	1	0	3	2	29	871
February ..	14	9	5	4	6	1	0	0	0	0	3	4	23	802
March ..	20	3	6	0	11	3	0	0	2	0	1	0	23	850
April ..	17	4	2	2	9	0	1	0	1	0	4	2	21	794
May ..	8	5	2	3	3	1	0	0	0	0	3	1	13	814
June ..	8	2	2	1	4	1	0	0	0	0	2	0	10	703
July ..	7	3	2	2	4	1	0	0	1	0	0	0	10	736
August ..	11	5	2	0	6	1	0	2	0	0	3	2	16	798
September ..	8	2	0	2	3	0	0	0	2	0	3	0	10	715
October ..	21	10	9	3	5	2	0	0	2	0	5	5	31	819
November ..	8	9	1	3	4	2	0	0	0	0	3	4	17	811
December ..	16	2	3	1	6	0	0	0	3	0	4	1	18	835
	160	61	36	21	77	17	1	2	12	0	34	21	221	9548

Record of Injections given and Specimens Examined.

1931.	Arseno- benzol Compounds.	Bismuth Etc.	Sodium- Thiosulphate Etc.	Total number of Specimens examined.
January	70	141	42	141
February	72	145	54	120
March	86	164	60	145
April	61	96	36	130
May	61	151	60	99
June	30	140	32	47
July	58	125	30	63
August	72	135	29	81
September	84	106	35	48
October	77	137	20	86
November	82	151	21	89
December	79	136	22	95
	832	1627	441	1144

MATERNITY SERVICE AND CHILD WELFARE SCHEME.

The scheme in force throughout the Landward Area and twenty-two small burghs continues on routine lines with such minor amendments from time to time as practice proves necessary.

The Annual Report of Dr. Krause is subscribed. The County Medical Officer remains responsible for the granting of additional nourishment, admission to maternity homes and allied questions under the Scheme.

ADDITIONAL NOURISHMENT.—The Health Visitor reports on the health and home conditions where application is made or she considers additional food necessary, the local Public Assistance Officer furnishing particulars of the financial circumstances of the home.

During 1931, applications were received from the Welfare Nurses on behalf of 606 families. Grants of milk, oatmeal, etc., were authorised on behalf of 462 families, 74 grants being on behalf of expectant mothers, 124 on behalf of nursing mothers, 232 on behalf of children under five years of age, and 32 where mothers and children generally would benefit. The cost of the additional nourishment provided amounted to £462 15s 10½d.

MATERNITY HOMES.—Advantage is being taken increasingly by women of the working-class of the facilities offered by Davaar Maternity Home, Dunfermline, and Kirkcaldy Maternity Home. During the past five years the number admitted to the Homes has steadily risen :—1927, 52 patients admitted ; 1928, 83 patients admitted ; 1929, 84

patients admitted; 1930, 131 patients admitted; and 1931, 225 patients admitted. The decided increase in the last two years is in part accounted for by the inclusion of figures in respect of admissions from certain small burghs within the County not previously in the combinations.

One hundred and twenty-five patients were treated in Davaar Maternity Home, Dunfermline, and 100 in Kirkcaldy Maternity Home.

Of the total, viz., 225, 17 or 7.55 per cent. were wholly necessitous, 21 or 9.34 per cent. were partly necessitous, *i.e.*, able only to contribute a modified amount, usually about £2 received as Maternity Benefit, while 187 or 83.11 per cent. were patients who paid the usual fee, viz., £2 on admission and 1s per day of residence in the Home, though a few private patients are included in the latter figure. The sum of £715 3s 4d was contributed by patients and the additional payments by the County Council amounted to £1,091 10s 8½d.

MIDWIVES ACTS.—During 1931, 178 claims were received from Medical Practitioners in terms of Section 22 of the Midwives (Scotland) Act, 1915, involving an amount of £247 16s 6d.

ORTHOPAEDIC TREATMENT.—The child admitted to the Home in the beginning of 1930 was discharged in February, 1931, with instructions to report at the Home in two months time. When she reported in April the Surgeon thought it in the best interests of the patient that she should have a further period of treatment and she was retained and was still under treatment at the close of the year.

Report by Dr. R. A. Krause.

In last year's report the provision made under the Maternity and Child Welfare Scheme for (a) expectant mothers and nursing mothers, and (b) children, was outlined and it was indicated that for the purpose of carrying out that scheme, the County had been divided into seven districts, each under the control of an Area Medical Officer who is assisted by the Health Visitors (whole and part-time).

As a result of further re-organisation it was decided to have only six areas. These six areas are distributed as follows:—

(a) **DUNFERMLINE DISTRICT**—Two—under the charge of Drs. A. Dundie and Jane Macdonald, assisted by seven Health Visitors. Of these, one is employed half-time by the Education Committee for the practical instruction in the schools of mothercraft:

(b) **KIRKCALDY DISTRICT**—Three—under the charge of Drs. Chisholm, Lisbet and Doris Williams. They are assisted by 10 Health Visitors. One of these is also employed half-time by the Education Committee for the practical instruction of school girls in mothercraft. By arrangement with the Fife County Nursing Association, the Health Visiting work in two Burghs is carried out by District Nurses (Lochgelly and Arntisland):

(c) CUPAR AND ST. ANDREWS DISTRICT—One—under the charge of Dr. A. Sheila MacLeod, assisted by four Health Visitors. In the Burghs of Cupar and Newport the District Nurses carry out the health visiting duties.

During the year 1931, the number of births reported to the office was 1,861 boys and 1,818 girls. Whilst in accordance with the provision laid down by the Notification of Births Act, 1907, the bulk of the cases were duly notified, in the case of 101 births this was not done and inquiries had to be made. The number of non-notified cases was distributed as follows:—(a) Dunfermline 7 (under 1 per cent.); (b) Kirkcaldy 72 (3·9 per cent.); (c) Cupar 6 (1·6 per cent.); and (d) St. Andrews 16 (3 per cent.). In the following table the distribution of the births is given. There were 56 plural births (Dunfermline 20, Kirkcaldy 23, Cupar 4, and St. Andrews 9). The number of births attended by a doctor was 2,644 and by midwives 1,010. There were 24 births unattended by either doctor or midwife. One of these was in an institution.

There were 242 infant deaths reported. In Dunfermline 80, Kirkcaldy 122, Cupar 19, and St. Andrews 21. Of these 116 were due to prematurity or debility, 59 to respiratory diseases, 13 to infectious diseases, 12 to diseases of the digestive system (2 being from diarrhoeal conditions), and other diseases or conditions 42. Of the illegitimate babies about 15 were reported dead. In none of these cases was the cause due to apparent neglect.

There were 127 stillbirths throughout Fife. From the nurses reports the most frequent cause for stillbirths seems to be abnormal and difficult labour; another is frequent pregnancies, whilst albuminuria, prematurity, and in rural districts "outworking" are probable causes. In one case where there had been the third consecutive stillbirth, the mother had been treated at the V.D. Centre but had not completed the cure. There is no doubt that more ante-natal care is required for these cases if the number of stillbirths is to be reduced.

Regarding the condition of the homes at the first visit of the Health Visitor, 321 were found to be indifferent and 44 dirty (Kirkcaldy 2, Dunfermline 8, St. Andrews 7, Cupar 0). In all cases where the conditions were definitely insanitary, the attention of the Sanitary Inspectors was directed to these and in certain cases where overcrowding was discovered, lodgers and others had to be removed. In Cupar Anstruther Area the cottar housing conditions are far from satisfactory. There are stone floors, damp walls and small windows. The water has to be carried and there are no wash houses or lavatory accommodations. Fortunately during the year several of the cottar houses have been altered and brought up-to-date.

	Births.		Still.	Pre-mature.	Illegitimate.
	Boys.	Girls.			
<i>Dunfermline District.</i>					
Landward ..	295	297	28	18	35
Culross ..	4	5	..	..	..
Inverkeithing	37	40	2	5	5
Cowdenbeath ..	161	136	11	18	9
Totals ..	497	478	41	41	49
<i>Kirkcaldy District</i>					
Lochgelly Burgh	83	107	4	5	12
Burntisland ..	42	48	1	7	2
Leslie ..	33	34	3	3	2
Markinch ..	15	19	1	1	..
Kinghorn ..	11	10	1	1	..
Leven ..	48	58	5	3	2
Buckhaven ..	198	189	5	5	17
Landward ..	461	457	34	21	68
Totals ..	891	922	54	46	103
<i>Cupar District.</i>					
Cupar Landward	123	107	6	11	11
Cupar Burgh ..	33	33	1	..	2
Auchtermuchty	11	7	..	..	..
Ladybank ..	6	7	1	1	..
Newburgh ..	20	18	2	3	..
Falkland ..	1	1	..	..	..
Totals ..	194	173	10	15	13
<i>St. Andrews District.</i>					
Landward ..	152	102	14	12	14
St. Andrews Burgh	46	57	2	6	5
Anstruther ..	9	7	..	..	1
Elie ..	6	8	1	..	1
Pittenweem ..	13	21	1	1	1
Crail ..	13	12	..	1	1
Tayport ..	31	30	4	1	3
Newport ..	9	8	..	..	..
Totals, ..	279	245	22	21	26

Similarly "the housing conditions of Donibristle and Fordell villages are not at all satisfactory. Most of these houses are damp and the sanitary conditions are very primitive, and not at all suitable for people with large families."

The housing conditions in West Fife area are fairly good with the exception of a few old houses in Kincardine, Culross, Newmills and Valleyfield. In Low Valleyfield especially, a number of tenants have a room and kitchen house sublet. Oakley village still lacks modern sanitary conveniences.

In Cowdenbeath the housing conditions, on the whole, are fairly good. The nurse reported three cases of over-crowding and dirty houses. In one case of overcrowding there was one apartment occupied by five adults and a boy of 13 who required nursing. In the other case a mother with an infant and a young child—both of whom have been ill—are living in an unhabitable house which was condemned long ago. Both of these cases are obviously in urgent need of houses. Many of the families, of course, cannot afford to pay the rent of a newer type of house with modern conveniences.

In Lochgelly, whilst the housing conditions are being gradually improved by the laying on of water, etc., and the housing schemes have provided houses for some families, many small houses have been closed with the result that there is quite a number of sublet rooms, one family in the kitchen, another in the other room. The result is a state of affairs less sanitary and more unhealthy than was the case in the small houses which have been closed. It is usually young married people who live in these sublets.

This tendency to sublet is fairly common in other districts, *e.g.*, Buckhaven, Wemyss and Methilhill, where the houses are in good condition. High rentals and poor financial conditions account for this.

The Health Visitors find that at the "first" visit, the majority of mothers breast feed their babies—about 81 per cent. Whilst the figures vary for the different districts there is not a big difference (1) Dunfermline 769 (135 bottle fed, 28 mixed); (2) Kirkcaldy 1,406 (246 bottle fed, 68 mixed); (3) St. Andrews 400 (68 bottle and 26 mixed feed); and (4) Cupar 274 (72 bottle and 8 mixed feed). A large proportion continue to breast feed for the first three months, but after that a rapidly increasing number change to bottle feeding. There is a temporary diminution of the breast milk when the mothers take up their daily duties and if they could be persuaded to persevere with breast feeding there would be a gradual increase in the flow of milk. One of the difficulties which a number of nurses find is the fact that mothers do not feed their babies at regular intervals—some feed them whenever the baby cries. This tends to shorten the breast feeding period. Adverse economic conditions are also not conducive to breast feeding. Lack of attention to the nipples before the birth is given as

another reason, for the neglected and cracked nipple is sore and the mother less inclined to apply the baby to the breast. Further improper and badly cooked food along with poor surroundings also tend to make mothers unfit to breast feed their babies.

Where artificial feeding is resorted to, cow's milk is used in the majority of the cases. A number resort to patent foods, such as Allenbury's, Glaxo, Trufood, etc., and also a few use Nestle's milk. Here and there, there are mothers who give their babies biscuits and solid food under the false belief that milk cannot be sufficient for a baby to grow strong on. Digestive troubles accompanied by peevishness and irritability soon follow but the mothers only think this a sign of insufficiency of food.

There are now a number of areas in which designated tuberculin-tested milk is available, Wemyss, Elie, St. Andrews and now also in Bowdenbeath. Mothers are being encouraged to use this in preference to the ordinary milk. The cleanliness of feeding utensils is emphasised by the Welfare Nurses with good results. Home pasteurisation of milk is also encouraged wherever the milk supply is not a certified milk.

In their reports some of the nurses draw attention to the needs of the re-school children, particularly the "toddler" (1-2 years). "He is the one in the home that is too often sadly neglected." This applies particularly where the mother has a baby to look after. *Undoubtedly more requires to be done in the way of establishing "play centres."* *Especially where new housing schemes are being set up, provision ought to be made for play centres for little children. This must be emphasised in these days of rapid moving traffic and the tendency to build housing schemes near main roads.*

More attention will also have to be given to the diet of young children. Mothers are therefore being encouraged to attend the Child Welfare Centres where arrangements can be made for health talks, and where the demonstration of how to prepare simple meals, and their cost, should do much to counteract the ignorance of even simple matters relating to dietetics.

During the past winter the possible setting up of nursery schools was considered and approved in principle. The value of such "schools" in helping to improve the physical condition of young children in industrial areas is generally recognised. That there is an equally important educational value is not so generally understood. Such schools help children to be trained to better social habits as well as to use their limbs and brain more fully.

The number of visits made by the Health Visitors was as follows :—
Expectant mothers 3,233, infants and nursing mothers 35,522, children 0-5 years 24,098, inspection of certified midwives 187, tuberculosis patients 6,353 (pulmonary 2,974, non-pulmonary 3,379), or a total of 9,393 domiciliary visits in all.

<i>N.E. Fife</i> Schools.	No. of Families.	No. of Adults.	No. of Children.	Total Quantity of Milk.	Average Quantity of Milk.
Auchtermuchty	66	205	156	223·5	0·6
Cameron ..	12	31	24	41	0·7
Castlehill ..	208	618	547	670·5	0·5
Cellardyke ..	151	431	389	481·2	0·5
Ceres ..	34	95	94	107	0·5
Logie ..	23	74	53	82	0·6
Rathillet ..	19	58	49	72	0·6
St. Andrews Burgh	229	697	546	693	0·5
St. Monance ..	91	267	216	236·6	0·4
Totals (9) ..	833	2,476	2,074	2,606·8	0·57
<i>Kirkcaldy</i>					
<i>Landward.</i>					
Ballingry ..	150	462	438	358·5	0·3
East Wemyss	186	585	469	433	0·4
Kinghorn ..	93	256	229	238	0·4
Leven ..	282	1,165	929	975·5	0·4
Lochgelly R.C.	76	243	273	146·5	0·2
Markinch ..	167	564	421	509	0·5
Methil ..	129	346	415	227·5	0·2
Totals (7) ..	1,083	3,621	3,174	2,888·0	0·41
<i>Dunfermline</i>					
<i>Landward.</i>					
Crossford- Cairneyhill	39	119	96	103	0·4
Foulford ..	260	773	708	493·5	0·3
Torryburn ..	84	235	236	221	0·4
Totals (3) ..	383	1,127	1,040	817·5	0·37
Grand Total (19)	2,299	7,224	6,288	6,312·3	0·46

During the year, the Department of Health asked for the assistance of Headmasters in schools throughout Scotland, for the collection of information regarding milk consumption in the various families of children attending a school. "With the consent and cordial approval of the Scottish Education Department, it is proposed to check, in addition to the information already collected. It is suggested that the Head teachers of a representative proportion of the schools in each area should ask the senior scholars bring, on a given day (say 10th November), the following information for each of their homes:—

No. of Adults in household. (15 years and over).	No. of Children in household. (under 5 years).	Total milk consumed daily in household.
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This information should be written on a piece of paper and handed to the teacher. No names or addresses are wanted, merely figures."

Nineteen schools were selected and in all 2,299 families were investigated. These comprised 9,551 adults and 8,172 children. The total estimated daily consumption of milk was given as 8,181 pints, or an average of nearly half a pint (0.46) per individual.

As one would expect, the average per head (0.57 pint) is highest in the north-east or more rural part of Fife. Here the high figure of 2.2 pints of milk per head in a family was recorded, and there were no families who consumed no milk. In Kirkcaldy Landward District the average per head worked out at 0.41 pint, and the highest figure for a family was 1.6 pints per head. There was, however, a number of families who did not consume milk regularly. For instance, in Methil there were 7, and in Leven 11, and an odd one here and there in other parts of the district. In Dunfermline Landward District the average per head was 0.37 pints—the lowest of the three districts. Here also the highest family figure (1.25 pints per head) was lower than those in the other districts. In this district there were about 13 families who used condensed milk (1 tin a week) and in some cases only occasionally took milk. In one or two families milk was rarely used.

From these figures it is obvious that a considerable amount of propaganda is necessary to get parents to understand the value of milk to growing children. Whilst, no doubt, some of them would explain their small milk consumption on financial grounds, the majority do so because they have no idea the milk is only for babies and even then only during the first few months. The all-round food value of milk is not realised. Probably another factor which may affect a larger number of people, and is appreciated, is the knowledge that milk may be the means of spreading tuberculosis. The encouragement to milk producers to supply larger quantities of Grade A (tuberculin tested) milk would go far to reassure the general public.

Reports by Infant Protection Visitors, 1931.

	Dun-ferml'ne	Kirk-caldy.	Cupar.	St. Andr's.	Total.
No. of Children on Register, April, 1931	20	26	5	..	51
Removed from District ..	1	..	..	..	1
Returned to Relatives ..	3	..	2	1	6
No. now over 7 years ..	1	4	2	..	7
Preliminary Reports ..	5	18	9	1	33
" (no fireguards)	4	12	..	..	16
Visits paid	59	86	27	1	173
Attention drawn to State of Cleanliness, etc. ..	3	7	..	..	10
No. who do not have fireguards as at October, 1931	9	20	..	..	29

Infant Protection.

In accordance with the Children Act, 1908, Part I. which deals with Infant Life Protection, and Section 2 (2) it was decided to appoint the Health Visitors as "Infant Protection Visitors whose duty it shall be from time to time to visit any infants referred to" in the Act, "and the premises in which they are kept, in order to satisfy themselves as to the proper nursing and maintenance of the infants or to give any necessary advice or directions as to their nursing and maintenance."

The Health Visitor is notified of every infant put on the register and having visited the home of the "Infant" sends in a preliminary report. Thereafter quarterly revisits are paid to the infant and revisit reports sent to the central office. As a result of the first batch of preliminary reports which indicated that a large number of the homes had no fireguards, a circular letter was sent to the nurses requesting them to hand to the "guardians" at their next visit a printed form in which the attention of the guardian was drawn to Section 15 (Part I.) of the Children Act, 1908. According to this Section, persons in charge of a child under the age of seven years are liable, if any burning or scalding accidents should take place, as a result of lack of such fireguard, to a fine up to ten pounds. As a result of this a large number provided themselves with fireguards or made other suitable arrangements.

An analysis of the preliminary reports (33) shows that on the whole the guardians are satisfactory. In only one case was the report as to the character and conduct of the guardian considered unsatisfactory. The state of the clothing was unsatisfactory in two cases and in four cases the personal cleanliness was only fairly good, but only in one case was the bedding reported as only fairly good. The reports regarding the state of the houses were not quite so good, only 26 being considered satisfactory. Despite these various criticisms the reports show that the nursing and maintenance of all the infants was good and satisfactory and only one infant was found to be in only fair health.

Midwives Acts, 1915 and 1927.

The number of certified Midwives practising in the Burghs and Landward Areas of Fife during 1931 was Dunfermline 22, Kirkcaldy 2, Cupar 5, and St. Andrews 6.

During the year there were 230 cases of emergency in the Midwife practice where medical assistance was called for. In 1930 the number of such emergency cases was 159. In the following table an analysis of the types of cases for which medical assistance was sought in the various districts of Fife is given.

	Dun-ferml'e.	Kirk-caldy.	Cupar.	St. Andr's.	Total.
Delayed labour and Uterine Inertia	24	35	..	2	61
Abnormal and difficult labour	12	8	..	..	20
Torn perineum	11	17	1	1	30
Maternal haemorrhage :—					
(a) Ante partum .. ..	..	4	..	1	5
(b) Post partum .. ..	..	2	..	..	2
Placenta praevia .. ..	..	2	..	..	2
Adherent or retained placenta	3	6	..	..	9
Contracted pelvis and faulty passages	4	..	..	..	4
Pain and puffiness, legs, etc.	3	3	..	..	6
Weakness :—					
(a) Mother	1	3	..	..	4
(b) Baby .. ..	..	2	..	..	2
Premature births	5	9	..	..	14
Still births	6	3	..	..	9
Inflamed and discharging eyes	5	7	..	2	14
Jaundice	2	2	..	..	4
Deformities and malformations (meningocele, Spina Bifida, etc.)	3	6	..	..	9
Raised temperature (rigor, etc.)	4	6	..	..	10
Asphyxia	1	1	..	1	3
Albuminuria	2	..	..	..	2
Baby ill (cold, etc.)	6	1	..	1	8
Miscellaneous (threatened abortion, fits, suspected twins, miscarriage, etc. ..	3	9	..	..	12
Totals	95	126	1	8	230

Of the total number of births (3,679) in Fife, 1,010 were attended by midwives. There were 115 deaths of infants within 10 days of birth and of these 21 occurred in the practice of midwives. The following figures indicate the number of conditions occurring in the practice of midwives during the past year. The figures in brackets are the totals for the County. Ophthalmia neonatorum 25 (82), puerperal fever 6 (19), and one died (6) puerperal pyrexia 6 (41) of these none died (1), stillbirths 22 (127).

The Midwives were visited by the Health Visitors and periodic inspections carried out. In all 156 such visits were made. There was a number of cases of seeming irregularity investigated as well as several cases where omission to notify ophthalmia and other conditions was reported. In none of these inquiries was it necessary to report any case to the Central Midwives' Board.

In a few of the mining districts there has been an increasing tendency, because of unemployment, to use handywomen, and several have had to be warned by the Health Visitors.

Ophthalmia Neonatorum.

During 1931 the number of cases of ophthalmia neonatorum notified was 82 (Kirkcaldy 40, Dunfermline 33, Cupar 7, and St. Andrews 2). Twenty-five of these occurred in the practice of Midwives. The number of cases removed to the Infectious Diseases Hospital was 12. Owing to the relatively large number of cases occurring in the Cowdenbeath area, the Midwives were interviewed in order to ensure uniform preventive measures as well as to bring about more co-operation with the Health Visitors.

Puerperal Fever and Puerperal Pyrexia.

There were 19 cases of puerperal fever and 41 cases of puerperal pyrexia notified. The number of cases removed to Hospital was 1 puerperal fever, and 23 puerperal pyrexia.

Pneumonia.

The Health Visitors paid 524 visits to about 335 cases of pneumonia notified to the Central Office. Of 27 infant cases 23 were treated at home, of these 9 died, and 4 were treated in hospital—no deaths. There were 127 cases of pre-school and school children, of these 98 were nursed at home, and three died, and 29 were admitted to hospital and of these three died. By the visiting of these cases the nurses are in position to draw the attention of the responsible Medical Officer to the need for hospital treatment.

Maternity and Child Welfare Clinics. New Cases and Total Attendances, 1931.

Clinic.	Expect't Mothers.	Infants under 12 mths.	Children 1-5 yrs.	Other Cases.	Total Attend'es.
Auchterderran	6	85	30	3	393
Burntisland ..	..	49	42	22	343
Crosshill ..	19	116	48	12	609
Denbeath ..	2	227	5	..	2,202
East Wemyss ..	..	34	..	..	63
Leven ..	4	92	58	10	1,349
Lochgelly ..	9	148	45	4	1,332
Markinch ..	..	30	22	2	176
Methilhill ..	..	14	2	..	30
Thornton ..	..	29	34	..	252
Crossgates ..	..	43	10	..	224
Cowdenbeath	25	162	11	1	1,434
Inverkeithing	2	42	8	..	115
Kelty ..	15	55	26	25	295
Torryburn ..	2	4	7	8	60
St. Andrews ..	37	123	11	..	1,684
Tayport ..	3	32	15	..	138
Newburgh ..	..	30	26	3	208
Totals ..	124	1,315	400	90	10,907

Maternity and Child Welfare Centres.

In the north-east of Fife two centres were established—one at Newburgh and the other at Tayport. In the case of Newburgh the clinic used is the School Clinic and is quite satisfactory except that there is inefficient heating. As Dr. MacLeod reports “a temperature suitable for an ordinary class-room, is not suitable for a clinic where children are to be undressed.” In Tayport, the clinic is held in the school cooking-room—“an unsatisfactory state of affairs.” The majority of the cases brought to the clinics were for the purpose of seeing what progress in weight the baby was making, as well as for advice regarding feeding, etc. In the case of Tayport, Dr. MacLeod states that “many of the babies most in need of care are not seen at the clinic, owing to the mothers working in the mill, and being unable to bring their babies for advice.” In the other parts of this area where there are no child welfare clinics, arrangements are made by the nurses to bring children to the schools on the days when the Area Medical Officer is carrying out medical inspection of school children.

In St. Andrews the majority of the cases seen at the Clinic are feeding cases (all the infants and 9 of the pre-school children). There were 171 new and 453 old cases dealt with, and in all, these made 1,684 attendances.

In the Kirkcaldy District as indicated in last year's report, Maternity and Child Welfare Clinics were established at a number of school clinics, namely, Crosshill P.S. (Glencraig), Auchterderran H.G., Burntisland H.G., Markinch H.G., Methilhill P.S., East Wemyss and Thornton P.S. At the last four only weighing of babies is carried out.

It is extremely unfortunate that nothing has been done to improve the clinic conditions at Lochgelly. Here although there is a very active clinic the conditions under which the work has to be carried out is disgraceful. It says a lot for the patience of the mothers that they are prepared to sit in a draughty corridor for a considerable time to await their turn to see the Nurse or the Doctor. Similarly at Denbeath the conditions are far from being satisfactory. In the course of the winter, a change was made here in the clinic time-table with a view to reducing the overcrowding that tended to occur weekly on the clinic day. Dr. Chisholm found that very few mothers attended on the forenoon of Tuesdays. It was therefore decided to try another afternoon, and Friday was chosen. The Buckhaven and Denbeath mothers come on Tuesday and those from Methil, Aberhill and Innerleven on Friday. As a result of this change the working of the clinic is more satisfactory. A large central clinic is what is really needed to meet the needs of the district adequately.

Of the new clinics, that at Crosshill has shown a very large increase in the number of mothers attending the fortnightly clinic, and increased accommodation is urgently called for. An empty class-room is to a small degree temporarily solving our difficulty.

Whilst the majority of the cases brought to the clinics are for advice regarding feeding, other cases are also brought such as, skin conditions, deformities, glandular swellings, etc.

Dr. Chisholm draws attention to a case which illustrates the value of the Welfare Clinic. A girl of 10 years, who had never been to school was brought to the clinic. Her weight was 18 lbs. She had been in hospital when 3 years old and sent home as incurable (vomiting). As an obstruction was suspected, arrangements were made for the admission of the case to the Sick Children's Hospital where the condition was diagnosed as congenital oesophageal stenosis. A gastrostomy was performed. In less than a year she has doubled her weight and is able to run about in Hospital.

Encouragement is given for mothers to bring the pre-school children and especially the "toddler" to the clinics and advice has been given to a number of these with minor as well as major deformities (double congenital dislocation of the hip).

Dr. Nisbet in his report states that "the goodly numbers attending the clinics, with the exception of Markinch, are gratifying" and it is encouraging to record the continued support from the majority of the local practitioners. At all the clinics, the superiority of breast feeding is always emphasised and wherever it has to be suspended, the substitution of cow's milk is always in the first instance recommended.

Dr. Nisbet also reports that "during recent months there has been a considerable increase in the numbers of necessitous cases coming to the clinics, either on their own accord, or being sent by the family doctor. They sought help, in the form of nourishment, either for themselves as expectant or nursing mothers, or for their infants."

The inadequacy of the clinic accommodation in the Lochgelly, Glencraig and Auchterderran Districts is brought out by the large number of mothers with infants (72) or with pre-school children (366) who had to be referred to the Area Medical Officer at his school visits. Also ante-natal work cannot be properly developed because of the unsuitable premises. Any expectant mothers who visit the clinics come primarily to ask for "extra nourishment."

In the Dunfermline District the only clinic of any importance is that at Cowdenbeath. There the attendance has been well maintained. Practically all the children brought to the clinic were feeding cases. Of the expectant mothers three consulted at the clinic *re* diet, seven had their urine tested, fourteen applied for extra nourishment and one came to make arrangements for dental treatment.

At Kelty increasing numbers of mothers with infants and children are attending the clinic and the need for increased accommodation is becoming serious. At Inverkeithing the position of the school clinic

prevents mothers with babies from attending the clinic. Arrangements are being made to transfer the Child Welfare Clinic to the old school premises where mothers will not require to climb flights of stairs.

At Torryburn the school clinic is too far removed from the main part of the population that particularly needs advice and help. Consequently the attendance of mothers at the clinic remains small.

Ultra-Violet Ray Therapy.

Treatments at Ultra-Violet Ray Clinics.

Clinic.	Children.	Adults.	Attendances.
Cowdenbeath	51	4	1,308
Leven	78	2	1,818
Lochgelly	118	9	2,590
Totals	247	15	5,716

There are three centres at which treatment by ultra-violet rays is available : (1) Cowdenbeath (one mercury vapour lamp) ; (2) Lochgelly (one mercury vapour lamp) ; and (3) Leven (two carbon arc lamps).

The following were the main types of cases treated at the Cowdenbeath Clinic :—General debility 15 ; malnutrition 7 ; rickets 7 ; enlarged cervical glands 8 ; tubercular abdomen 2 ; alopecia areata 7 ; and bronchitis 2. Of the cases treated, 12 left off treatment at various times. Six of these had gone through half the course and six had had three or four exposures. As a result of treatment, 14 children showed marked improvement, 8 slight improvement and in 18 children no improvement. With certain mothers lack of interest in their children's welfare makes the attendances very irregular in spite of continual warning from the nurses.

The cases treated at Lochgelly Clinic were mainly malnutrition, debility, marasmus, tubercular glands, skin conditions, asthma and ambulant chorea. Here there is the same complaint of young children not being brought regularly or not for a long enough period to obtain the full benefit. Of the infants and children treated, 76 showed marked improvement, 13 slight, and 27 no improvement.

At Leven there has been a steady increase in the attendance during the year, chiefly due to the general practitioners making more use of this form of therapy. The types of cases treated were enlarged glands 12 ; rickets 14 ; malnutrition 9 ; anaemia 3 ; general debility 4 ; bronchitis 3 ; chilblains 3 ; etc. Two adults were treated for lupus vulgaris. There was marked improvement in 25, slight in 27 and none in 5 cases. The rest of the cases had only received a part of the necessary treatment.

The value of periodically testing the strength of the ultra-violet ray radiation of the mercury vapour lamps was demonstrated this winter. The lamps at the Cowdenbeath and Lochgelly Clinics were tested and a considerable difference found in the time required to produce "erythema" or reddening. Three months later the older burner at Cowdenbeath had to be replaced and tests were again carried out when the time exposure at Cowdenbeath was found to be markedly shorter, and the time exposure at Lochgelly increased. Unless periodic tests are thus carried out a really scientific dosage of ultra-violet rays is impossible. At Leven the lamps used are of such low amperage that it requires nearly an hour's exposure to produce satisfactory results. Whilst this longer exposure has probably some advantages, it must be remembered that more current is required and more of the staff's time is taken up.

Whilst necessitous adult cases requiring U.V.R. treatment can be treated at the three clinics, we have found it necessary to cut down the numbers and only treat a few selected cases.

Dental Treatment.

Pre-school children who require dental treatment are treated at the ordinary school clinics. There are twenty-three school clinics (Dunfermline District 7, Kirkcaldy District 9, Cupar and St. Andrew Districts 7). Whilst the numbers, as yet, are small, there are indications that increasing advantage is being taken of these clinics. In the north-east of Fife, 26 children were referred to the dentist, necessitating about 59 extractions. In the Kirkcaldy District, 47 pre-school children had 170 teeth extracted, and seven of the children required general anaesthetic. In the Dunfermline District 30 children require treatment and 69 extractions were carried out. Five of the children had the extractions carried out under gas anaesthesia.

Expectant and nursing mothers who are in necessitous circumstances are referred to the Dental Officer by the nurses and Medical Officer. Similarly, cases on the Public Assistance roll who require dental treatment are referred to the dental clinics. There were 19 adults treated necessitating 174 extractions, 4 fillings and the insertion of 3 dentures. Of these cases 7 were treated under a general anaesthetic (3 gas and chloroform).

At the request of the Police Committee arrangements have been made whereby dental treatment and the supply of dentures are provided for members of the police force.

Eye Refractions.

The "eye" scheme allows for the examination of pre-school children as well as necessitous cases by the Area Medical Officers at one of the following eye clinics:—Torryburn, Dunfermline (for Inverkeithing and

Carnock District), Cowdenbeath, Lochgelly, Auchterderran, Burntisland, Markinch, Buckhaven, Cupar, Ladybank, St. Andrews, Newburgh and Anstruther. Cases of special difficulty are referred to the Eye Specialist. A number of the cases referred to this Department by the Public Assistance Officer had already been examined at the Royal Infirmary, Edinburgh. These cases had to be referred to one of our eye clinics to be measured for the size of frames.

Mental Defectives—Institution Cases.

The provision of Institutional accommodation for mentally defective children has been publicly considered in Fife repeatedly by the various public bodies. As a result of the re-organisation of the various Services under one body—The Fife County Council—this important aspect of social work has again been brought to the forefront. Whilst it was known that there was a number of cases requiring institutional treatment, the number of such cases was indefinite. Consequently it was decided to make a survey throughout the County in order to obtain more definite knowledge as to the numbers in different parts of Fife.

As there is a good deal of misconception regarding the different types of mental defectives, the following brief classification may help laymen to understand the social problem which confronts us to-day regarding these unfortunates. Mental defectives can be divided into educable and uneducable. The Education Committee are responsible for the education of the former, and the Mental and Lunacy Committee are responsible for the latter. The former constitute about 1 to 1½ per cent. of the school population, the latter only a small fraction of one per cent. The division of the mentally defective children into educable and uneducable helps us only to a small extent, in determining cases suitable for institution or otherwise.

There are the children who are very definitely educable—high grade cases of mental defectives—whose social behaviour and moral conduct is such as to constitute them a definite menace to the community, and their committal to an institution may be necessary even for their own good. Then there are cases where the home conditions are such, that the children must be removed, or, the cases in whom there is also a physical defect so marked that the child requires nursing care. All these, as well as others, although educable, require institutional treatment. On the other hand there are “uneducable” cases where the home conditions are such that the child can be properly looked after, and where the need for institutional treatment is not necessary.

The number of children from Fife who are at present receiving institutional treatment is about 54. Of these 41 were placed into an institution by the Public Assistance Committee and 13 by the Education Committee. Between the years 1922 and 1930 (October), 82 children were notified by the Education Authority as uneducable.

From the recent reports of the Area Medical Officers a further 51 cases were stated to be in need of institutional accommodation. As a conservative estimate, accommodation for about 120 children will have to be found. This figure, once it is known that institutional accommodation is available, will certainly be exceeded.

EXAMINATION OF MORBID PRODUCTS.

The number of specimens submitted for examination by medical practitioners from persons resident within the County area during 1931 was 277 as compared with 220 in 1930 and 167 in 1929. In addition 90 specimens of sputum were sent for investigation by the Tuberculosis Officer of which 18 were positive.

The bacteriological examination of morbid material is undertaken by Professor Tulloch, University College, Dundee.

Morbid Products, 1931.

Fife County.

Nature of Specimen.	Positive	Negative	Total
Throat Swabs for Diphtheria	7	119	126
Blood for Typhoid Fever .. ..	..	21	21
Sputum for Tuberculosis	26	104	130
Total	33	244	277

BUILDING BYELAWS.

The plans examined and reported upon relative to the Landward Area of the County comprised proposals to build 392 new houses and alterations and extensions to 29 existing houses. Plans for the erection of premises for purposes other than housing involved 41 new buildings and alterations and extensions to 28 existing buildings. There was one restoration of a dwellinghouse after fire with minor alterations and a ship's cabin was approved for housing purposes.

HOUSING (RURAL WORKERS) ACT, 1926.

In all, 202 houses were approved for renovation in terms of this Act (Cupar District 89, Dunfermline District 23, Kirkcaldy District 74, and St. Andrews District 16), and the work of alteration, extension and repair has been undertaken. A number of applications additional to the above were approved but the work has not yet been started. A proportion of the applications received are refused where the premises are unworthy of further expense or the work proposed is insufficient to warrant the grant being given.

Excellent work has been done under the Act which has proved a boon in the rural agricultural areas and an endeavour is being made to secure increased advantage being taken of the Scheme in certain areas which have shown belated appreciation of its benefits.

HOUSING.

The following building programme representing the minimum essential housing requirements of the County Landward Area was submitted in May for approval by the County Public Health Committee. At that time, no detailed complete survey had been made of the housing of the County and it was recognised that with such information available requirements would be substantially increased. The programme included for 1931 certain developments which had been sanctioned and, but for the change in Local Government administration at 16th May, 1930, would have been completed by the District Committee of Kirkcaldy. The scheme for additional housing at Kelty had also been well discussed by Dunfermline District Committee prior to their demise in May, 1930.

	New Houses.	1931.	1932-33.	Total.
Cupar District	60	72	132
St. Andrews District	70	30	100
Dunfermline District	160	174	334
Kirkcaldy District	304	80	384
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Fife County	594	356	950
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The programme was approved and the progress made is defined in the District Reports.

MILK SUPPLY.

The conditions under which the Milk Supply of the County is produced are undergoing steady continuous betterment, in respect of both (1) the structure of dairy premises and (2) methods of production securing a higher standard of cleanliness.

When application is made for registration, the premises are examined with a view to securing compliance with the terms of the Dairy Bye-laws regulating structure, cubic space, floor area, lighting, ventilation, water supply, drainage, etc. A better standard in the handling and care of milk is being inculcated and there are signs of conscious effort on the part of dairymen to improve their methods.

Where premises do not comply sufficiently with the terms of the Dairy Bye-laws, provisional registration only is granted until all necessary structural alterations have been completed.

Apart from pasteurised milk, there is but a small volume of milk produced in the County under the provisions of the Milk (Special Designations) Order and it seems doubtful whether any great increase in the numbers applying for licences under the Order will be secured. Particulars of the designated milks produced are furnished in the District Reports.

ANNUAL REPORT OF COUNTY VETERINARY INSPECTOR :—During 1931 Mr. R. G. Anderson, F.R.C.V.S., made 16,190 examinations of cows, of which 71 were condemned under the Tuberculosis Order, 1925, 26 of this number suffering from tuberculosis of the udder. In 1930, 65 cows were found on examination subject to condemnation under the Tuberculosis Order and 25 were suffering from tuberculous udder. As the dairies are inspected twice annually, it would appear that approximately one per cent. of the milk cows of the County are suffering from advanced tuberculosis and about one-third per cent. from tuberculosis of the udder.

In 1931, there were 390 dairies with 7,777 cows in the Landward and small burgh areas of the County.

The following extracts from the Annual Report of the County Veterinary Inspector for 1931 are submitted for information :—

“ The outbreak of Foot and Mouth Disease during the summer interfered to a considerable extent with routine inspection of dairies, owing to the great risk of carrying infection in this, the most readily infectious of all known diseases.

When Foot and Mouth Disease makes its presence known, there must always be a time of great anxiety to stockowners and all whose duties bring them into contact with susceptible animals, owing to the dangerous infective state of affected animals, in the early stages of the disease, before symptoms are noticeable ; such persons may unknowingly have been in contact with the disease and become unwitting carriers of infection. It will thus be seen that routine inspection of dairies becomes one of the first duties to be discontinued till the infected places or areas become accurately defined.

All registered dairies in the County and Burghs administered by the County Council have been inspected at least twice during the year.

Exempted premises, *i.e.*, sellers of surplus milk, are treated as registered premises so far as Veterinary Inspection of the animals is concerned.

A number of visits, additional to a bi-annual inspection, have been made in response to reports by owners of cows or by Veterinary practitioners, where tuberculosis in one of the forms prescribed by the Tuberculosis Order of 1925 was suspected to exist.

Reports by such owners are not so numerous or timely as they might be, and if an estimated inadequacy of the compensation allowed for slaughtered animals under the Tuberculosis Order, 1925, is the actual reason, there is contained in this neglect a grave reflection on the stockowners' estimate of values.

It cannot be profitable to a stockowner to retain a source of infection, or other more valuable stock a day longer than is necessary to have the case recognised and dealt with: no compensation could be considered equal in value to the earliest possible removal of infection. Neglect to report cases of Tuberculosis which come within the clearly defined scope of the Tuberculosis Order of 1925 is emphasized as being to the detriment of the owners' interest and the above remarks are the expression of my opinion that increase of compensation is not a remedy or conduct detrimental to Public Health interests.

Lack of appreciation of the infectivity of tuberculosis is also shown in connection with cases which are reported. These are frequently well established cases, but only on the most rare occasions is the suspected animal found to have been isolated and the stall disinfected. The question of compensation here would seem to be whether the Local authority should sanction any payment as no very useful public interest is being served by the removal of an animal, which has already done a great deal of harm, and, apart from the Tuberculosis Order compensation, would already have gone to the knacker.

The want of isolation premises may constitute a difficulty, but this is an illusory excuse—ignorance in some cases, carelessness in most are the real explanations—as only the most primitive shelter is required for a tuberculous subject—the fenced off corner of a shed being quite sufficient if the weather prevents living entirely in the open. Additional visits have also been made to premises when positive results to the biological examination of milk samples from suspected tuberculous udders, or of milk samples taken by other (consuming) Local Authorities or reports by the County M.O.H. of cases of tuberculosis due to ovine infection have been received.

In the latter two instances it is not always possible to discover the culpable cow as in the interval the normal movement of stock may have already secured her removal. It is however sometimes possible to report that the probable culprit has already been effectively dealt with under the Tuberculosis Order of 1925. One owner was convicted and fined for failure to report a suspected case of tuberculosis of the udder.

The general condition and cleanliness of the cattle in the District.

In this respect owners readily fall into three classes, Those who with proper appreciation of the responsibilities attaching to the production of an article of food of special importance as the chief diet of young

children and invalids, keep their animals in good condition, and clean and are particular in their methods of milk production. For such, Bye-laws require no emphasizing and need hardly exist.

Others have less urgent ideas of the demands of pure milk production and are complacently satisfied with a second rate attention to detail: for such and the next class bye-laws would require to have greater definition to bring to their notice what should be of itself obvious.

The third class, fortunately a small one, should have no connection with the production of milk.

The question arises whether certification should be granted to any one on the sole basis of satisfactory premises. It would seem desirable that some evidence of fitness—a mental rather than a physical quality—should be insisted on as might be secured by granting only a provisional certificate to applicants for new licences for one year.

The nature of the fodder and diet as affecting the quality of the milk.

No instances of inadequate or improper diet were observed though some dairies contained cows which were generally somewhat poor. Hay of 1931 crop was deficient in feeding value and dusty, and turnips less valuable than usual. Errors of wrong feeding were occasionally noticed and corrected, these being likely to taint the milk; such is the feeding of turnips, silage or flavoured foods before milking. The more general use of drinking bowls and dry feeding as compared with hot mash feeds is a great improvement in dietetic management.

The manner of the disposal of milk from diseased cows.

Where tuberculosis is suspected the milk is stopped for human use and fed, boiled, to calves or pigs till it is proved not to be affected.

Of 193 cases of non-tubercular induration 93 tested were negative to biological examination of the milk. The others were due to known causes. Milk from cows obviously ill, sickness, retained placentae, mammitis or where milk is commercially unsuitable from taint or colour is invariably kept out of the milk supply.

It is a custom to put calves to suckle cows having one or more chronically diseased quarters. It is recommended that such cows be hand milked and the product of the sound quarters only, fed to calves, after boiling, as the chronic disease may be tuberculosis and the seemingly non-affected quarters giving infected milk.

INSPECTION OF GRADED HERDS.—Three yearly clinical inspections were made of all graded herds except that of Wemyss Castle.

The Tuberculin Test was applied to Hospital Mill Herd twice during the year—21/4/31, 26 cows tested; 26 passed the test. : 11/11/31, 37 cows and heifer tested; 36 passed.

West Balrymonth, St. Andrews—13/4/31, 47 cows, 10 heifers, 1 bull passed : 2/11/31, 51 cows, 20 heifers passed.

MEAT INSPECTION.—Detained carcasses were inspected in the burgh and other slaughterhouses in the Western part of the County as follows :

Leslie—4 bullocks (fat) totally condemned.

Cowdenbeath—1 bullock (fat) partial condemnation ; 1 cow (fat) partial (non-tuberculous).

Markinch—3 bullocks (fat) total condemnation.

Burntisland—2 bullocks (fat) partial condemnation.

Buckhaven—1 bullock, partial condemnation.

Leven—1 heifer, total.

Inverkeithing—1 bullock, total.”

The main purpose of the County Council in establishing the whole-time appointment of County Veterinary Officer was to secure by the inspection of dairy cattle a clean wholesome milk supply or, in other words, the elimination of infection from milk.

Apart from the extraneous germs occurring in milk from carelessness and lack of cleanliness in production and handling and the transference of milk by human agency of those of scarlet fever, diphtheria, typhoid fever, sore throat, etc., the tubercle bacillus of bovine type is the commonest disease-producing organism found in milk. The tubercle bacillus of bovine origin is found not only in the milk of the cow suffering from tuberculosis of the udder but may also be present in the milk of any cow suffering from tuberculosis without obvious or palpable lesion of the udder.

The Tuberculosis Order, 1925, furnishes the statutory authority under which the County Veterinary Inspector acts in dealing with tuberculous cattle. Unfortunately the Order permits only of the condemnation and slaughter of cattle suffering from advanced tuberculosis, viz. :—“Tuberculosis of the udder or tuberculous emaciation or giving tuberculous milk, or suffering from a chronic cough or showing definite clinical signs of tuberculosis.” When a milk cow is suffering from tuberculosis as defined in the Order it means that the animal is in process of dying on its feet and has done much of the damage the Order was presumably intended to prevent. Another strange and illogical provision of the Order is that the owner of the stock suffering from advanced tuberculosis receives financial compensation for their loss when, as the County Veterinary Inspector points out, they are only fit for removal to a knackery.

The Tuberculosis Order, apart from the expense it entails, is in great measure useless for the control and prevention of the spread of tuberculosis in dairy cattle. The number of animals which serve as foci of open infection is certainly lessened when the Order is actively en-

forced but, as cattle suffering from advance disease only may be dealt with, the spread of infection to other units of the herd has already taken place and thus the vicious circle is complete.

The Tuberculosis Order cannot therefore prove an important or valuable factor, despite the cost it entails, in the eradication of tuberculosis in cattle or the elimination of tuberculous milk.

Tuberculosis in man is caused by either of two types of the tubercle bacillus (1) the bovine, which has its source in the cow and gains entrance to its human host by the consumption of milk in its natural or raw state, and (2) the human, which invades the body by way of the air passages. It is with the cow as a source of infection however that we are dealing.

It has been estimated, and the estimate is trustworthy, that 40 per cent. of the cows of Great Britain are infected with tuberculosis although only a proportion of them are capable of spreading the infection; that one-fifth per cent. of the cows of the Country are suffering from tuberculosis of the udder and giving tuberculous milk that 40 per cent. of the cows slaughtered in public slaughterhouses show definite signs of tuberculosis; and that on the average about 7 per cent. of the milk of the country contains living tubercle bacilli.

In so far as man is concerned, about 6 per cent. of the total deaths from tuberculosis are caused by the bovine type of the bacillus; about 2,000 deaths mostly of children occur annually from this cause, and, as a minimum, 4,000 fresh cases of bovine infection occur annually. It is apparent therefore that an immense amount of sickness and suffering often entailing permanent crippling and deformity, results from the consumption in the raw state of milk from tuberculous cows.

Bovine tuberculosis could readily be wiped out if the Government cared to undertake the task: its eradication is practicable but will not be taken up until the layman interests himself in the question.

Dr. Stanley Griffith of Cambridge has suggested that if all cows were tuberculin-tested, the reactors could be segregated in one group of farms and the non-reactors in another group containing the most up-to-date buildings. The non-reacting group would be retested in three months and thereafter at intervals of six months, any animals reacting being transferred to the reacting group. The milk from the non-reactor group of farms would be tuberculosis free.

The reactors would be used for breeding, the calves being removed from their mothers to new inexpensive sheds away from possible sources of infection and brought up on sterilised or tubercle-free milk. After three months, the calves would be tuberculin-tested, any reactor being slaughtered. The reactor group of cows would be inspected periodically by veterinary surgeons, any cow showing signs of clinical tuberculosis being slaughtered. As the reactors became reduced in

umber by slaughter, they would be concentrated in fewer and fewer farms, the vacated premises, after thorough disinfection or reconstruction, being filled with young tubercle-free stock.

The milk from the reactor group of cows would be sent to a pasteurising plant.

Dr. Griffith's plan, which is a modification of that of Bang with an area as unit instead of a single farm, does not entail the wholesale slaughter of reactors, and appears a practical feasible scheme for the abolition of the disease.

As the Tuberculosis Order, 1925, is not likely to reduce the prevalence of bovine tuberculosis and as it is improbable that the Government will adopt a practical scheme for the eradication of the disease in the immediate future, other measures should be taken for the provision of a safe milk supply.

So far as tuberculous milk is concerned, the risk can be avoided by obtaining the supply from herds certified free from tuberculosis or, on the other hand, by the sterilisation or pasteurisation of milk.

Sterilisation, for all practical purposes can be carried out in any household by raising the milk to boiling-point and cooling rapidly in cold water. Objection is taken, however, to the altered taste of the milk.

Pasteurisation is defined by the Milk (Special Designations) Order as the retention of milk at a temperature of not less than 145 and not more than 150 degrees Fahrenheit for at least half an hour and immediate cooling to a temperature of not more than 50 degrees Fahrenheit.

Empirically, there is no doubt that the pasteurisation of milk as defined in the Milk (Special Designations) Order is a definite safeguard against the common milk-borne infections.

Certified and Grade A (Tuberculin Tested) milks are a safeguard against tuberculosis, but are possibly as liable to convey chance infections, *e.g.*, those of scarlet fever, diphtheria, typhoid, etc., as the ordinary trade milk supply.

In these circumstances it is difficult for the Medical Officer of Health to frame a decision other than that efficient pasteurisation is a necessity at the present time if milk-borne infection is to be prevented. Chance infection of non-pasteurised milks by missed cases or carriers of the common infectious diseases conveyed by milk cannot be secured by the most thorough precautions undertaken as a routine by the medical officer.

It is common knowledge that a milk carelessly produced in unsatisfactory dirty premises by unclean milking methods and often containing a considerable proportion of manure, cow hair, etc., can be rendered safe for consumption by pasteurisation and it has occurred that milk in bulk has been accepted from non-registered producers by those managing pasteurising plant.

For many years past there has been a steady continuous improvement in the dairy premises of the County relative to the housing and general care of the cattle and the cleanliness secured in the methods of production of milk in regard to workers, cows and equipment.

Supervision, active and continuous, on these lines is essential if designated milk, untreated by heat, is to be produced and is equally necessary for the ordinary trade fresh milk.

One fears, however, that if the consumption of pasteurised milk becomes general or statutory, the tendency of the ordinary milk producer will be towards a lowering of the standard of cleanliness.

RIVERS POLLUTION.

The most seriously polluted rivers of the County are the Leven and Ore which were the subject of inquiry by the Scottish Advisory Committee on Rivers Pollution Prevention during 1931. The following preliminary statement covering generally the condition of both rivers in respect of pollution was submitted to the Secretary prior to giving oral evidence before the Advisory Committee:—

“ 8th June 1931.—The river Leven has its source in Loch Leven (in the County of Kinross), the top water level of which is approximately 350 feet O.D., and enters the Firth of Forth at Leven after a course of about fifteen miles almost directly eastwards.

Loch Leven serves as the drainage basin for the major area of Kinross a County of sparse population (7,963—census, 1921), the only township of any size being the Burgh of Kinross (population 2,631) and the village of Milnathort (population 1,207). The Burgh has sewage disposal works, the effluent from which enters the Loch but of the nature of the Works and their effluent I am ignorant. Milnathort possessed of sewage disposal works, producing a very satisfactory effluent which discharges to the North Queich River and thence to the Loch. Milnathort Sewage Works have no adverse effect on the North Queich, all trace of the effluent being lost within a few yards, the dilution by the River being many hundred times that of the treated sewerage.

The population of the County of Kinross is practically stationary and is mainly employed in agricultural pursuits and its effluent drainage is not the least likely to have any serious deleterious effect on the water of Loch Leven. The river Leven, as it leaves the Loch, is a pure limpid stream of, doubtless, potable water. Its rapid fall of an approximate average of twenty-three feet per mile would obviously determine the establishment of the numerous mills and factories on its banks. The river has always been noted for its water-power and probably it served increasingly as years passed for the disposal of the waste waters produced by the industry it attracted and the workers employed therein.

When the last trout or salmon was seen in the lower reaches of the Leven I do not know, but I should imagine fish-life to have been impossible in its waters below Leslie for a century past.

Pollution begins at Walkerton. The Flax Mill has been closed for several years but domestic pollution from the adjoining hamlet (mainly conservancy system) gains access to the River.

From Walkerton to the sea, the volume of pollution, from trade waste waters particularly, steadily and grossly increases. Between Walkerton and its junction with the River Ore, the Leven is not unduly polluted with sewage in view of its volume. At the present moment, the village of Prinlaws, formerly on the conservancy system, is being provided with a drainage scheme, sinks and waterclosets being installed for all the houses, 221 in number. Leslie Burgh has two sewage-disposal works (north and south) which with reasonable attention produce a satisfactory effluent. Markinch Burgh is just completing an installation of sewage disposal works which I am satisfied will give an effluent of a high standard of purity.

The village of Coaltown of Balgonie is still mainly on the conservancy system but a few of the better older houses and the new housing built since the close of the War have the routine sink, tub and lavatory facilities draining to the waters of the Leven without the intervention of the recognised facilities for purification.

Since submitting my report on the pollution of the Rivers Ore and Leven, dated 11th October, 1913, to Kirkcaldy District Committee, I have made no detailed inspection of either the Leven or the Ore, but I am satisfied that the pollution of the Leven by trade waste waters is, in part from fluctuations in or periods, like the present, of depression of trade, as gross as at the date of my report.

In regard to the River Ore, the main tributary joining the Leven on its right bank about a mile above Cameron Bridge, its condition in respect of sewage pollution is probably considerably worse than at the date of my report in 1913. In the interval since, sewage disposal works have been established for the treatment of sewerage of the Auchterderran Drainage District (comprising the communities of Bowhill, Cardenden, Denend and Woodend). But here as elsewhere throughout Kirkcaldy District, local authority enterprise has been responsible for the provision of large numbers of new houses under the Housing Acts furnished with the necessary routine water-carriage arrangements. Thus the Burghs of Cowdenbeath and Lochgelly have built largely within their Districts. The sewage of Cowdenbeath Burgh is sedimented and settled in Loch Gelly, whence a comparatively clean burn finds its way by Shaw's Mill and Carden Den to the River Ore. Lochgelly Burgh pours its crude sewage into the Ore. The populous area, stretching northwards from the Burgh of Lochgelly to the village of Ballingry, and comprising a population of approximately 7,000

disposes of its crude sewerage in the Ore. In this area (Glencraig Crosshill-Lochore), there has also been considerable housing development.

In the Beath Area, there has been housing development at Kelty and the effluent from the Kelty Sewage Purification Works, which were at one time racked by subsidence, was never in my opinion too satisfactory. The crude sewage of Cantsdam, a part of Kelty, joins, as formerly, the Fitty Burn, a tributary of the Ore. On the other hand such pollution as reached the Fitty from Fairfield Rows and Lassodie at the eastern end of Loch Fitty will in great measure cease as the pits in this area have been closed and the houses are already being vacated.

At Thornton, the late District Committee built 151 houses. The village had two Sewage Purification Works (North and South). The Northern Works were wrecked by subsidence and the effluent runs direct to the Lochty Burn, a tributary of the Ore. The Southern Sewage Purification Works are unsatisfactory, the filter-distributor being out of order and the partially filtered liquefied effluent from the tanks being pumped to the Ore. Nearer the source of the Lochty Burn is the village of Kinglassie which has developed considerably in the last fifteen years *pari passu* with that of the Kinglassie Pit. The Fife Coal Company, as well as the late District Committee, have built new housing. No public sewerage scheme has been established, the new housing being drained to septic tanks whence the liquefied effluents enter the Lochty Burn.

Another factor which is likely to have added considerably to the sewage content of the River Ore is, that during the last fifteen years Kirkcaldy District Committee have actively pursued the policy of insisting on the provision of water within the house and the installation of sinks and waterclosets. At the time of my report in 1913, the mining villages were mainly on the conservancy system (privy-midden or pail closet) but practically every house in mining townships and hamlets now has its sink and watercloset.

A similar policy has been followed in the Burgh of Lochgelly and in recent years, water-carriage facilities have been increasingly introduced into the older housing of Kelty and Cantsdam.

When I took up work as County Medical Officer nineteen years ago, trout of large size were still to be caught in the River Ore in the Thornton area. This, so far as I am aware, is not the case now.

The River Ore flows through the heart of the coal-bearing area of Kirkcaldy District (central Fife) and is subject to pollution by coal washer effluent. Settling ponds are provided for the sedimentation of washer effluent but constant continuous supervision would require to be maintained to ensure that the settling ponds are maintained in satisfactory condition.

Immediately above or below the junction of the Leven and the Ore no solid sewage is apparent. Below the points where the sewers from Windygates and Methilhill enter the Leven, this is not the case.

Building at Methilhill has been extensive of recent years. Formerly there was a small sewage-purification installation for the village but I recommended the District Committee of Kirkcaldy to discontinue these works and pipe the sewer direct through Pirnie Den to the River Leven.

Building has also been active at Windygates, the sewers from the village entering the River direct.

There is a proposal that sewage purification works for the villages of Windygates, Kennoway and Methilhill should be jointly installed at Durievale, a site acquired for the erection of works for Windygates by Kirkcaldy District Committee many years ago although purification works have never been provided. I doubt whether the proposed site would prove appropriate and as the site is at no great distance from the sea, the alternative of a common sewer direct to the Firth of Forth should, if necessary, be considered.

Perhaps I should add that when my opinion has been sought regarding the provision of sewage purification works by comparatively small communities such as Methilhill, Windygates, Kennoway, etc., I have, bearing in mind the heavy incidence of rates in Kirkcaldy District, recommended that such proposals should not be seriously considered without ample warrant that every community and trading concern contributing to the pollution of the Leven and Ore were to take the best practicable and available measures for the prevention of pollution.

In this connection it has to be borne in mind that as already noted, the Ore flows through the heart of the coal-bearing area and that in the central populous area of the County there is no safe site for purification works above the unexhausted coal measures.

In regard to the conditions obtaining where the Leven discharges to the Firth of Forth, there has been, so far as my observation has gone in the comparatively few occasions that I have visited the mouth of the river, no nuisance commensurate with my knowledge of the actual pollution carried by its waters. The river Leven has one admirable feature, viz., that, apart from leap tides, it disposes of its contents forthwith in the deep waters of the Forth without regurgitation to the adjacent shore.

The pollution of the rivers Leven and Ore is steady and constant : it does not change from year to year otherwise than in the aspects I have already indicated. The evidence submitted in the report of Mr. J. B. Hamilton of 18/5/1925 to the Scottish Board of Health is, in my opinion, substantially correct and in accord with the facts of to-day."

HOSPITAL FACILITIES.

The hospital facilities available throughout the County were described in the Annual Report for 1930. During 1931, the County Public Health Committee discussed the centralisation of the Infectious Diseases Hospitals of the County. In Cupar and St. Andrews Districts, four comparatively small institutions, with consequent multiplication of staff and services, provide locally for the needs of a population of approximately 60,000 which would be more efficiently and economically served by one central hospital not necessarily limited to the treatment of the so-called infectious diseases.

Shortly thereafter the Department of Health for Scotland took up with the County Council and the large burghs of Dunfermline and Kirkcaldy the subject of the re-organisation of the hospital facilities of the County as a whole from the standpoint implicit in the provisions of the Local Government Act, 1929.

These questions have been actively canvassed. A draft scheme for the centralisation of the institutional treatment of infectious diseases, medical cases and normal and abnormal maternity cases involving the co-operation of the Councils of the County and the two large Burghs in some form of joint partnership has been discussed with a view to meeting present and future requirements on the best and least costly lines. Any such scheme, however, must await better times for its application, but the thought expended on the subject will perhaps engender a wider outlook not only on the treatment of disease but also on the sounder and better-paying project of prevention by the provision of education for the maintenance of health, a subject in which more and better teaching, not limited to school children, is urgently needful.

SICK POOR—MEDICAL CARE.

As noted in last year's Report, the medical treatment of the sick poor has been the subject of discussion with a view to the replacement, if possible, of the existing parish medical officer service by some more adequate and less costly scheme.

The Fife Branch of the British Medical Association, having expressed the desire to submit to the County Council a scheme of attendance and treatment of the sick poor and their dependents which, in the opinion of the Association, would prove in practice more efficient and not more costly than the existing parish medical service, the offer was accepted. A brief outline of a scheme for the establishment of a panel of practitioners to undertake the work on a capitation-fee basis has been discussed, but doubtless the Fife Branch will await the report of a committee appointed for the purpose of framing a draft scheme on the

capitation principle at a Conference of Local Authorities and representatives of the British Medical Association recently convened by the Scottish Department of Health.

The number of persons on the roll of registered poor in the course of a year is approximately 3,330 with dependents numbering about 3,580, a total of 6,910. The sum spent in 1931 on prescribed medicines (apart from medical appliances, additional nourishment, etc.), was £430 10s.

DUNFERMLINE DISTRICT.

The general health of Dunfermline District during the period under review was quite satisfactory. The incidence of infectious diseases was somewhat lower than in the previous year, there being a total of 54 cases notified within the burghward area as compared with 502 in 1929 and 745 in 1928.

In the burghward area, complaints were again received about the offensive smell coming from Greenmound Oil Refinery, which pervaded the neighbourhood from time to time. The smell was again reported to in my last report and the matter was again investigated. The smell was only felt at certain times and appeared to be governed by the direction of the wind. On referring the matter to the Department of Health for enquiry, Dr. Wylam, Chief Inspector for Scotland, under the Alkali Act, Works Regulation Act, made investigation. Plans sheets as follows were prepared by him in July for distribution to residents in the area:—Place, date, hour, wind, giving direction and strength; climatic conditions; nature and strength of odour; remarks. The information thus recorded was forwarded to Dr. Wylam for correlation with information received by him from residents on the outskirts of the burgh so that further investigation could be carried out in conjunction with Messrs. Scott's Oil. After investigation, Dr. Wylam came to the conclusion that the objectionable smell was due to the escape of small quantities of oil gas from the plant. In November steps were suggested by Dr. Wylam for the elimination of the objectionable gas by scrubbing the gases with a dilute solution of caustic soda. Although it may be impossible to entirely remove the nuisance it is considered that the scheme proposed will undoubtedly improve matters considerably. Most desirable at this time.

Kirkcaldy and Dunfermline Districts Annual Report 1931

Dr. G. M. McGILLIVRAY, Deputy Medical Officer.

The following report relating to Kirkcaldy and Dunfermline Landward Areas of Fife County for the year 1931 with an account of the transferred services in respect of the small burghs therein is framed in accordance with instructions contained in Circular No. 2, dated 16/12/31, issued by the Department of Health, Edinburgh, for the guidance of Medical Officers of Health. As in former years, each district is dealt with separately and an account of the major health services of the various small burghs in each district, as administered by the County Council under the Local Government (Scotland) Act, 1929, is included.

DUNFERMLINE DISTRICT.

The general health of Dunfermline District during the period under review was quite satisfactory. The incidence of infectious diseases was somewhat lower than in the previous year, there being a total of 548 cases notified within the Landward Area as compared with 562 in 1930 and 745 in 1929.

In Culross-Torryburn Area, complaints were again received about the offensive smell coming from Grangemouth Oil Refineries which pervaded the neighbourhood from time to time. This smell nuisance was referred to in my last report and the matter was again investigated. The smell was only felt at certain times and appeared to be governed by the direction of the wind. On referring the matter to the Department of Health for enquiry, Dr. Wylam, Chief Inspector for Scotland, under the Alkali, etc., Works Regulation Act, made investigation. Diary sheets as follows were prepared by him in July for distribution to residents in the area :—Place, date, hour, wind, giving direction and strength, climatic conditions, nature and strength of odour ; remarks.

The information thus recorded was forwarded to Dr. Wylam for correlation with information received by him from residents on the south side of the Forth so that further investigation could be carried out in conjunction with Messrs. Scottish Oils. After investigation, Dr. Wylam came to the conclusion that the objectionable smell was due to the escape of small quantities of oil gas from the plant. In November steps were suggested by Dr. Wylam for the elimination of the obnoxious hydrogen sulphide gas by scrubbing the gasses with a dilute solution of caustic soda. Although it may be impossible to entirely remove the nuisance it is considered that the scheme proposed will undoubtedly improve matters considerably.

Numerous complaints were received in respect of a dust nuisance at Prestonhill Quarry, Inverkeithing, and the matter was investigated and reported on. The complaints all came from people resident in Preston Crescent within the Burgh of Inverkeithing, the quarry in question being situated outwith the Burgh boundary and close to the houses above referred to. Representation was made to the quarry owners to take steps to abate the dust nuisance and they agreed to fix a structure to the top of the stone crusher to trap the dust and direct it into the dust hopper. The structure provided proved quite ineffective to stop the nuisance and the installation of a dust suction plant was recommended as this appeared to me to be the only satisfactory remedy. Instead of adopting this measure, the quarry owners gave an undertaking to erect additional boarding at the stone crusher to prevent dust from reaching the houses at Preston Crescent during an east wind. As this additional structure proved no more effective than the dust shield previously tried, a meeting of Dunfermline District Public Health Sub-Committee was held at the site with a view to arriving at a definite solution of the problem. Mr. Clark, Manager of the quarry, proposed the erection of another barrier on the east side of the elevator and screens already put up which he stated would prevent the dust from being blown over to Preston Crescent during an east wind. The Committee generally agreed that this course would prove as futile as the methods already tried. The installation of a suction dust plant was discussed and Mr. Clark admitted that the Quarry Company had already been in communication with an engineering firm regarding the cost of fitting up a suction plant to eliminate the dust. The Committee agreed that a notice should be served on the Prestonhill Quarry Company calling upon them to abate the nuisance. All that has been done, however, is the erection of a barrier some 14-15 ft. wide by approximately 12 ft. deep on the east side of the stone crusher. This has proved quite ineffective to abate the nuisance and I am still of opinion that the installation of a suction dust plant is the only remedy. There can be no question that the nuisance is a serious one as the interior of the houses in Preston Crescent is seldom free from the grey quarry dust, and dishes and articles of food can not be kept free from it. Even bedclothes become impregnated with the dust and windows cannot be kept open for purposes of ventilation. The gardens situated to the front and back of the houses at Preston Crescent are rendered useless as a result of the nuisance. Flowers and vegetables are all covered with a thick grey deposit of whinstone dust which completely alters their natural appearance.

WATER SUPPLY.

As indicated in previous reports, the main water supply for Dunfermline District is obtained from Glenquay and Glendevon

reservoirs. The local supplies for Crossgates, Tulliallan and Saline, three of the old Special Water Districts, are augmented from one or other of the principal supplies.

The water derived from both Glenquay and Glendevon is of excellent quality for all purposes and is more than sufficient for the needs of the area. Contiguous authorities continue to be supplied by special agreement as formerly and a number of farms, etc., in proximity to the mains are supplied therefrom. Occasionally some difficulty is experienced in securing a proper or adequate water supply for outlying farms and cottages but generally, where representation is made to the owners, the matter is remedied if it is found reasonably practicable to introduce a proper supply. Since the coming into operation of the Housing (Rural Workers) Act, 1926, many rural cottages, previously without a proper water supply, have had water introduced to sculleries and water-closets provided in place of existing privies.

DRAINAGE.

Dunfermline District contains eleven Special Drainage Districts as follows:—Aberdour, Blairhall, Charlestown, Crossford, Crossgates, Limekilns, North Queensferry, Tulliallan, Valleyfield and Torryburn, Saline and Kelty. The supervision of these Special Districts is undertaken by the respective Sanitary Inspectors and all sewers, etc., have been kept in efficient working order during the year. At Tulliallan the main sewer in Toll Road was extended for a distance of about 900 yards to provide drainage for a number of new houses erected by the Forestry Commission near Newraw Farm.

With the exception of Kelty, Blairhall, Crossgates and Saline all sewage from the Special Drainage Districts is run into the river Forth by means of sewers taken down the foreshore to low water mark. At Kelty the sewage purification works are still functioning although somewhat affected by mineral excavation and consequent subsidence of the ground. The installation at Saline is modern and adequate for the needs of this area. The sewage disposal works at Blairhall has proved inadequate to deal with the increase of population owing to the large number of new houses erected here. The distributors, of the rotary type, are too small and the question of extending the works has been reported on by the County Engineer and is under consideration. At Crossgates the present system is unsatisfactory and a scheme to provide drainage for this and contiguous villages by taking a main sewer to link up with the Dunfermline Burgh sewer is under consideration.

Six villages are still without proper drainage facilities, viz:—Wellwood, Oakley, Carnock, Hillend, Fordell and Cairneyhill. As the village of Oakley is now likely to be closed down owing to most of the houses being unfit for habitation there is no need for the provision of drainage here. The houses are being closed as they become vacant

and very few will ultimately remain in occupation. The question of providing proper drainage for Wellwood with a connection to Dunfermline Burgh sewer is now under consideration, while the cost of providing proper drainage facilities for Cairneyhill, Carnock and Hillend have been reported on.

POLLUTION OF RIVERS.

A certain amount of pollution of the River Ore has occurred from time to time due to coal-washings from the Aitken, Foulford and Gordon Pits. Appliances to prevent pollution have been installed at the Gordon Pit and function satisfactorily. At Foulford Colliery the washing effluent gains entry to the Foulford Burn and the Coal Company have been asked to disconnect the pipe from the washery to the burn and to carry all water to a large settling pond. When recently inspected a certain amount of black coloured water was still discharging into the burn from the washery pipe but the embankments on the eastmost settling pond were being raised considerably to deal with the water from the washer. At the Aitken Pit, where pollution was taking place, an embankment of pit debris and ashes is being raised along the bank of the River Ore so as to enclose a large area surrounded by reed to prevent discharge from the settling ground into the river. It has been recommended that this area should be divided into sections to be used separately and alternately for settlement purposes.

HOUSING.

During the year a great deal of my time has been taken up in making a survey of the housing conditions in my area and in submitting reports relating thereto. In addition to surveys made in the Landward Districts of Dunfermline and Kirkcaldy, several of the small burghs have also been dealt with, viz. :—Kinghorn, Markinch, Lochgelly and Inverkeithing.

In dealing with Dunfermline Landward Area, a report was submitted to the Public Health Committee in June, 1931, recommending that 160 new houses should be erected in 1931 and 174 in 1932-33, a total of 334 houses. The above figures only represented the minimum requirements for the District as then ascertained by inspection, etc. It was, however, considered likely that once a complete survey could be made the requirements would in all probability be substantially increased.

The programme for Dunfermline District included the following schemes :—

Place.	1931	1932-33.	Total.
Aberdour	24	12	36
Crossgates	20	30	50
Kelty	80	60	140
Kincardine	36	12	48
Milesmark—Blairhall .. .. .	..	60	60
Dunfermline District	160	174	334

Although the above houses were all approved by the County Council a start had not been made at the end of the year in any of the schemes with the exception of Kelty. At the latter, 20 of the houses were completed and in occupation in December, 1931, while the remainder were well on the way to completion at that time.

On the whole, there is no great shortage of working-class dwellings in Dunfermline District. A considerable number of the houses are, however, unfit for habitation and these, where known, have been recommended either for demolition or renovation in terms of the Housing (Scotland) Act, 1930. Not infrequently owners of uninhabitable houses carry out all necessary repairs to make them reasonably habitable when representation is made by the Medical Officer or Sanitary Inspector. In this way the issue of Statutory Notices under the 1930 Act is unnecessary and delay in the execution of the work is obviated.

Defective houses, wherever found, have been dealt with either under Part II. of the Housing (Scotland) Act, 1930, or representation has been made to the owners by the Medical Officer or Sanitary Inspector as above noted. The action taken under Part II. of the Act has been governed by the state of the houses, and where these are not capable at reasonable expense of being rendered fit for human habitation, demolition is recommended. Very few cases of overcrowding have come to notice during the year and these were all satisfactorily dealt with under the Public Health Act.

A return has already been submitted to the Department of Health under Article 2 of the Housing (Inspection of District) Regulations (Scotland) 1928. As this return dealt with the County as a whole, I include here the information contained therein relating to Dunfermline District only :—

Housing (Inspection of District) Regulations (Scotland) 1928.

1. Number of dwellinghouses inspected,	1,000
2. Number of dwellinghouses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation,	265

Housing (Scotland) Act, 1925.

3. Number of cases where intimations were given under Section 20 (1) as to insufficient water-closet accommodation,	1
(a) Cases where requirements complied with by owners, (a) 1	
(b) Cases where works carried out by Local Authority after failure of owners to do so	(b) 0
(c) Cases still pending,	(c) 0

4. Number of houses of (a) one apartment, and (b) two apartments, for the erection of which the consent of the Local Authority has been given in terms of Section One hundred and eleven, (a) 0
 (b) 2

Housing, Town Planning, etc. (Scotland) Act, 1919.

5. Number of cases where notices were served under Section 40 (1) to provide dwellinghouses with water supply :— 1
 (a) Cases where requirements complied with by owners, (a) 1
 (b) Cases where works carried out by Local Authority after failure of owners to do so, (b) 0
 (c) Cases still pending, (c) 0

Housing (Scotland) Act, 1930.

6. Number of dwellinghouses in respect of which notices were served under Section 14 (1), 0
 7. Number of dwellinghouses rendered fit for human habitation following on notices under Section 14 (1), 0
 8. Number of dwellinghouses in respect of which work has been done by the Local Authority under Section 15 (1), .. . 0
 9. Number of dwellinghouses in respect of which in terms of Section 17 a demolition order or closing order under Section 16 (3) has been substituted for a notice under Section 14 (1), 0
 10. Number of dwellinghouses in respect of which notices were served in terms of Section 16 (1), 73
 11. Number of dwellinghouses referred to in 10 :—
 (a) which have been rendered fit for human habitation, (a) 0
 (b) in respect of which undertaking has been given that the house will not be used for human habitation until it has been rendered so fit, (b) 0
 (c) in respect of which demolition orders* have been made under Section 16 (3), (c) 73
 (d) in respect of which closing orders have been made under Section 16 (3) and (4), (d) 73
 2. Number of dwellinghouses in respect of which closing orders have, in terms of Section 16 (3), been determined by the Local Authority, following upon the houses having been rendered fit for human habitation, 0
 3. Number of houses in respect of which advances have been made in terms of Section 34 towards cost of repairs and amount so advanced, 0

If permission to reconstruct a building has been granted, the number of houses existing prior to the reconstruction should be stated (see in this connection, sub-section (3) of Section 49 of the Housing (Scotland) Act, 1930.

NEW DWELLINGHOUSES.

NOTE.—This Return should NOT include Houses provided with State Assistance whether by the Local Authority or by Private Enterprise.

Number of new dwellinghouses * completed during the year ended 31st December, 1931 :—

(a) with 3 rooms† or less,	Nil
(b) with 4 rooms,	Nil
(c) with 5 rooms,	1
(d) with 6 rooms or more,	Nil
Total,	1

*“ Dwellinghouse ” includes part of a house let as a separate dwelling.

A house or part of a house is not to be excluded because part of the premises is used as a shop, office or business premises.

†“ Room ” includes kitchen, living-room and bedroom, but not scullery or bathroom.

No conditions have arisen or are expected to arise pointing to the expediency of a Town Planning Scheme for the proper control of further development in Dunfermline District.

BUILDING BYE-LAWS.

Plans submitted for examination and report during the year comprised proposals to erect 125 new dwellings (2 of 2-apartments, 101 of 3-apartments, 21 of 4-apartments and 1 of 5-apartments), and to alter or extend 3 existing houses. With the exception of the 5-apartment house all were approved for purposes of subsidy under the 1924 and 1930 Acts. Proposals in respect of premises for other than housing purposes involved 11 new buildings and alterations to 5 existing buildings, while an old ship's cabin was converted for habitable purposes.

HOUSING (RURAL WORKERS) ACT.

During the year a survey of rural housing was undertaken wherever possible in conjunction with the general housing survey. Where houses were found to be defective in any way, the attention of the owners was directed to defects with a request for renovation and the advantages to be derived under the terms of the Housing (Rural Workers) Act, 1926, were pointed out to them. Plans relating to alterations and improvements to 23 houses were submitted under the County Scheme in force and recommended for approval for purposes of grant. In addition, plans in respect of 12 other houses were received but these were not recommended for approval as the work proposed did not

warrant grant being given or the houses were such that they were considered beyond the stage where they could be made fit for habitation.

A return showing what has been done in the County in the matter of inspection and improvement of Farm Servants' Cottages since the issue of Circular, dated 2nd April, 1929, on the subject of housing of Farm Servants was submitted to the Department of Health early this year. The following statement gives the particulars in so far as Dunfermline District is concerned :—

FARM SERVANTS' COTTAGES.

COUNTY OF FIFE. DUNFERMLINE LANDWARD AREA.

Total estimated number of Farm Servants' Cottages in Area,	(a)	289
Number of such cottages inspected in terms of Section 5 of the Housing (Scotland) Act, 1925, and relative Inspection of District Regulations since 1st August, 1930,	(b)	179
Number of houses in (b) which were found to be not in all respects fit for human habitation,	(c)	38
Number of houses in (b) which have been demolished or closed,	(d)	19
Number of houses in (b) which have been made fit for human habitation or which are in process of being made fit :		
(e) with assistance under the Housing (Rural Workers) Act, 1926,	(e)	8
(f) without such assistance,	(f)	3
Number of houses in (c) in respect of which no action has been taken*,	(g)	*
Number of Farm Servants' Cottages not inspected between 2nd April, 1929, and present date,†	(h)	44

Action taken in all cases and improvements called for have been either carried out or are under consideration.

It is hoped to overtake the inspection of these cottages when other duties permit ; 66 cottages were inspected prior to 2nd April, 1929.

INFECTIOUS DISEASES.

During the year, 548 persons were notified as suffering from infectious diseases within the Landward Area of Dunfermline District. In 1930 the number of persons notified was 562 and in 1929, 745 cases were reported to the Medical Officer of Health in this area.

The cases notified were as follows :—Scarlet fever 137, diphtheria 66, rypselas 31, puerperal fever 5, ophthalmia neonatorum 22, chicken-ox 157, encephalitis lethargica 1, acute primary pneumonia 52, acute

influenzal pneumonia 15, pulmonary tuberculosis 25, non-pulmonary tuberculosis 28, puerperal pyrexia 7, and cerebro-spinal meningitis 2.

Two hundred and sixty-three cases were removed to hospital during the year and of these 249 were treated at the Infectious Diseases Hospital and 14 at Glenlomond Sanatorium.

Excluding chickenpox, the numbers of notifications received from Dunfermline District in recent years were :—1931, 391 ; 1930, 461 ; 1929, 499 ; 1928, 357 ; 1927, 358 ; 1926, 439 ; 1925, 406.

The incidence of scarlet fever in 1931 showed a considerable decline from the previous year, there being 73 fewer cases recorded. Diphtheria cases numbered one more, chickenpox 56 more, influenzal pneumonia 10 more, pulmonary tuberculosis 10 more and non-pulmonary tuberculosis one more than in 1930. Two cases of cerebro-spinal meningitis were recorded during the year but no persons were notified as suffering from typhoid fever in 1931.

No special action was taken to deal with influenza, pneumonia, measles and whooping cough apart from admission to hospital where necessary. Cases of pneumonia secondary to measles, whooping cough or influenza as well as cases of acute primary pneumonia are sent to hospital where the home conditions are unsatisfactory and proper nursing is not available. Hospital treatment is always available for encephalitis lethargica, infective jaundice and psittacosis should cases of these diseases occur.

School closure was unnecessary for the prevention of the spread of infectious diseases during the year and neither measles nor whooping cough showed undue incidence in 1931.

An arrangement exists whereby diphtheria antitoxin can be given free of charge to patients suffering from diphtheria or to suspect cases if the patients or their relatives are not able to defray the cost themselves. The practitioners in attendance administer the antitoxin and submit an account to the Local Authority. By this means delay is avoided and treatment on approved lines is available not only for actual cases but also for suspects. The Schick and Dick tests for susceptibility to diphtheria and scarlet fever are not carried out and no artificial immunisation against these diseases is practised.

The following table gives the number and age distribution of the persons notified as suffering from infectious diseases with the number of each removed for institutional treatment :—

DUNFERMLINE LANDWARD.

Return of Cases of Infectious Diseases notified, etc., during the year ended 31st December 1931.

	Number of Cases coming to the knowledge of the Medical Officer of Health.										Cases not removed to Hospital
	At all Ages.	At Age Years.					Cases removed to Hospital	Cases notified in a previous year and removed to Hospital for the first time in 1931.			
		Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 45			45 and under 65	65 and upwards	
A—Diseases specified in the Infectious Disease (Notification) Act, 1889, and Diseases Notifiable in terms of Regulations made under Section 78 of the Public Health (Scotland) Act, 1897.											
Scarlet Fever or Scarlatina ..	137	3	29	80	17	8	..	..	136	1	
Diphtheria or Membranous Croup ..	66	..	13	32	16	3	2	..	66	..	
Erysipelas ..	31	..	..	4	4	9	14	..	3	28	
Puerperal Fever ..	5	..	..	..	1	4	..	..	5	..	
Ophthalmia Neonatorum ..	22	22	..	..	..	..	..	..	..	22	
Chickenpox ..	157	11	40	105	..	1	..	..	..	157	
Encephalitis Lethargica ..	1	..	..	..	..	..	1	..	1	..	
Acute Primary Pneumonia ..	52	7	10	11	9	12	1	2	17	35	
Acute Influenzal Pneumonia ..	15	..	3	3	2	6	1	..	3	12	
Pulmonary Tuberculosis ..	25	..	1	4	9	8	3	..	16	9	4
Non-Pulmonary Tuberculosis ..	28	1	4	12	6	5	..	..	6	22	1
Puerperal Pyrexia ..	7	..	..	..	..	6	1	..	3	4	
Total ..	546	44	100	251	64	62	23	2	256	290	5
B—Diseases to which the Provisions of the Infectious Disease (Notification) Act have been Extended by the Local Authority.											
Cerebro-Spinal Meningitis ..	2	1	1	..	..	..	..	..	2	..	

WEST FIFE INFECTIOUS DISEASES HOSPITAL.

The extensions mentioned in my last report were not complete at the end of the year. Fortunately the incidence of diseases requiring admission was not unduly high and the cases for admission were fairly evenly distributed over the whole year so that no difficulty arose in providing accommodation.

The number of beds at this hospital, which caters for the needs of Dunfermline Burgh and the Landward Area of Dunfermline with the Burghs of Cowdenbeath, Inverkeithing and Culross, is as follows:—Males, 25; females, 26; children under 10 years, 37; a total of 88 beds. When the building operations are completed 24 beds and 2 cots will be available in addition to those mentioned.

During the year there were 673 admissions to the West Fife Infectious Diseases Hospital and 554 discharges. The total number of deaths was 26. The average duration of stay of patients was 31 days. The highest number of beds occupied during the year was 109 on the 9th December, 1931, and the lowest number occupied was 31 on the 12th September, 1931. Four surgical operations under general or spinal anaesthesia were performed in the hospital during the year and 14 minor operations were also undertaken. A small operating theatre in the Diphtheria Ward is equipped for tracheotomy and intubation and there is a well equipped bacteriological laboratory. The Medical Staff of this hospital consists of a visiting Medical Superintendent and a resident Medical Officer. The Nursing Staff is as follows:—One matron, five trained nurses and fifteen probationers. The hospital is approved for nurses' training.

The ambulance facilities available for hospital use are as follows:—(1), a 20 h.p. Arrol Johnson ambulance for removal to hospital, and (2) a Wolseley landaulette car used for discharge cases.

The total mileage covered by the ambulance during the year was 5,365 miles and by the discharge car 3,717 miles.

An account of the County Schemes for dealing with the treatment and prevention of tuberculosis and venereal diseases as well as an account of the work done under Maternity and Child Welfare and School Health Schemes and the medical care and nursing of the sick poor will be given under individual headings for the County as a whole.

MILK AND DAIRIES.

There are 74 dairies in Dunfermline Landward Area and the premises are licensed for 1,908 cows. In addition, six dairies registered for 4 cows in burghs came under the supervision of the County Official in terms of the Local Government (Scotland) Act, 1929. These are situated at Cowdenbeath (2); Culross (1); and Inverkeithing (3).

On the whole the dairies in Dunfermline District are clean and well kept and the premises generally conform to the standard laid down in the Dairy Bye-laws. There are still a few, however, where the premises are lacking in adequate light and ventilation and cases have been observed where there was lack of cleanliness and care in the methods of production.

Milk as an article of food is of first class importance, especially when regard is paid to its extreme value in infant life and in cases of sickness. Unfortunately milk is also an ideal medium for the growth of disease producing bacteria and other germs and probably no other article of food is so liable to gross contamination. Bacteria grow in milk with extreme rapidity especially where the temperature is favourable as during the hot summer months. Little growth takes place so long as the temperature of the milk is maintained around 40°F., but above this temperature the rapidity of growth is greatly increased. Thus a few thousand bacteria per cubic centimetre of milk at 60°F. will multiply to millions even in 24 hours. It is therefore important that milk should be cooled down by passing through a cooler as soon as it is milked and kept as cool as possible till being used. In the interests of health, especially of young children, it is also of extreme importance that proper precautions should be taken by producers to ensure a clean milk supply. There are many ways in which bacteria gain entrance to the milk in the process of milking. Soiling of the cows' flanks and udders, if proper care is not paid to the clipping of these and proper washing before milking, is one of the greatest sources of contamination. A minute particle of cow dung or even a few hairs from a cow will contain thousands of bacteria, each capable of rapid growth. The use of proper milking utensils such as a pail with a fixed cover extending over about three-quarters of the top will greatly reduce the risk of dirt and dust gaining entrance to the milk, and the practice of leaving open milk pails in the byre during milking is to be condemned as dust heavily laden with bacteria is constantly falling. Fortunately most dairymen now recognise the importance of cleanliness in this respect and a great improvement is noticeable. There are still some, however, who are haphazard and careless, and it is very difficult to constantly supervise the work of these producers.

No outbreak of disease attributable to milk occurred during 1931.

Apart from licences for the sale of pasteurised milk in the Area there was no graded milk sold in terms of the Milk (Special Designations) Order, 1930. The pasteurised milk sold in Dunfermline District is all pasteurised by Dunfermline Co-operative Society at their Creamery in Dunfermline Burgh. Samples of this milk taken during the year showed it to be in conformity with the provisions of the Order in respect of the bacterial count.

MEAT INSPECTION.

There are three private slaughterhouses in Dunfermline Landward Area, viz. :—at Kelty, Aberdour and Kincardine-on-Forth. In addition, one public slaughterhouse at Cowdenbeath Burgh, two private slaughterhouses in Inverkeithing Burgh, and one private slaughterhouse in Culross Burgh now come under the jurisdiction of the County Officials for purposes of meat inspection. Matters relating to meat inspection in Burghs will be given along with subject matter for individual burghs at the end of this report.

The three private slaughterhouses in the Landward Area are clean and well kept and the premises are satisfactory for the purpose. Definite hours have in each case been fixed for the slaughter of animals and the Sanitary Inspectors as Detention Officers keep a close watch on all animals slaughtered for the purpose of detecting unsound food. The two slaughterhouses at Aberdour and Kincardine are under the supervision of Mr. Davison, Sanitary Inspector, and that at Kelty is under the supervision of Mr. Alexander, Sanitary Inspector for Beath Area.

The following table gives the number of animals slaughtered during the year in the two slaughterhouses under Mr. Davison's supervision. No evidence of disease was found in any of the carcasses inspected :—

Class of Animal.	No. of Animals.	Weight in lbs. of condemned Meat and Offals.
Cattle	135	Nil.
Sheep	120	Nil.
Pigs.	10	Nil.
Total	265	Nil.

Mr. Alexander, Detention Officer, paid 179 visits of inspection at Kelty during the year and personally inspected all animals slaughtered. The following table gives the number of animals slaughtered with the amount of meat and viscera condemned :—

Class of Animal.	No. of Animals.	Weight in lbs. of entire carcasses condemned and disease.
Cattle.	345	850 lbs. T.B. generalised.
Sheep.	313	.. .. .
Pigs.	59	250 lbs. T.B. generalised.
Total	717	1100 lbs.

Parts of Carcasses and Organs Condemned.

	Tot. No.	Tot. Wt. lbs.	T.B. No. lbs.	Flukes. No. lbs.	Cirr-hosis. No. lbs.	Fatty Degn. No. lbs.	Abs-cess. No. lbs.	In-Flamm. No. lbs.	Con-gestion. No. lbs.	Ne-crosis. No. lbs.
Ox Livers	86	588	3	69	1	7	6	..	..	..
Ox Lungs	8	144	6	..	..	..	..	..	2	36
Ox Heart	1	4	1	..	..	..	..	..	..	..
Ox Skirting	2	20	1	..	..	..	..	1	..	..
Ox Head	1	30	1	..	..	..	..	..	..	..
Ox Fat	2	54	1	..	..	..	..	..	..	..
Ox Viscera	2	230	1	..	..	..	1	..	..	1
Ox Tongue	1	5	1	..	..	..	..	..	..	..
Total	103	1075	15	69	1	7	7	1	2	1
Pig Liver	1	4	..	..	..	..	..	..	..	1
Grand Total	104	1,079	15	69	1	7	7	1	2	2

MERCHANDISE MARKS ACT.

Strict supervision has been kept on all premises where foods are manufactured, prepared, stored or exposed for sale. Frequent visits of inspection were made by Sanitary Inspectors to butchers' shops, while vendors' carts and storage premises used by traders were frequently inspected.

In order to bring the provisions of the Merchandise Marks Act, 1926, to the notice of shopkeepers and traders with a view to the more efficient enforcement of the Orders in Council under this Act requiring the marking of imported foodstuffs with an indication of origin, explanatory leaflets were printed and circulated to shopkeepers and traders indicating the imported goods affected by the Orders. The leaflets explained in simple language the requirements as regards marking or labelling of each commodity. Retail shops and vendors' carts have been frequently inspected to ensure that the provisions of the Act are being complied with.

FOOD AND DRUGS ADULTERATION ACT, Etc.

During the year 125 samples were obtained and submitted for analysis in terms of the Food and Drugs (Adulteration) Act. Of these, 19 were "test" samples. With the exception of three official samples of sweet milk and one of whisky, all were certified to be genuine. No proceedings were taken in respect of the non-genuine samples.

Under the Public Health (Preservatives, etc., in Food) Regulations 23 samples were taken and all were found to be genuine. The samples were as follows:—Mince 14, sausages 7, chicken and ham roll 1, and sausage meat 1.

FACTORIES AND WORKSHOPS, Etc.

Two hundred and seventy-seven visits of inspection were paid to factories, workshops and workplaces in Dunfermline Landward Area in the course of the year. Written notices were issued in respect of one factory and two workshops. Twelve defects were found and all were remedied. The defects found were as follows:—Want of cleanliness 4, want of ventilation 1, other nuisances 3, insufficient sanitary accommodation 3, and other offences 1.

AN ACCOUNT OF THE TRANSFERRED SERVICES IN THE SMALL BURGHS. DUNFERMLINE AREA.

1. COWDENBEATH BURGHS.

INFECTIOUS DISEASES.—The number of infectious diseases notified during the year was 350. This is 45 more than in 1930, but is accounted for by the increased incidence of chickenpox. There were 174 cases of this disease notified in 1931 as compared with 49 in the previous year. Individual diseases notified comprised the following:—Scarlet fever 28, diphtheria 24, erysipelas 26, ophthalmia neonatorum 10, chickenpox 174, acute anterior poliomyelitis 1, acute primary pneumonia 32, acute

influenzal pneumonia 11, puerperal pyrexia 3, pulmonary tuberculosis 16, non-pulmonary tuberculosis 24, and cerebro-spinal meningitis 1.

Seventy-nine patients were removed to hospital :—Scarlet fever 25, diphtheria 24, erysipelas 1, ophthalmia neonatorum 2, acute poliomyelitis 1, acute primary pneumonia 7, puerperal pyrexia 3, pulmonary tuberculosis 7, non-pulmonary tuberculosis 8, and cerebro-spinal meningitis 1.

Cases of tuberculosis were admitted to Glenlomond Sanatorium ; all other cases of infectious diseases receiving hospital treatment were sent to West Fife Infectious Diseases Hospital, Dunfermline.

School closure was unnecessary in Cowdenbeath Burgh for the prevention of the spread of infectious disease during 1931.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.—There are two dairies licensed within the Burgh and the total number of cows for which the premises are registered is 15. The bulk of the milk consumed in the Burgh is produced in licensed premises within the Landward Area. Careful supervision of cow-sheds and milk shops was maintained and these were found to be well conducted and satisfactory.

No outbreak of disease attributable to milk occurred in the Burgh during the year.

MEAT INSPECTION.—There is a public slaughterhouse, the property of the Town Council, within the Burgh. This is in charge of a full time superintendent who assists the Detention Officer in the inspection of meat. The slaughterhouse is clean and well kept and although somewhat old it is satisfactory for the purpose. Definite hours for the slaughter of animals daily are adhered to and supervision of the meat is excellently carried out by Mr. Alexander, Sanitary Inspector, who acts as Detention Officer. The Town Council have the slaughterhouse under consideration meantime, and it is hoped to have certain alterations and improvements carried out very soon.

The following tables give the number of animals slaughtered for each month of the year and the amount of meat seized and condemned :—

Month.	Bull'ks.	Cows.	Calves.	Sheep.	Pigs.	Heifers.	Total.
Jan.	107	9	..	124	56	8	304
Feb.	94	6	1	120	60	5	286
Mar.	107	16	..	134	57	2	316
April	111	17	..	130	70	3	331
May	105	14	1	129	65	..	314
June	104	12	..	118	67	..	301
July	99	2	..	106	45	2	254
Aug.	97	21	2	124	63	..	307
Sept.	107	24	2	188	80	..	401
Oct.	107	19	3	191	82	..	402
Nov.	99	17	1	142	68	3	330
Dec.	130	21	5	172	84	4	416
Total	1267	178	15	1678	797	27	3962

Diseases.	Beef.		Mutton.		Pork		Total.	
	No.	lbs.	No.	lbs.	No.	lbs.	No.	lbs.
T.B.	12	6900	..	..	3	460	15	7360
Other Diseases	3	1050	2	120	1	200	6	1370
Totals	15	7950	2	120	4	660	21	8730

FOOD AND DRUGS (ADULTERATION) ACT, ETC.—The following tables give details of samples taken during the year under the Food and Drugs (Adulteration) Act and the Public Health (Preservatives, Etc., in Food) Regulations :—

	Genuine.	Non-Genuine.
Test Samples	25	..
Official Samples	5	..
Total	30	..

Details :—Test samples—Whisky 3, salt butter 3, veal loaf 1, sweet milk 7, margarine 1, baking soda 1, bacon 1, bramble jelly 1, dripping 1, apricots 1, currants 1, lard 1, white pepper 1, gin 1, rum 1.

Official Samples :—Milk 5.

Preservative Regulations.

	Genuine.	Non-Genuine.
Test Samples	14	2
Official Samples	1	..
Totals	15	2

Details :—Test Samples—Mince 13, sausages 3.

Official Samples—Sausages 1.

The above figures for Cowdenbeath Burgh are not included with those given for the Landward Area of Dunfermline.

VITAL EVENTS.—The population of the Burgh as estimated by the Registrar-General to the middle of 1931 was 12,747. The corrected

number of births for 1931 was 289 (males 145, females 144). This is two less than in 1930 and is equivalent to a birth-rate of 22.7 per 1,000 estimated population. There were 17 illegitimate births (males 7, females 10) or 5.9 per cent. of the total births. The marriages in 1931 numbered 63 and the marriage-rate was 4.9 per 1,000. In 1930 the marriages numbered 81 and the marriage-rate was given as 5.6 per 1,000. The decline in the marriage-rate might, at least to a certain extent, be taken as an indication that trade was not in a flourishing state during the year and that the economic position of the population as a whole was less satisfactory than in the preceding year. This state of matters was, however, general throughout the country and it is to be hoped that better times are ahead for all. The deaths numbered 145 (males 74, females 71), equivalent to a corrected and adjusted death-rate of 13.6 per 1,000 of the population. The death-rate for all tuberculosis was 1.18 per 1,000 while that for pulmonary tuberculosis was 1.02 per 1,000. These rates are considerably in excess of those for 1930 when the rate for all tuberculosis was 0.76 per 1,000 and for pulmonary tuberculosis 0.28 per 1,000. The infantile mortality rate for 1931 was 114 per 1,000 births. This is a high figure and does not compare favourably with the rate for 1930 which was only 62. The total number of children dying under one year of age was 33, 16 dying of congenital debility, prematurity or malformations. Something might be done to improve matters in this respect by the institution of properly conducted ante-natal clinics where expectant mothers could receive proper guidance and advice with institutional treatment where necessary. By this means the life and future wellbeing of the mothers could not only be safeguarded but the lives of some at least of the children might be saved. The natural increase of the population as shown by the excess of births over deaths, was 144 during 1931.

2. INVERKEITHING BURGH.

INFECTIOUS DISEASES.—Thirty-one cases of infectious diseases were notified as occurring within the Burgh in 1931. This is an increase of three over the preceding year. The diseases notified were as follows :—Scarlet fever 13, erysipelas 1, ophthalmia neonatorum 1, chickenpox 5, acute primary pneumonia 3, acute influenzal pneumonia 3, pulmonary tuberculosis 3, and non-pulmonary tuberculosis 2. Seventeen patients were removed to Dunfermline and West Fife Infectious Diseases Hospital for treatment and two cases of pulmonary tuberculosis were sent to Glenlomond Sanatorium. The infectious diseases cases sent to hospital were as follows :—Scarlet fever 12, acute primary pneumonia 3, acute influenzal pneumonia 2.

School closure for the prevention of spread of disease was unnecessary during the year.

MILK AND DAIRIES ACT, 1914.—Three dairies are registered for the production of milk within the Burgh, the premises being registered for 21 cows. The bulk of the milk consumed in the Burgh is got from premises registered in the Landward Area of the County.

The registered premises in the Burgh are well kept and suitable for the purpose of dairying.

MEAT INSPECTION.—Two slaughterhouses are maintained by private individuals within the Burgh. Although not altogether modern, the premises are quite well kept and sanitary. No definite hours have been fixed for the slaughter of animals but intimation is always sent to the Detention Officer who attends when animals are being killed. No slaughtering is allowed without this proviso and supervision is quite satisfactory.

The following table gives the number of animals slaughtered with the amount of meat condemned during the year :—

Type of Animal.	No. Examined.	Whole car-cases condemned.	Part car-cases condemned.	Weight of Meat condemned.
Bullocks	221	2	7	1396 lbs.
Heifers	28	..	1	12 „
Calves	27	..	..	..
Sheep	*617	..	..	..
Pigs	63	..	2	18 lbs.
Total	956	2	10	1426 lbs.

*130 Sheep were slaughtered for the London Market on 22nd March, 1931.

3. CULROSS BURGH.

INFECTIOUS DISEASES.—There were five cases of infectious diseases recorded in Culross Burgh in 1931. These were :—Chickenpox 2, acute primary pneumonia 2, and non-pulmonary tuberculosis 1. One case of pneumonia was removed to Dunfermline and West Fife Infectious Diseases Hospital and the case of tuberculosis was admitted to Glenlomond Sanatorium for treatment. The other cases of infectious diseases were treated at home.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.—There is only one registered dairy within the Burgh and it is well kept and satisfactory for the purpose. The premises are registered for 12 cows. In addition, three dairymen are registered to retail milk in the Burgh, one being licensed under the Milk (Special Designations) Order (Scotland) 1930, and retails pasteurised milk.

MEAT INSPECTION.—There is a privately-owned slaughterhouse in the Burgh situated within the old Abbey grounds. The premises are of good construction and are well kept. Definite hours have been fixed for the slaughter of animals and supervision is satisfactorily maintained by the Detention Officer in terms of the provisions of the Meat Inspection Regulations. One licence to slaughter was renewed under the Slaughter of Animals (Scotland) Act, 1928.

The following animals were slaughtered during the year :—cattle 67, sheep 62. The entire carcase of an ox was found to be infected with generalised tuberculosis and was condemned and destroyed. The weight of the meat thus condemned was 700 lbs.

FOOD AND DRUGS (ADULTERATION) ACT.—Under the Food and Drugs (Adulteration) Act eight official samples were taken for analysis and all were genuine.

Under the Public Health (Preservatives, Etc., in Food) Regulations, one sample of sausages was taken and submitted for analysis. This was also found to be genuine. The above figures are included with those given for Dunfermline Landward Area.

Kirkcaldy District.

No fresh conditions unfavourable to the general health of the community were observed during 1931. The incidence of disease was considerably lower than in 1930, there being 740 cases of infectious diseases notified in comparison with 1,134 in 1930.

Enquiries were again made in respect of complaints received with regard to the burning coal bing at Randolph Colliery. This matter has been referred to in previous reports. A meeting of Kirkcaldy District Public Health Sub-Committee was held at the site in January, 1931, to meet colliery representatives with a view to having the nuisance abated. As it was considered impracticable to extinguish the fire at the bing it was agreed that the old one be allowed to burn itself out and that a new bing should be formed on another site. A new bing was formed and separated from the old burning part by about 1,000 tons of dead engine ashes, but despite this the fresh material speedily went on fire. The old portion of the bing is now burnt out and practically all the pit water raised by the pit pumps at a rate of 500 gallons per minute and about 700,000 gallons per day is discharged on to the bing. The colliery management are quite emphatic that on account of the nature of the redd from this pit it is impossible to bing it in any depth without the material immediately taking fire by spontaneous combustion.

Although it may not be possible to entirely eliminate the nuisance arising from the sulphurous fumes, it now appears that every possible precaution is being taken to abate the nuisance by Fife Coal Company. The pit water which is being constantly delivered over the bing is certainly keeping the fire in check and the vapours now coming from the bing are for the most part only steam.

WATER SUPPLIES.

The water service for Kirkcaldy District is quite satisfactory, the quality being excellent for all general purposes and the amount available ample for the needs of the Area. The main sources of supply are as follows:—Glenfarg Reservoir provided by Kirkcaldy District; Glendevon Reservoir provided by Dunfermline District; Carriston Reservoirs, the property of Wemyss Water Trust; and Leven Burgh water, a supply of which is available for houses in Scoonie Parish.

Practically all the premises in the Parishes of Auchterderran and Balingry, the village of Kinglassie and certain of the farms in Kinglassie Parish are provided from the County Glenfarg Mains. Kennoway, Bonnybank and Baintown are also supplied from County mains coming from Glenfarg. The water in this case is forced by a water-ram

situated in Kennoway Den to a collecting tank in a field at Balgraybank Farm from which it gravitates to the aforesaid villages. In Wemyss Area water is supplied from the Wemyss Water Trust Reservoirs situated at Carriston. Scoonie Parish, as already noted, is for the most part supplied from Leven Burgh supply. Lumphinnans village and the housing scheme at Gray Park have a supply from Glendevon. Thornton village, Coaltown of Balgonie, Auchtertool and Boreland are supplied from the Glenfarg scheme, while Wemyss Water Trust supply Windygates and Balcurvie and Milton of Balgonie.

Outlying farms and houses have private supplies, either by well or other means, and a considerable number have a supply direct from one or other of the public sources in the District where the water mains are within reasonable distance.

DRAINAGE.

There are 14 Special Drainage Districts in Kirkcaldy Area. These are as follows:—West Wemyss, East Wemyss, Coaltown of Wemyss, Methilhill, Cross Roads, Kennoway, Thornton, Coaltown of Balgonie, Little Raith, Windygates and Balcurvie, Kinglassie, Auchterderran, Lochore and Glencraig, and Lumphinnans.

Supervision of the Special Drainage Districts is undertaken by the respective Sanitary Inspectors and all sewers have been kept in efficient working order during the year.

Although Kennoway is regarded as a Special Drainage District there is no proper system of drainage for this village, and until proper facilities are provided it will be impossible to secure improvements which are necessary. The question of providing a proper system of drainage is meantime under consideration by the County Council.

Trouble was experienced with the outfall sewer at West Wemyss owing to sand and grit being washed into the pipe by the rising tide. It was found necessary to raise the outfall sewer to prevent further obstruction taking place.

In Auchterderran Special Drainage District trouble was experienced from ground subsidence owing to underground workings. The purification works, situated near the river Ore, functioned satisfactorily during the year. No special purification is carried out in connection with sewage from Lochore and Glencraig Special Drainage District. All that is done is to cause the sewage to pass through four troughs partly filled with stones before discharging into the Fitty Burn. Apart from a certain amount of aeration and breaking up of solids the troughs are of little value and sewage reaching the burn is in a crude state. The troughs are cleaned periodically during the summer months. To cater for the needs of the 60 new houses erected at Crosshill, Glencraig, approximately 300 yards of new sewer was laid.

Drainage in Lumphinnans Special Drainage District is linked up with the Lochgelly Burgh Sewer apart from the low lying houses at Zetland Place, the school house and janitor's house. Drainage from these goes into a ditch forming Cowdenbeath Burgh Boundary. The existing sewer passing Brucefield Housing Scheme, Lumphinnans, was replaced by a larger pipe to link up with the 9 inch sewer in order to serve the new houses and allow for future development.

Kinglassie Special Drainage District is akin to that at Kennoway and exists in name only. Proper drainage facilities for this village have been under consideration for some time by the County Council, and until these are provided the fitting of sanitary conveniences to existing houses cannot be carried out. A few private houses in addition to the housing scheme and a row of Fife Coal Company houses have modern conveniences fitted with drainage to septic tank or cesspool, the effluent going into Lochty Burn.

At Thornton the drainage is unsatisfactory. The sewer in Main Street is too small to deal with sewage coming from Strathore Road area and during the summer serious flooding took place here. The question of laying a new sewer to deal with the houses at Strathore Road and additional houses to be built in a field to the south of this road is now under consideration. The purification works, owing to the large number of new houses built in Thornton within the past few years, are now overtaxed and provision should be made to extend and remodel the works as the filter distributors are out of order and partially filtered effluent from the tanks is pumped direct to the river Ore.

The drainage system at Windygates and Balcurvie is satisfactory but no treatment of sewage takes place. All crude sewage is discharged into the river Leven at Cameron Bridge. The position at Methilhill is similar, and in order to prevent gross pollution of the river, steps should be taken to treat the sewage from these populous areas. The matter has been under consideration for some time by the County Council but so far nothing has been done.

Coaltown of Balgonie, like Kennoway and Kinglassie, is a Drainage District in name only. Apart from the new housing scheme, where the drainage is linked up with a septic tank, there is no drainage for the village and most of the houses are still supplied with the old privy closets. Proper drainage for these villages would supply a long needed want and permit the installation of modern sanitary conveniences.

At Little Raith complaints were received during the year regarding a nuisance arising from sewage effluent from the septic tank which discharges into the road-side ditch. All sewage from the housing scheme—48 houses—passes into a septic tank situated some distance back from the public road, and to abate the nuisance the County Council agreed that a fresh outlet should be made from the septic tank into a ditch running through the moss to the south-east of the houses instead of allowing the effluent to discharge into the road-side ditch as formerly.

POLLUTION OF RIVERS.

The river Leven and its chief tributary, the Ore, are both grossly polluted with sewage throughout their course. Dealing first with the river Ore, all the drainage from Auchterderran Special District, which covers a fairly wide area, is discharged into the river. The sewage in this case is treated prior to going into the river as already noted in this report. Sewage in practically a crude state from the Special Drainage District of Lochore and Glenraig is discharged into the Fitty Burn, a tributary of the Ore. At Kinglassie, sewage effluent from septic tanks, which deal with the sewage from the housing scheme and a considerable number of houses erected by Fife Coal Company a few years ago as well as a few private houses, is discharged into the Lochty Burn, another tributary of the river Ore. All sewage from Thornton Special Drainage District ultimately reaches the Ore although partially treated in the Purification Works situated on the banks of the river.

Pollution of the river Ore also takes place to a certain extent by coal washings gaining entrance to the stream from the various pits situated along its course.

At the Aitken Pit steps have been taken to prevent pollution from coal washings by forming an embankment of pit debris and ashes along the river bank so as to form a large settling area surrounded by redd. Large settling ponds formed at the Mary Pit, Lochore, to deal with the washery effluent are proving insufficient and water from this source with a considerable amount of silt has extended and formed a large lagoon which will ultimately reach the Ore unless a bank of redd is taken across from the redd bing on the north side of Lochore railway to Chapel Farm. The matter has been taken up with the Coal Company with a view to forming a large enclosed area which will be divided into several compartments to be emptied or the banks raised in rotation. The question of dealing adequately with the drip water from the washer and waggons at this pit which joins the pit water running into the river Ore near the Old Castle has also been taken up with the Coal Company.

At Randolph Pit adequate provision has already been made by the formation of settling ponds to prevent pollution of the river and the appliances at Gordon Pit also function satisfactorily. Ample provision has also been made at the Nellie Pit to deal with washer effluent and drip water and no pollution of the river takes place here. There is no evidence of pollution reaching the Ore at Minto Pit where all washer water is pumped to the top of the redd bing. Large settling ponds have recently been formed at the Lady Helen Pit and no pollution takes place here.

At Glenraig Colliery washer effluent is settled in a large settling area to the south-east of the pit while waggon drip-water is led into two small settling ponds at the side of the river. Although no pollution

reaches the stream the settling area is too small and water might readily overflow to the river. The question of leading the drip water to the old redd bin on the other side of the railway and forming a large settling pond there has been taken up with the Wilson and Clyde Coal Company.

Drip water from waggons and the washery at Julian Colliery are being run direct into the river Ore, thus causing pollution. Proper settling ponds will require to be formed here to prevent coal washings from reaching the stream.

Pollution of the river Leven itself begins at its source as Loch Lever receives sewage from the Burgh of Kinross and also that of Milnathort a village of considerable size. Both of these have sewage purification works giving a fairly satisfactory effluent. From Walkerton, Leslie to its mouth at Leven the river receives trade waste water and sewage all along its course. At Prinlaws, Leslie, drainage from those houses already fitted with modern sanitary conveniences goes straight into the river without purification. The Burgh of Leslie has two sewage purification works each giving a fairly satisfactory effluent before it reaches the river. Markinch Burgh is now possessed of a modern sewage purification plant which gives a very pure effluent, but up till the completion of the works during the year crude sewage from this Burgh all reached the river.

About a mile above Cameron Bridge, the river Ore, already grossly polluted as noted above, joins the river Leven. At Cameron Bridge all sewage from Windygates and Balcurvie enters the river without previous treatment, and further down the sewer from Methilhill runs direct to the river. It is thus apparent that the river Leven and its tributary, the Ore, are practically open sewers.

The question of pollution of the river Leven was considered by the Scottish Advisory Commission on river pollution last June, but their report has not yet been issued. The problem of proper drainage schemes with the installation of efficient plant to deal with sewage is meantime being considered by Fife County Council in respect of certain villages in Kirkcaldy Area as well as for the County generally. Owing to ground subsidence from mineral workings existing purification works have in some cases been completely ruined while others have been damaged to a certain extent. The installation of new purification works to cope with sewage from mining villages is a problem of great difficulty as few, if any, safe sites are available and new plant if provided might readily be ruined and cease to function in a few years.

HOUSING.

Prior to the change over in accordance with the terms of the Local Government (Scotland) Act, 1929, Kirkcaldy District Committee had for a number of years pursued a very active and progressive housing

policy and had built a large number of houses to replace those unfit for habitation. At the change over Kirkcaldy District was thus in a far better state as regards housing conditions generally than any other part of the County and the housing problem was probably less acute here than elsewhere.

In the few years immediately preceding 1930, Kirkcaldy District Committee had actually built 1,038 new houses and had, just prior to the change over, sanctioned the building of 102 additional houses for the District. This number far exceeds the total number built or sanctioned in the whole of the remainder of the County and reflects great credit on the late District Committee of Kirkcaldy.

The following are the housing schemes completed by Kirkcaldy District Committee prior to the change over in May 1930 :—Balgreggie Park, Cardenden, 58 houses ; Dundonald, Cardenden (1st Development), 52 houses ; (2nd Development), 50 houses ; Woodend, Cardenden (1st Development), 28 houses ; (2nd Development), 50 houses ; Garry Park, Glenraig, 90 houses ; Lochore (1st Development), 50 houses ; (2nd Development), 16 houses ; (3rd Development), 24 houses ; Lumphinnans (1st Development), 54 houses ; (2nd Development), 32 houses ; (3rd Development), 14 houses ; (4th Development), 20 houses ; (5th Development), 8 houses ; Gray Park, 48 houses ; Kinglassie, 56 houses ; Methilhill, 98 houses ; Windygates, 32 houses ; Thornton, 242 houses ; and Kennoway, 16 houses—a total of 1,038 houses. In addition, as noted above, sanction had been given by the District Committee for the building of 102 additional houses and but for the change over these would also have been completed by the District Committee. The additional schemes sanctioned were as follows :—Lochore (4th Development), 6 houses ; Crosshill, Glenraig, 60 houses ; Lumphinnans, 16 houses ; and Coaltown of Balgonie, 20 houses, and all were completed by Fife County Council as part of their 1931 County housing programme.

With a view to further meeting the needs of this area a recommendation was made to the County Council that 202 additional houses over the 102 above noted, should be built by the County Council in 1931 and 80 in the succeeding two years. These were as follows :—

	Place.	1931.	1932-33.	Total.
Lumphinnans	32	32
Thornton	20	..	20
Burntisland	20	..	20
East Wemyss	50	..	50
Boreland	54	..	54
Windy gates—Kennoway	30	..	30
Coaltown of Balgonie	20	20
Kinglassie	16	16	32
Auchtertool	12	12	24
Total	202	80	282

Thus in 1931, 102 houses previously sanctioned by Kirkcaldy District Committee were completed by Fife County Council as part of their housing programme and the schemes at Boreland, Burntisland and Thornton were nearing completion. A start had not been made with the schemes proposed for East Wemyss, Windygates-Kennoway, Kinglassie and Auchtertool at the end of the year.

In spite of the large number of new houses built at Lumphinnans and in the Bowhill-Cardenden area, sub-letting is still in evidence with, as a consequence, overcrowding in certain instances. There are, however, no vacant habitable houses in either area and unless migration takes place to other mining areas to relieve the pressure on existing housing accommodation, sub-letting will continue. At the present time there are 73 sub-let houses in the Bowhill-Cardenden Area and at Lumphinnans it was ascertained during a survey made early in 1931 that there were 96 sub-let houses. Sub-letting here was somewhat relieved by the occupation of houses completed under the 5th Development Scheme during the year.

Demolition Orders in terms of Section 16 of the Housing (Scotland) Act, 1930, were served in respect of 20 houses in Kirkcaldy District during the year and several others were closed voluntarily before the issue of Demolition Orders. Notices were also served in terms of Section 14 of the same Act in respect of two houses in need of repairs but a considerable number of houses in the District were repaired and made habitable without the issue of a notice under Section 14 of the Housing (Scotland) Act, 1930, on representation being made to the owners either by the Medical Officer of Health or Sanitary Inspector.

BUILDING BYE-LAWS.

The number of plans submitted to the Medical Officer for examination and report during 1931 comprised proposals to erect 245 new dwellings (one single-apartment house to be used as a bothy ; 24 two apartment houses ; 216 three-apartment houses ; and 4 four-apartment houses). Plans reported on in respect of other buildings comprised the following :—Alterations to existing dwelling-houses 9 alterations to premises other than for housing 9, new buildings for purposes other than housing 24. In addition to the above plans dealt with, others were received and reported on in respect of the conversion of a three-apartment dwelling into a bake-house and for the restoration of Chapel House (9 apartments and offices) previously destroyed by fire.

HOUSING (RURAL WORKERS) ACT, 1926.

Steady progress has been maintained in Kirkcaldy District during the year in respect of the renovation and improvement of rural housing. The advantages to be derived under the County Scheme of Assistance are always brought to the notice of the owners where improvement

beyond those of ordinary repair and maintenance are necessary. In this way it has again been possible to bring a large number of rural houses up to modern standard with the provision of an inside water supply and all modern sanitary conveniences. In many cases a bath room has been provided in lieu of a single water-closet apartment. Where accommodation is insufficient an additional bedroom has not infrequently been added and in every case a scullery with sink, tub and boiler, and a larder have been provided. Where the lighting is inadequate windows have either been enlarged or additional windows provided. The raising of walls to give a minimum ceiling height of 8 feet and lathing and plastering with special treatment of damp internal solid walls have been insisted on.

It is sometimes difficult to persuade owners or their responsible agents to carry out all the work necessary to render a house fit in all respects for human habitation and some still maintain that the provision of a larder and a modern water-closet within the house of a farm worker is nothing but a luxury. This attitude is by no means uncommon and it is difficult to secure a change of opinion from this old rooted notion. I have no hesitation in saying that far from being a luxury, the provision of a larder and modern water-closet within each house is an absolute necessity. I have no doubt also that if some who believe them to be a luxury had perforce to live in the old type of farm cottage, dark and damp throughout the year, with no place to store food but the kitchen table or on a shelf in this apartment, with perhaps a few hundred yards to carry all water and often fifty yards or more to go to the old fashioned dilapidated privy closet in all weathers and during sickness as well as in health, they would very soon change their minds and also regard these changes as essential. Many an infant death can be attributed to gross contamination of milk in the home by flies and dust, especially during hot summer weather, simply because there is no place to keep it cool and clean. Other articles of food may also suffer but milk is specially liable to infection and it is by far the best medium for the growth of disease producing germs which multiply with enormous rapidity during hot weather. Outbreaks of infantile diarrhoea, and not infrequently deaths, could largely be prevented by the provision of a larder for each house in order to keep the food clean and cool. Not a few deaths have also been caused through a chill caught by someone having to use a distant privy in the middle of the night during the winter months.

Opinions may differ on these matters but any reasonably minded person who considers the facts as stated above will, I think, agree that the time has come when all inhabited houses should be provided with both a larder and a modern water-closet and that water should also be laid on within each house. On going round farm cottages I have frequently been struck by the happy contented outlook on life displayed by the housewife of a modern cottage in contrast to the

“trauchled” discontented demeanour of one who has perforce to live in a house of the old type. I am quite sure that in a few years farmer will have the greatest difficulty in securing families for their cottages unless these are provided with all conveniences as, having once lived in a modern cottage, few will go back to the old type.

During the year plans were submitted and reported upon in respect of proposed alterations and additions to 80 houses in Kirkcaldy District in terms of the County Scheme for grant under the Housing (Rural Workers) Act, 1926. All but one were finally approved for grant although some required to be amended in several respects to meet the requirements necessary to render the houses fit for human habitation. In five instances the work was not gone on with although the plans were finally approved for grant.

The following statement gives particulars relating to Inspection and Improvement of Farm Servants’ Cottages since 2nd April, 1929, when a circular on the subject was issued by the Department of Health. A statement was submitted to the Department early this year giving similar details for the County as a whole :—

FARM SERVANTS’ COTTAGES.

COUNTY OF FIFE. KIRKCALDY DISTRICT.

Total estimated number of farm servants’ cottages in Area,	(a) 62
Number of such cottages inspected in terms of Section 5 of the Housing (Scotland) Act, 1925, and relative Inspection of District Regulations since 1st August, 1930,	(b) 34
Number of houses in (b) which were found to be not in all respects fit for human habitation,	(c) 25
Number of houses in (b) which have been demolished or closed,	(d) 1
Number of houses in (b) which have been made fit for human habitation or which are in process of being made fit :—	
(e) with assistance under the Housing (Rural Workers) Act, 1926,	(e) 12
(f) without such assistance,	(f) 5
Number of houses in (c) in respect of which no action has been taken,	(g)
Number of farm servants’ cottages not inspected between 2nd April, 1929, and present date	(h) 27

*Action taken in every case but frequently owners had no money to spend on renovation. A considerable number of the defective houses are now being renovated in terms of the Housing (Rural Workers) Act, 1926.

TOWN PLANNING, Etc., ACT.

No conditions have arisen or are likely to arise in Kirkcaldy District pointing to the expediency of a Town Planning Scheme for the proper control of further development.

INFECTIOUS DISEASES.

During the year 1931, seven hundred and forty cases of infectious diseases came to my notice within the Landward Area of Kirkcaldy in contrast to 1,134 in 1930. The cases notified were as follows:—Typhoid fever 1, scarlet fever 127, diphtheria 117, erysipelas 49, puerperal fever 6, ophthalmia neonatorum 26, chickenpox 183, encephalitis lethargica 2, acute primary pneumonia 92, acute influenzal pneumonia 30, pulmonary tuberculosis 41, non-pulmonary tuberculosis 44, puerperal pyrexia 16, cerebro-spinal meningitis 6.

There was a decrease in the number of all notifiable infectious diseases brought to notice in 1931 with the exception of erysipelas 10 more, puerperal fever 1 more, acute influenzal pneumonia 19 more and puerperal pyrexia 3 more. There were also 6 cases of cerebro-spinal meningitis notified in 1931, while no cases of this disease came to notice in 1930. The decrease in the numbers notified for each disease in 1931 in contrast to 1930 was as follows:—Typhoid 10 less, scarlet fever 72 less, diphtheria 61 less, ophthalmia neonatorum 13 less, chickenpox 193 less, encephalitis lethargica 1 less, acute primary pneumonia 62 less, pulmonary tuberculosis 11 less and non-pulmonary tuberculosis 7 less, while no cases of dysentery came to notice during the year.

All cases of scarlet fever and diphtheria with the exception of one of each disease were treated in hospital. A table showing the cases notified with the incidence of disease under the age period groups and the numbers removed to hospital is attached.

Where home conditions proved unsatisfactory and suitable nursing facilities were not available for the home treatment of cases of infectious diseases other than above noted, arrangements were made for removal to hospital. Thus, quite a number of cases suffering from broncho-pneumonia following measles or whooping cough were treated in hospital during the year. Cases of influenzal pneumonia were dealt with as for other notifiable diseases and removed to hospital if the circumstances were such that proper treatment could not be given at home. All cases of encephalitis lethargica and cerebro-spinal meningitis were removed to hospital. No cases of infective jaundice or psittacosis came to notice during the year.

Satisfactory arrangements exist for the supply of diphtheria anti-toxin throughout the County as a whole but no use is made of the Schick and Dick tests of susceptibility to diphtheria and scarlet fever and no artificial immunisation against these diseases is carried out.

Schemes relating to the treatment and prevention of tuberculosis and of venereal diseases are in operation for the County as a whole and will be dealt with elsewhere in the County Annual Report. The schemes under Maternity and Child Welfare and the medical care and nursing of the sick poor are also operative for the County as a whole and will be dealt with as such.

HOSPITAL FACILITIES.

The hospital facilities available for those resident in Kirkcaldy Area are as follows:—(1) Kirkcaldy Joint Infectious Diseases Hospital, Thornton; (2) Smallpox Hospital, Fosterton, Thornton; (3) Cameron Infectious Diseases Hospital, Windyates; (4) The Randolph Wemyss Memorial Hospital, Methil; and (5) Home and Hospital, Station Road, Thornton.

All cases of infectious diseases within the Landward Area and Burghs in Kirkcaldy District, with the exception of Kirkcaldy Burgh which has a separate hospital for Burgh cases, are catered for at Kirkcaldy Joint Infectious Diseases Hospital, Thornton and Cameron Infectious Diseases Hospital, Windyates. The former is the sole hospital used for the treatment of cases of ophthalmia neonatorum throughout the County and those burghs in which the major health services have been transferred to the County Authority. Similarly the Smallpox Hospital at Fosterton, Thornton, is the only hospital in the County for the treatment of cases of Smallpox. It adjoins the Kirkcaldy Infectious Diseases Hospital and is always kept in readiness for the reception of cases, but, fortunately, it has not been required for a number of years now.

The Randolph Wemyss Hospital is a small private institution partly endowed and dependent on voluntary aid. There are 28 beds and it is for the most part used for surgical cases but any urgent case whether medical or surgical is admitted. The Medical Staff consists of a visiting Superintendent who resides in the adjoining house, while local practitioners attend their own patients and administer anaesthetics. Two consulting surgeons from Edinburgh visit as required to carry out major surgical operations. The Nursing Staff is composed of a matron, three trained nurses and six probationers.

The Home and Hospital, Station Road, Thornton, is now maintained by Fife County Council under the Poor Law Acts and contains 45 beds for general medical cases, 13 beds for chronic sick and two maternity beds. There is no appropriate accommodation for children in this hospital. The staff of this hospital consists of a visiting Medical Superintendent, a Matron and five trained nurses.

KIRKCALDY JOINT INFECTIOUS DISEASES HOSPITAL.

This hospital has meantime accommodation for 60 beds as approved by the Department of Health, but not infrequently this number of patients is greatly exceeded. As pointed out in previous reports, the administrative block is too small for the size of the institution, there being insufficient accommodation for the nursing staff and maids. The kitchen and offices also are too small and inadequate for present needs.

The total number of admissions during 1931 was 385 and the number of patients discharged was 349. The average duration of stay of

patients discharged or who died was 31·53 days and 36 deaths took place during the year. The average number of beds occupied during 1931 was 33, the highest being 53 on the 26th December, and the lowest 15 on the 22nd July 1931.

Seven operations were performed under general or spinal anaesthesia and a considerable number of minor operations, no record of which was kept, were also carried out. There is no operating theatre and no laboratory equipment is available for this hospital. The Medical Staff consists of a visiting Medical Superintendent and an Assistant, there being a private telephone between the doctor's house and the hospital. The Nursing Staff consists of a matron, 12 trained nurses and 10 probationers.

Suitable motor ambulance facilities are available for the removal of patients to and from the hospital.

CAMERON HOSPITAL.

This hospital, consisting of 4 pavilions and administrative block, is approved by the Department of Health for 22 beds but this number of patients is exceeded on occasion. During the year there were 161 patients admitted to this hospital and 157 discharged. Eighteen deaths took place in hospital and the average duration of stay of patients discharged or who died was 22 days. The average number of beds occupied during the year was 10·75, the highest being 26 on January 1st, 1931, and the lowest 4 on 16th June, 1931.

Only one operation under general or spinal anaesthesia was performed and a few minor operations were also undertaken, viz. :—opening of abscesses, etc. No operating theatre or laboratory equipment are available at this hospital. The Medical Staff consists of a visiting Medical Superintendent and a Nursing Staff of a matron, 1 fully trained nurse, 2 partially trained nurses and 6 probationers.

Suitable motor ambulance facilities are available for the removal of patients.

THE SMALL-POX HOSPITAL

at Fosterton, Thornton, is run in conjunction with Kirkcaldy Joint Infectious Diseases Hospital, there being no special staff here. The hospital has accommodation for 14 patients.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.

There are 118 dairies in Kirkcaldy Landward Area and the number of cows for which the premises are registered is 3,053. There are still a considerable number of premises that do not conform in all respects to the standard laid down in terms of the County Dairy Bye-laws, but progress was made during the year in rectifying defects. Whenever a change of tenant took place only provisional registration was granted unless the premises were satisfactory in all respects for dairy purposes

when full registration was given. On receipt of an application for registration I personally visit the premises and where these are defective the matter is discussed with the tenant and the work necessary to bring the dairy up to standard in terms of the Bye-laws is indicated verbally and confirmed in writing. In this way a considerable number of defective premises were made suitable in all respects for the dairy trade in the course of the year.

Although the standard of dairying is steadily improving, especially as regards equipment and methods of production, it is still to be noted that some do not adhere to the standard of cleanliness of premises and of cows which is essential for the production of clean milk. The clipping of cows udders, flanks and tails is regarded by some as unnecessary and improper cleansing before milking leads to dirt gaining entrance to the milk. Where the premises are not properly washed out daily, soiling of udders is not infrequently observed and milking under such conditions cannot fail to give milk of a dirty nature. Another frequent fault found on going round dairies and one which dairymen are rather guilty of is the practice of stuffing ventilators, both inlet and outlet, with straw or old sacking. On entering a byre improperly ventilated or with ventilators closed as above noted, the air is frequently found to be foul and nauseating and very unhealthy for the animals stalled therein. There can be no question that under conditions of this nature throughout the winter months a single tuberculous animal may infect many others. Yet owners in some cases are loath to change from their old fashioned ways and maintain that their cows get a chill when the ventilators are left open. Were the animals accustomed to fresh air in the byre from the time they come in off the grass I am quite sure they would neither take chills nor feel cold in a properly ventilated byre in winter. Cattle are naturally open air animals and readily adapt themselves to environment, but where kept in close stuffy byres with a temperature often that of a hothouse and with an insufficient supply of clean fresh air, it is not to be wondered at that so many contract chills or become infected with tuberculosis. As in the human species, fresh air and sunshine are essential for perfect health in cows and unless this is freely given disease sooner or later supervenes.

No outbreak of disease attributable to milk occurred during 1931 and no action was taken in connection with milk consigned from other areas. Arrangements exist whereby bacteriological examination of samples can be carried out in terms of Sections 20 and 21 of the Milk and Dairies (Scotland) Act, 1914.

Grade A (Tuberculin Tested) Milk is produced at Wemyss Castle Dairy in terms of the Milk (Special Designations) Order, 1930. Samples of this milk taken during the year for chemical analysis and bacteriological examination showed the milk to be clean and of good quality and well within the standard laid down in the Order.

Pasteurised milk in terms of the above Order is also sold by Buckhaven Co-operative Society within the Landward District of Kirkcaldy. The premises in which the pasteurising is carried out are situated in Buckhaven Burgh and are suitable in all respects for the purpose. Samples of pasteurised milk sent during the year for chemical analysis and bacteriological examination proved the milk to be quite satisfactory and in accordance with the provisions laid down in the Order.

Apart from the above designated milk sold in Kirkcaldy District there are no premises registered for the sale of designated milk and no progress has been made in milk grading within the District.

MEAT INSPECTION.

There are six public and three private slaughterhouses in Kirkcaldy District now under the control of the County Council for purposes of meat inspection under the Public Health (Meat) Regulations (Scotland) 1930. The private slaughterhouse at Kinghorn and five of the public slaughterhouses in other burghs situated at Buckhaven, Leven, Lochgelly, Leslie and Burntisland still come under the jurisdiction of the Town Councils for purposes of licensing, etc. These will be dealt with under the respective burghs.

The attached table shows for each slaughterhouse in Kirkcaldy Area the number of animals slaughtered and the weight in lbs. of meat condemned during the year. It will be observed that the amount of meat condemned in the individual slaughterhouses varies considerably, three showing a clean bill of health as far as the animals slaughtered are concerned. Thus of a total of 2,262 animals slaughtered (cattle 777, sheep 1,303, pigs 182), at East Wemyss, Burntisland and Kinghorn, none of the animals or organs were condemned. At Buckhaven on the other hand where 1,580 cattle, 1,241 sheep, 42 calves, and 517 pigs were slaughtered in the public slaughterhouse 36,087 lbs. of meat were condemned over the same period. The explanation of this apparent discrepancy is difficult but may be two-fold. In the one case either the class of animal slaughtered must have been of a very much better type and less liable to disease or the supervision of the carcasses and organs in the latter case must have been more thorough and complete. I do not think that the first explanation fully meets the case. Thus, liver fluke disease is by no means uncommon and may attack animals of prime quality yet with the exception of Cardenden, where 30 lbs. of liver was condemned, and Buckhaven not a single case of this disease is recorded in the Area. At Buckhaven it was found that 120 animals (117 cattle and 3 sheep) were affected by this disease and the weight of liver condemned was 2139 lbs. Tuberculosis is also by no means uncommon nor is it confined to emaciated animals. Apparently quite healthy animals may be found on slaughter to be badly affected with this disease.

I do not mean to imply that any of the Detention Officers are remiss in their duty but where they can neither inspect every carcass nor give the time to thoroughly inspect every organ as well there is always the chance of unsound meat being passed on to the consumer. The Detention Officer in most cases is so placed that he cannot possibly give the time to meat inspection which should be available for this purpose, and in many cases he merely relies on the butcher to inform him when anything is wrong and only visits the slaughterhouse as time will permit. This to my mind is unsatisfactory and I consider that slaughtering should only be permitted in a public abattoir where a full time superintendent is in charge and where a Detention Officer, who is thoroughly conversant with all forms of diseased meat, is always available to inspect every carcass and organ passing through. I am quite satisfied that this is the only sure means of preventing unsound meat from reaching the consumer.

Place.	Class of Animal.				Condemned Meat.
	Cattle.	Sheep.	Calves.	Pigs.	Weight in lbs.
Markinch	860	692	..	256	1,512
Cardenden	53	26	..	8	30 (Liver)
East Wemyss	208	260	..	40	Nil
Lochgelly	731	657	5	361	2,951
Burntisland	461	850	2	106	Nil
Kinghorn	108	193	8	36	Nil
Buckhaven	1,580	1,241	42	517	36,087
Leven	1,067	1,392	..	287	1,220
Leslie	429	273	..	109	3,752
Totals	5,497	5,586	57	1,720	45,522 lbs.

Markinch public slaughterhouse, though within the Landward District, is the property of Markinch Town Council. The premises here are quite suitable for the purpose and curtailment of the hours for slaughter have been recommended to the County Council as follows:—Monday to Friday, 2—5 p.m., and Saturday, 9 a.m. to 12 noon. No definite hours had previously been fixed for the slaughter of animals and proper supervision and inspection of the meat was practically impossible. Even with this curtailment of hours the Sanitary Inspector as Detention Officer could not personally inspect every animal slaughtered.

During the year 860 cattle, 692 sheep and 256 pigs were slaughtered at Markinch public abattoir and of these only two bullocks of approximately $6\frac{3}{4}$ cwts. each were condemned as unfit for human consumption owing to generalised tuberculosis. Both carcasses were disposed of to the Damside Works, Cupar.

The private slaughterhouse owned by Mrs. Ann Campbell at Balgreggie Road, Cardenden, is of suitable construction for the purpose. No slaughtering takes place here without notice being given to the Detention Officer who lives about 100 yards distant. Inspection here is very satisfactory as every animal slaughtered is inspected by Mr. Riddle, Detention Officer.

The following table gives the number of animals slaughtered during the year and the weight in lbs. of condemned meat.

Class of Animal.	Number of Animals.			Weight in lbs. of condemned Meat and offals.
	Slaughtered.	Wholly Condemned.	Partially Condemned.	
Cattle	53	30 lbs. Liver.
Sheep	26	..	..
Pigs	8	..	..

The privately owned slaughter house at East Wemyss belonging to East Wemyss Co-operative Society is of poor construction and not in all respects suitable for the purpose. Representation was made to the County Council in the course of the year to have this slaughterhouse closed owing to the close proximity of Buckhaven public abattoir but it was agreed to continue the licence. Definite hours for the slaughter of animals have now been fixed as follows :—Monday and Friday, 9 a.m. to 1 p.m. ; Wednesday, 2—5 p.m. Although unsatisfactory as to structure, the premises are kept in a reasonably clean condition and the hours fixed should prove more suitable for efficient inspection of the animals slaughtered.

The following table gives the number of animals slaughtered and the weight in lbs. of meat and offal condemned :—

Class of Animals.	Number of Animals.			Weight in lbs. of Meat & offal condemned.
	Slaughtered.	Wholly Condemned.	Partially Condemned.	
Cattle	208	Nil	Nil	Nil
Sheep	260	Nil	Nil	Nil
Pigs	40	Nil	Nil	Nil

THE MERCHANDISE MARKS ACT, 1926.

Explanatory leaflets were distributed to shopkeepers and traders in Kirkcaldy Area with a view to more efficient enforcement of the provisions relating to the marking of imported food stuffs with an

indication of origin. Retail shops and vendors' carts have been periodically inspected to ensure that the provisions of the Orders in Council under the Act are being complied with.

FOOD AND DRUGS (ADULTERATION) ACT, 1928.

Two hundred and eighty-seven samples of food were obtained and submitted for analysis in terms of the above Act and the Public Health (Preservatives in Food) Regulations. With seven exceptions, all were reported as genuine. Four samples of mince were found to be non-genuine and fines ranging from £2 to £6 with £2 2s expenses were imposed by the Sheriff. The vendors of two samples of mincemeat found to be non-genuine were fined £1 and £2 respectively, while the vendor of a sample of non-genuine sweet milk was warned.

FACTORIES AND WORKSHOPS, Etc.

Two hundred and seventy-two visits of inspection were made in Kirkcaldy Landward Area in the course of the year in respect of Factories, Workshops and Workplaces, viz.:—40 in Wemyss Area, 152 in Lochgelly Area and 80 in Kirkcaldy Area. With one exception, where want of cleanliness was observed no defects were found and the premises were found to be well kept. The defect noted above was remedied after written notice was sent to the owner.

LOCHGELLY BURGH.

INFECTIOUS DISEASES.—One hundred and thirty-two cases of infectious diseases were notified during 1931, there being 58 fewer cases than in the preceding year, and in comparison with the number notified in 1929, the decrease was 137. Scarlet fever showed a decrease of 24, diphtheria a decrease of 2, and erysipelas a decrease of 12 from the numbers notified in 1930. No case of typhoid fever occurred in contrast to two cases of this disease in the preceding year. Tuberculosis showed a slight increase over the number notified for 1930, there being two more cases of the pulmonary type and three more of the non-pulmonary form of this disease. Acute primary pneumonia showed a decrease of 17 cases, while acute influenzal pneumonia was also less prevalent, there being 19 fewer cases of this disease notified in 1931 than in 1930. Three cases of cerebro-spinal meningitis were notified in 1931 but no case of this disease occurred in 1930. The attached table shows the return of cases of infectious diseases under the age groups with the number of patients admitted to hospital during the year.

The number of infectious diseases notified during the year were as follows:—Scarlet fever 5, diphtheria 18, erysipelas 9, puerperal fever 1, ophthalmia neonatorum 2, chickenpox 25, encephalitis lethargica 2, acute primary pneumonia 27, acute influenzal pneumonia 6, pulmonary tuberculosis 10, non-pulmonary tuberculosis 24, and cerebro-spinal meningitis 3.

MEAT INSPECTION.—The public slaughterhouse is of good construction and is kept in a clean and satisfactory manner by the Superintendent in charge. Definite hours are fixed for the slaughter of animals and the Detention Officer is in daily attendance for the purpose of meat inspection. During the year a total of 1756 animals were slaughtered as follows :—Cattle 731, sheep 657, calves 5, and pigs 361.

Disease.	Beef.		Total.	
	No.	Wt. in lbs.	No.	Wt. in lbs.
(a) Tuberculosis	1	1,008	1	1,008
(b) Cirrhotic Disease	163	1,931	163	1,931
(c) Decomposition	1	12	1	12
Total	165	2,951	165	2,951

FOOD AND DRUGS (ADULTERATION) ACT, 1928.—Fourteen samples of food and drugs were taken during the year and all were found on analysis to be genuine.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.—There is only one dairy within the Burgh and the number of cows for which the premises are registered is 24; the premises are kept in a clean and satisfactory manner. The bulk of the milk supplied in the burgh comes from dairies situated within the Landward Area. A pasteurised milk in terms of the Milk (Special Designations) Order, 1930, is also sold in the Burgh. This is produced at Dunfermline by the Dunfermline Co-operative Society.

BUCKHAVEN AND METHIL BURG.

INFECTIOUS DISEASES.—During the year 361 cases of infectious diseases were notified within the Burgh. This is an increase of 88 over the number notified in 1930 but is accounted for by a large increase in the number of cases of chickenpox occurring during the year. In 1931, 210 cases of this disease were notified in contrast to 59 in the preceding year.

The cases notified in 1931 were as follows :—Scarlet fever 27, diphtheria 16, erysipelas 17, puerperal fever, 4, ophthalmia neonatorum 11, chickenpox 210, dysentery 1, acute primary pneumonia 26, acute influenzal pneumonia 7, pulmonary tuberculosis 23, non-pulmonary tuberculosis 17, and puerperal pyrexia 2.

There was a decrease of 23 cases of scarlet fever, 19 cases of diphtheria, 36 cases of acute primary pneumonia, 5 cases of acute influenzal pneumonia, and 5 of pulmonary tuberculosis from the numbers notified in 1930. An increase of 9 erysipelas, 3 puerperal fever, 4 ophthalmia neonatorum, 151 chickenpox, 7 non-pulmonary tuberculosis and 2 of puerperal pyrexia fall to be recorded in the same period.

Hospital treatment was provided at Cameron Hospital for cases of infectious diseases apart from tuberculous patients who were treated at Glenlomond Sanatorium.

No school closure was necessary during the year for the prevention of the spread of infectious diseases.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.—There are only two dairies within the Burgh registered for the production of milk. These are well kept and are fairly satisfactory for the purpose. Wellesley Road Dairy is registered for 8 cows and Kirklandhill Dairy for 43 cows. The bulk of the milk supplied in the burgh is produced in registered dairies within the Landward Area. Buckhaven Co-operative Society procure most of this and sell it as pasteurised milk after treatment at their premises in accordance with the provisions of the Milk (Special Designations) Order, 1930. Samples of this milk taken for chemical and bacteriological examination during the year showed it to be of good quality and well within the standard of purity laid down in the Order.

Grade A (Tuberculin Tested) Milk produced at Wemyss Castle Dairy in the Landward Area is also supplied in the Burgh.

MEAT INSPECTION.—The public slaughterhouse is a modern structure well adapted for the purpose. It is kept in a very clean and satisfactory manner. A full time Superintendent is in charge and the Detention Officer is in daily attendance. Supervision of the animals slaughtered and of the various organs liable to disease is carefully carried out and there is little likelihood of unsound food reaching the consumer from this abattoir.

The following tables show the number of animals slaughtered monthly during the year and the weight of meat condemned as unfit for human consumption during that time :—

Return of Animals Slaughtered at Public Slaughterhouse for the year ending 31st December, 1931.

Month.	Oxen.	Calves.	Sheep.	Swine.	Total.
January	134	1	87	33	255
February	120	1	85	36	242
March	114	2	93	45	254
April	136	2	90	45	273
May	123	..	106	35	264
June	118	..	95	29	242
July	140	2	110	23	275
August	128	..	110	28	266
September	131	2	120	59	312
October	153	4	112	63	332
November	129	9	95	68	301
December	154	19	138	53	364
Totals	1,580	42	1,241	517	3,380

UN SOUND FOOD.

Carcases entirely or partially destroyed for the year ending 31st December, 1931

Disease.	Cattle.		Calves.		Sheep.		Swine.		Total.		Weight in lbs.
	En.	Pt.	En.	Pt.	En.	Pt.	En.	Pt.	En.	Pt.	
Tuberculosis	9	152	..	1	..	..	..	6	9	159	31,429
Flukes	..	117	..	..	..	3	..	..	..	120	2,139
Necrosis	..	12	..	1	1	..	..	..	1	13	197
Bruised	..	5	..	..	..	..	..	..	..	5	736
Dropsy	..	2	..	..	..	..	..	..	..	2	427
Dead	3	..	..	..	3	..	176
Abscesses	..	7	..	..	..	1	..	..	..	8	122
Congestion	..	3	..	..	..	1	..	..	..	4	313
Inflammation	..	1	..	..	..	..	..	..	..	1	72
Actinomycesis	..	4	..	..	..	..	..	..	..	4	273
Emaciated	..	1	..	..	..	..	..	..	..	1	86
Piners	3	..	..	..	3	..	117
Totals	9	304	..	2	7	5	..	6	16	317	36,087

VITAL EVENTS.—The population of the Burgh as estimated to the middle of 1931 was 17,722. The corrected number of births was 386 (males 190, females 196), equivalent to a birth-rate of 21·8 per 1,000 of estimated population. There were 17 illegitimate births or 4·4 per cent. of the total births.

The marriages for the year numbered 107 and the crude marriage-rate was 6 per 1,000.

Deaths numbered 183 (males 90, females 93), and the corrected and adjusted death-rate was 10·3 per 1,000. The death-rate for all tuberculosis was 0·28 per 1,000 and that for pulmonary tuberculosis was similar, there being no deaths attributed to other forms of this disease. In 1930 the death-rate for all tuberculosis was 0·86 per 1,000 and that for pulmonary tuberculosis 0·70 per 1,000. Ten deaths occurred from the principal epidemic diseases, the death-rate being 0·56 per 1,000.

Thirty infants under the age of one year died during the year 1931 and the infantile mortality (deaths under one year per 1,000 births) was 78. This is two less than in the preceding year and a fairly satisfactory figure for a Burgh of this size. Eighteen of the deaths in this group occur under the heading of congenital debility, premature birth and malformations. This points to the need for better care of the expectant mother as neglect or lack of proper ante-natal treatment is a frequent cause of prematurity, malformations and weakly infants who rarely survive the first few days of life.

LEVEN BURGH.

INFECTIOUS DISEASES.—The number of cases of infectious diseases notified during the year was 79—three less than in 1930. The diseases notified were as follows:—Scarlet fever 9, diphtheria 5, erysipelas 4, ophthalmia neonatorum 1, chickenpox 46, acute primary pneumonia 2, acute influenzal pneumonia 1, pulmonary tuberculosis 6, non-pulmonary tuberculosis 3, and cerebro-spinal meningitis 2.

Both scarlet fever and diphtheria were less prevalent than in the preceding year when 11 cases of scarlet fever and 12 of diphtheria came to notice.

Treatment is available for cases of ordinary infectious diseases at Cameron Hospital, Windygates, and for tuberculosis at Glenlomond Sanatorium.

School closure was unnecessary for the prevention of the spread of infectious diseases during the year.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.—There is only one dairy viz. :—Shotburn Farm, registered for the production of milk within the Burgh. The number of cows for which the premises are registered is 20. The premises are satisfactory for the purpose and are kept clean and tidy. The bulk of the milk supplied in the Burgh is produced in dairies within the Landward Area.

MEAT INSPECTION.—There is a public slaughterhouse within the Burgh. This is somewhat old and in close proximity to the dwelling-houses but it is quite well kept and is suitable for the purpose. A full time Superintendent is in charge and the Detention Officer is in daily attendance. The only change here since the coming into operation of the Local Government (Scotland) Act, 1929, is in respect of the Meat Inspector. Previously a local Veterinary Surgeon acted in this capacity whereas under the County administration the County Veterinary Officer is called in by the Detention Officer when any diseased or suspicious carcase is observed.

The following table gives the number of animals slaughtered and the weight in lbs. of meat condemned as unfit for human consumption during the year. :—

Class of Animal.	Number of Animals.			Weight in lbs. of condemned Meat and offal.
	Slaught'd.	Wholly cond'md.	Partially condem'd.	
Cattle	1,067	2	Nil	1,050 lbs.
Sheep	1,392	3	Nil	170 "
Pigs	287	..	Nil	Nil

BURNTISLAND BURGH.

INFECTIOUS DISEASES.—There were 51 cases of infectious diseases notified within the Burgh during 1931. Individual diseases notified were scarlet fever 17, diphtheria 2, erysipelas 6, chickenpox 16, malaria 1, acute primary pneumonia 5, acute influenzal pneumonia 2, pulmonary tuberculosis 1, and non-pulmonary tuberculosis 1.

The number of cases notified during the year is 10 more than in 1930, scarlet fever showing an increase of 12, chickenpox an increase of 9, and erysipelas an increase of 3. All other diseases showed a decrease from the number notified during 1930.

Hospital treatment was provided at Kirkcaldy District Infectious Diseases Hospital, Thornton, for ordinary infectious diseases and at Glenlomond Sanatorium for tuberculous cases.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.—There are two dairies within the Burgh registered for the production of milk. These are Kirkton Dairy registered for 30 cows and Green Mount Dairy registered for 24 cows. The premises are well kept and satisfactory for the purpose. Milk from dairies registered in the Landward Area of the County is also supplied within the Burgh.

MEAT INSPECTION.—There is a good public slaughterhouse within the Burgh with a full time Superintendent in charge. The premises are kept in an excellent manner and have always been found scrupulously clean. During the year supervision of the animals slaughtered here was unsatisfactory as the Detention Officer in addition to his duties as Sanitary Inspector for a wide area had the supervision of three other slaughterhouses at Leslie, Markinch and Kinghorn. An arrangement has now been come to with the Burgh and the local Sanitary Inspector who acted as Detention Officer prior to the change over in terms of the Local Government (Scotland) Act, 1929, has again been appointed as Detention Officer.

During the year the following animals were slaughtered:—Cattle 461, sheep 850, pigs 106, and calves 2. No meat was condemned as unfit for human consumption during the year.

MARKINCH BURGH.

INFECTIOUS DISEASES.—There were only 15 cases of infectious diseases notified during the year in contrast to 58 cases brought to notice in 1930. The diseases notified in 1931 were as follows:—Scarlet fever 6, diphtheria 1, erysipelas 1, chickenpox 1, acute primary pneumonia 1, pulmonary tuberculosis 1, non-pulmonary tuberculosis 1, and puerperal pyrexia 3.

Five cases of scarlet fever and one of diphtheria were removed to the Infectious Diseases Hospital, Thornton, for treatment.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.—There are no premises within the Burgh licensed for the production of milk. All milk sold in the Burgh is produced in premises licensed within the Landward Area of the County.

MEAT INSPECTION.—The public slaughterhouse which is situated just outwith the Burgh boundary is the property of the Town Council but comes under the jurisdiction of the County Council for purposes of meat inspection and licensing of the premises, etc. This slaughterhouse and matters relating to meat inspection here have already been dealt with in the report for Kirkcaldy Landward Area.

LESLIE BURGH.

INFECTIOUS DISEASES.—During the year 10 cases of infectious diseases were recorded. This is a decrease from the number notified in 1930 when 85 cases were brought to the notice of the Medical Officer of Health. During the year only a single case of chickenpox was notified in the Burgh whereas in 1930, 73 cases were recorded.

The cases notified during the year were as follows :—Scarlet fever 3, diphtheria 1, erysipelas 3, chickenpox 1, and acute primary pneumonia 1.

All the cases of scarlet fever and diphtheria were admitted to the Infectious Diseases Hospital, Thornton.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.—Maryfield Dairy, registered for 20 cows, is the only dairy in the Burgh. As noted in my previous report the premises though well kept are not in accordance with the standard laid down in the County Dairy Bye-laws. Both light and ventilation are below standard, beam filling requires to be carried out and the wooden trevisses should be replaced by cement or cast-iron fittings of the iron tubular type.

MEAT INSPECTION.—There is a public slaughterhouse within the Burgh. This is of good construction and well kept. Curtailment of the hours for slaughter were fixed by the Town Council and approved by the Department of Health as follows :—Daily from 2—7 p.m., except Sunday. The hours fixed may be reasonable and necessary for the butchers who slaughter here but meat inspection cannot be satisfactorily carried out by the Detention Officer under existing arrangements as he is also Sanitary Inspector for a wide area with two other slaughterhouses to visit and cannot possibly spend every afternoon at Leslie. In consequence meat inspection as far as he is concerned is practically a thing in name only. As already referred to under the Landward Area, meat inspection to be of any use must include the thorough examination of every animal slaughtered including the viscera, etc. The Burgh Sanitary Inspector, who also acts as superintendent of the slaughterhouse, notifies the Detention Officer

when suspicious meat is noticed or brought to his notice by the butcher but on an average the Detention Officer only visits this abattoir or three days per week.

The number of animals slaughtered during the year was as follows :—Cattle 429, sheep 273, pigs 109. Five carcasses of cattle were condemned as unfit for human consumption on account of generalised tuberculosis. These were removed to Damside, Cupar, for destruction and weighed approximately 27½ cwts. dead weight.

KINGHORN BURGH.

INFECTIOUS DISEASES.—Thirty-eight cases of infectious diseases were notified during 1931 as follows :—Scarlet fever 8, diphtheria 1, erysipelas 3, chickenpox 15, acute primary pneumonia 8, acute influenzal pneumonia 1, pulmonary tuberculosis 1, and cerebro-spinal meningitis 1. In 1930, 48 cases were notified.

All cases of scarlet fever, diphtheria and cerebro-spinal meningitis were removed to the Infectious Diseases Hospital, Thornton, for treatment.

MILK AND DAIRIES (SCOTLAND) ACT, 1914.—There is only one dairy viz. :—Lochty Dairy, within the Burgh, and the premises are registered for 10 cows. The bulk of the milk sold in the Burgh is produced in premises licensed within the Landward Area. Lochty Dairy is satisfactory for the purpose and is kept in a clean and tidy condition.

MEAT INSPECTION.—There is one privately owned slaughterhouse within the Burgh, the premises being part of an old mill converted for use as an abattoir. The structure is not altogether suited for the purpose but it is kept in a clean and quite satisfactory manner. In view of the close proximity of Kirkcaldy public slaughterhouse to Kinghorn the question of closure of this private abattoir was raised with the Town Council. An agreement was come to whereby the owner agreed to close his premises for slaughtering animals as soon as the new slaughterhouse at Kirkcaldy is ready for use. At the same time the Town Council agreed to fix hours for slaughter as suggested by the Medical Officer so long as the present slaughterhouse remains in use. The hours fixed were as follows :—Winter months—Tuesday and Thursday, 2—5 p.m.; summer months—Tuesday, Thursday and Friday, 2—5 p.m.

As in other slaughterhouses in this area, supervision of the animals slaughtered has not been so complete and satisfactory as it should be but it is hoped that the new slaughterhouse at Kirkcaldy will be ready for use at an early date so that closure can be made of the private structure in Kinghorn Burgh in accordance with the agreement come to between the Town Council and the owner.

During the year 108 cattle, 193 sheep, 36 pigs and 8 calves were slaughtered in this private slaughterhouse and none of the meat was condemned as unfit for human consumption.

Cupar District.

Dr. G. MATTHEW FYFE, Depute Medical Officer.

As the following paragraphs will show, the year 1931 was not attended by the appearance of any influences or conditions injurious to the health of the District. The incidence of infectious diseases was exceptionally low. Except for an outbreak of Foot and Mouth Disease among cattle, nothing of an untoward nature was discovered in connection with the food supply. Progress was made but slowly in connection with the improvement of housing conditions. In short, the year was an uneventful one—an administrative calm following the storms and disruptions of the local government reform of 1930.

INFECTIOUS DISEASES.

Only 130 persons in the landward part of the District were notified as suffering from infectious diseases, viz. :—

					Removed to Hospital.
Scarlet Fever	..	..	..	38	36
Diphtheria	..	..	..	5	4
Erysipelas	..	..	..	10	3
Puerperal Fever	..	..	..	1	..
Ophthalmia Neonatorum	..	..	..	6	3
Chickenpox	..	..	..	42	..
Acute Primary Pneumonia	..	..	..	9	3
Acute Influenzal Pneumonia	..	..	..	2	1
Pulmonary Tuberculosis	..	..	..	7	4
Non-Pulmonary Tuberculosis	..	..	..	8	1
Puerperal Pyrexia	..	..	..	2	2
				130	57

Scarlet fever and chickenpox were again the principal notifiable infectious diseases in the District. Isolated cases of scarlet fever occurred throughout the year but no epidemic outbreak ensued. Chickenpox appeared during the summer months, particularly in the parishes of Ceres and Strathmiglo.

In the month of October, 17 children attending Freuchie School were reported to be suffering from measles. By the end of the month nearly all the susceptible children had become infected. Early in November the disease was carried to Strathmiglo and in December to Auchtermuchty, Cupar and Falkland. Thereafter outbreaks occurred in sequence in the schools at Newburgh, Abdie, Letham, Logie, Ladybank, Kingskettle, Collessie, Gateside, Creich, Flisk, Cults, Dunbog,

Rathillet and Kemback. Concurrently the disease spread eastward to St. Andrews District. At the time of writing approximately 500 children had been infected in Cupar District, and 90 children in St. Andrews District. Headteachers were advised regarding the importance of excluding contacts on the occurrence of first cases, but it was recognised that modern social conditions militated against all attempts at controlling the outbreak. Fortunately the disease was of mild type and was followed by only one death and few serious complications. The epidemic afforded an excellent illustration of the highly infectious nature of the disease and of the futility of modern methods of prevention against it.

There were only 5 cases of diphtheria during the year. The incidence of diphtheria in the District has been low of recent years and few children have acquired immunity against it. Much anxiety will thereby be occasioned, if, in spite of the care that is taken to keep the disease under control, an epidemic should occur. On the other hand, if parents were to ensure that their children underwent the painless and harmless procedure of receiving artificial immunisation against diphtheria, the disease would hold no terrors for the community. Facilities for the purpose are available in St. Andrews District.

HOSPITAL ACCOMMODATION FOR CASES OF INFECTIOUS DISEASES.—The Infectious Diseases Hospital at Auchtermuchty admitted 83 patients—49 from the landward area of Cupar District and 34 from the burghs. There were 60 cases of scarlet fever, 8 of diphtheria, 5 of pneumonia, 5 of german measles, 4 of erysipelas and 1 of cerebro-spinal meningitis. The patients came from the following localities:—Cupar Landward District 49, Cupar Burgh 17, Ladybank Burgh 2, Newburgh Burgh 6, Auchtermuchty Burgh 8 and Falkland Burgh 1.

Unfortunately one case of influenzal pneumonia and the case of cerebro-spinal meningitis died.

One mastoid operation was successfully performed during the year. The average duration of stay of patients in hospital was 39 days.

The hospital is a converted mansion house which has space for only 12 beds but which normally contains 30 beds and 3 cots. The wards are inconveniently arranged and there is a noticeable absence of those adjuncts which characterise a modern hospital. In spite of these handicaps, however, Dr. Macmillan, the Medical Superintendent, and Mrs. Dowie, the Matron, carried out their duties in a praiseworthy manner, and were unsparing in their efforts to ensure the comfort and wellbeing of their patients.

The hospital ambulance, an adapted Ford chassis, continued to serve its purpose admirably well.

WATER SUPPLIES.

The Special Water Districts at *Kettle*, *Strathmiglo*, *Pitlessie*, *Balmblae* and *Newton of Falkland* were described in the Report for 1930. No important alteration or improvement was effected in these Districts during the year except in *Strathmiglo*, where new sand was laid down in the filter beds.

Special Water Districts have now been formed at *Springfield* and *Cupar Muir* and negotiations are proceeding with Cupar Town Council with a view to securing a water supply from Clatto Reservoir.

At the end of the year steps were taken towards the formation of a Special Water District at *Dunshalt*. Early in the present year the District was formed and the work of cleaning the Marl Pit and of laying down supply pipes was well advanced.

The absence of a public gravitation water supply at *Ceres* is having a retarding influence upon hygienic conditions at the school and upon the housing programme of the area. At the end of the year negotiations were commenced with a view to making the village a Special Water District. Utilization of the overflow from the Reservoir at Clatto is contemplated.

Slow but steady progress is therefore being made in providing water supplies for the more densely populated areas of the District. In view of the relationship between a plentiful and safe water supply and housing, the matter is of considerable importance.

Private Water Supplies.

As has been indicated, the private water supply at *Dunshalt* has been taken over by the County Council as an outcome of the formation of a Special Water District.

The water supplies at *Luthrie* and at *Letham* are reasonably suitable for domestic and drinking purposes, but their distribution would be improved and an impulse would be given to housing developments if their control were in the hands of the Local Authority.

Further complaints were received regarding the unsatisfactory nature of the water supply at *Gateside* which, in terms of a Minute of Agreement, is partly owned by the County Council. The school and the schoolhouse have first claim on the water to the exclusion of all other users. At the school the supply is often insufficient or altogether absent. On occasions too, it is unsatisfactory in quality, containing much debris and suspended matter. In addition to the school premises, 25 houses take in the supply at an annual charge.

During visits of inspection it was ascertained that the distributing outlets at the storage tank had been tampered with, with the result that the supply to *Gateside* had been diminished. The whole system was found to be in need of overhauling and cleaning. It was suggested

that the most efficacious method of dealing with the defects would be for the County Council to acquire the whole works. At the end of the year matters were still pending.

No complaints were received regarding the quality and quantity of the gravitation supply at *Freuchie*.

At *Chance Inn* the gravitation supply which was provided for a few houses under the Housing (Rural Workers) Act, 1926, continued to meet requirements. The scheme might with advantage be extended for the use of other houses in the village.

Under the Housing (Rural Workers) Act, 1926, the water supply at *Glenduckie* was augmented to serve the needs of 10 houses. The arrangement has effected a great improvement in living conditions in this village.

DRAINAGE.

Although four Special Drainage Districts have been defined in Cupar District, namely, *Newton of Falkland*, *Balmblae*, *Kettle* and *Freuchie*, it is only at the latter that a Drainage System has been laid down. For the most part, then, the formation of Special Districts has not, so far, proceeded much beyond definitions on paper. Drainage facilities are required for many of the smaller communities in Cupar District, in particular *Gateside*, *Springfield*, *Dunshalt*, *Cupar Muir*, *Ceres* and *Dairsie*.

Water Supply and Drainage Schemes Sub-Committee.

This Committee was appointed to obtain information regarding areas in the County where water and drainage services ought to be provided and to report upon the financial aspect of their considerations. Particular investigations were made of requirements in the following areas :—

Water and drainage facilities at—

Gateside.	Dunshalt.
Collessie.	Cupar Muir.
Letham.	Ceres.
Luthrie.	Bow of Fife.
Springfield.	Dairsie.
Balmblae.	Gauldry.

Drainage at—

Strathmiglo.	Balmblae.
Newton of Falkland.	Kettle.
Pitlessie.	

The action which follows the recommendations of the Committee will have a most important bearing upon the future of the areas concerned. Nowadays no township can hope to maintain its place as a

flourishing residential or industrial centre unless it has a plentiful water supply and a secure drainage system. It is to be hoped, then, that the outcome of the Committee's considerations will be a policy based upon recognition of both the present requirements and the future development of each individual area.

HOUSING.

Building Bye-laws.

Twenty-six plans were reported upon during the year—3 for the erection of houses under Government subsidy, 7 for the improvement of existing houses, 6 for the erection of or alterations to business premises, 3 for the erection of garages, 4 for the improvement of byres, 1 for the heating of a school, 1 for the extension of a hall and 1 for the erection of an engine room. During the year the erection of 2 houses was completed in the District.

Housing (Inspection of District) Regulations (Scotland) 1928.

Seven hundred and forty-eight houses were inspected, of which 2 were found to be unfit for human habitation.

One hundred and one intimations as to insufficient water-closet accommodation were issued and in 83 cases requirements were met.

Forty-nine notices were served to provide dwellinghouses with water supplies. In 42 cases requirements were complied with by owners.

Thirty-six houses were found to be unfit for habitation within the meaning of Section 14 (1) of the Housing (Scotland) Act, 1930. In 24 of these the defects were remedied without formal representations under the Act. A closing order under the Act was served on 1 house. Dampness, inadequate lighting and ventilation and the absence of sanitary fitments were the predominating defects in these houses.

No new dwellinghouses unprovided with state assistance were erected during the year.

Housing (Rural Workers) Act, 1926.

Thirty applications for assistance under the County Scheme were reported upon. In 2 cases grant was not allowed. Living conditions in 89 dwellinghouses were thereby improved and the water supplies to two groups of cottages were augmented.

The advantages of the generous terms of the County Scheme for assistance have been fully recognised by the Public Health Sub-Committee, and no opportunity has been lost of securing, by their aid, an improvement in housing conditions. At the same time a high standard of reconditioning has been insisted upon. Great credit is due to Mr. Gorrie, Sanitary Inspector, for the manner in which he has utilized the provisions of the Act for the betterment of housing in the District.

Housing Requirements.

In the Report for 1930 it was pointed out that 132 new houses were required in the District and that it had been decided to erect, as a first development, about 60 houses. The following building programme was accordingly outlined during the year :—

<i>Locality.</i>		<i>Number of houses to be built.</i>
Newton of Falkland	.. .. .	8
Freuchie	.. .. .	10
Dunshalt	.. .. .	2
Strathmiglo	.. .. .	12
Kingskettle	.. .. .	4
Pitlessie	.. .. .	6
Springfield	.. .. .	8
Cupar Muir	.. .. .	4
Ceres	.. .. .	8
Luthrie	.. .. .	2
Letham	.. .. .	2
Total	.. .. .	66

After further consideration, however, the following modifications were agreed upon. It was decided that owing to industrial depression and shortage of water supply no houses should be erected at Freuchie and that further procedure in connection with the erection of houses at Luthrie, Letham and Ceres be delayed, the latter pending inquiry into the water supply. The present position, therefore, is that a site has been approved for the erection of 12 houses in Strathmiglo and that negotiations are proceeding in connection with sites at Newton of Falkland, Dunshalt, Kingskettle, Pitlessie, Springfield and Cupar Muir. If these proposals are brought to a successful issue the total number of houses which will be provided in the District will be 44.

FACTORIES AND WORKSHOPS.

One hundred and fifty-two visits of inspection were paid to the factories, workshops and workplaces in the District. Sixteen written notices were issued concerning nuisances. Want of cleanliness, want of ventilation, insufficient sanitary accommodation and other nuisances under the Public Health Acts were found in 41 premises, in all of which satisfactory remedies were applied. On the whole the working conditions in the various premises in Cupar District are of suitable nature.

OFFENSIVE TRADES.

Slaughterhouses.

There are 15 licensed slaughterhouses in the District—9 landward and 6 burghal—rather an excessive number for an area with a total landward and burghal population of 24,512.

In October, plans were submitted and applications for licences were lodged in connection with the erection of new slaughterhouse premises at Kettle for the Kettle Co-operative Society, and at Strathmiglo for a private butcher. The Sanitary Officials reported adversely on both proposals. A licence, however, was granted to the former, but the application from the latter was not entertained.

The whole question of the slaughterhouses in Cupar District came under review during the year. The Local Authority decided that hardship would be inflicted on the holders of licences if they were withdrawn and that the time was not opportune for full consideration of a scheme of centralisation of slaughtering.

Accordingly, an investigation was made into existing hours for slaughter at the various slaughterhouses. After negotiations with the Town Clerks and butchers concerned, the hours were considerably curtailed, thereby enabling the District Sanitary Inspector to undertake his duties as Detention Officer with a greater degree of efficiency. The arrangement is the best that could be made under the circumstances.

Supervision of the meat supply is largely in the hands of the District Sanitary Inspector. The Superintendent at Cupar Public Slaughterhouse and the butchers at the other slaughterhouses call him in when they discover abnormalities. In addition he visits all the slaughterhouses weekly during specified slaughtering hours. In cases of difficulty or doubt he is empowered to call in Mr. Jas. Baillie, M.R.C.V.S., Cupar.

During the year 20,402 animals were slaughtered and 3,791 lbs. of meat were condemned.

Slaughtering of horses, blood and bone boiling, tallow melting and the manufacture of fish meal and bone meal continued to be carried out in the premises at Damside, Cupar Muir. On two occasions complaints were received regarding offensive odours said to be emanating from the works. Full investigations were made on each occasion and it was eventually found that the deodorising plant had been rendered ineffective to a certain extent by an accumulation of scale deposited in a trap in one of the water towers. The defect was remedied and no further complaints followed.

By instruction of the Department of Health an arrangement was made whereby as from 1st August all carcasses of bovines (including horse flesh) prepared at Damside for exportation to Belgium were inspected by a veterinary inspector and stamped on each quarter. In October, however, it was ascertained that carcasses of horses imported into Belgium with lungs attached and including the head did not require to bear a stamp. In the meantime, however, 125 such carcasses had been passed and stamped by the veterinary surgeon appointed. The arrangement was terminated but needless expenditure had been incurred.

The bone mill and manure manufacturing business at Cupar gave rise to no cause for complaint.

The facilities at the Kennels, Ceres, for the preparation of meat as food for hounds were inspected periodically and found to be in order.

MILK SUPPLY.

There are 59 registered dairy farms in the landward area and 12 in the burghal areas, a total of 71. In addition there are 22 registered dairy shops. The number of cows in the registered dairy farms totalled 993.

A systematic survey of all the dairy premises in the District was commenced during the year. Several of the premises do not comply with essential requirements of the County Dairy Bye-laws. When the investigation has been completed the defects will be brought to the notice of the dairymen and their co-operation will be sought in an endeavour to bring their premises gradually up to the standards required.

A reasonable degree of cleanliness was maintained in most of the dairies. It is difficult, however, to get dairymen to appreciate that the ultimate test of cleanliness in a byre or dairy shop is the purity of the milk, which may have to stand the exacting scrutiny of a bacteriological examination. To fulfil his duty a dairyman should be cleaner in his work and habits than is the most efficient housewife, for the reason that his labours have to stand investigation not only by the naked eye but also by scientific instruments of precision.

Alterations were carried out in 4 byres. All the improvements were of extensive nature and fully in accordance with the provisions of the Bye-laws.

Applications for registration were submitted in respect of two dairy farms and one dairy shop. These were approved subject to certain defects in the premises being remedied.

A licence to retail Certified Milk was granted to Mr. John Robertson, Barony, Cupar. The milk is obtained in sealed bottles from Hospital Mill Dairy Farm, Springfield.

The premises at Hospital Mill Dairy Farm, Springfield, were inspected at intervals and found to be in satisfactory condition. A sample of milk taken for examination at the end of the year showed a bacterial count of 750 colonies per c.c. and a butter fat content of 4.07 per cent.

The County Veterinary Inspector reported the herd to be free from tuberculosis.

It is encouraging that certified milk should be available both at Springfield and at Cupar, but it is unfortunate that so comparatively little milk of this type is consumed in the District. Graded milk, of which certified milk is the best type, is superior to ordinary milk in

that special precautions are taken to ensure its nutritive quality and purity. Housewives do not seem to have wakened to the important bearing which this fact has upon the health of consumers, especially of infants and of children. Nor, it must be confessed, have the majority of the dairy farmers in Cupar District shown the same keenness to produce graded milk as have their neighbours in other parts of the East of Fife. There is no lack of demand for milk in Cupar District. A census was taken on a day in April, 1931, when it was ascertained that 600 gallons of milk were sold in the three burghs, Cupar, Ladybank and Newburgh, alone, and that the consumpt per head of population was 0·62, 0·69 and 0·55 respectively. It would seem then, that consumers have grounds for demanding the production of the better types of milk. Such an urge on the part of the people would receive every support from all public health workers.

ACCOMMODATION OF SEASONAL WORKERS.

There are five premises for the accommodation of seasonal workers in the District—a hut, a barn and three cot houses or bothies. The buildings were inspected from time to time and were found to be in reasonably satisfactory condition. Any defective arrangements which were discovered were brought to the notice of the proprietors with a view to remedy. The lack of Bye-laws is tending to hold up action in connection with the improvement of premises.

PUBLIC HEALTH SERVICES IN BURGHS IN CUPAR DISTRICT.

The following brief account is submitted of the major Public Health services which were transferred from the control of the Town Councils of Small Burghs to that of the County Council under the Local Government (Scotland) Act, 1929.

BURGH OF AUCHTERMUCHTY.

According to the census the population was 1212. The birth-rate and the death-rate both equalled 15·7 per 1,000. The corresponding figures for the previous year were 14·1 and 12·3 respectively. One death occurred among infants under one year of age. Sixty-eight per cent. of the total deaths occurred among people over 65 years of age.

The principal cause of death was cancer.

There was a slight increase in the incidence of infectious diseases, 7 cases being notified—5 scarlet fever and 2 diphtheria—in addition to an epidemic of measles which occurred in the school at the end of the year. There were no new cases of tuberculosis. The cases of scarlet fever and of diphtheria were removed to the Burgh Fever Hospital and all made good recoveries.

The Burgh obtains its milk supply mainly from sources outside the boundaries. There is only one dairy farm and one dairy shop within the Burgh. Both were kept in a clean state but the farm is in need of considerable structural alterations.

The meat supply is obtained from two private slaughterhouses, one situated within and the other without the Burgh. Carcasses were inspected twice weekly on the days during which slaughtering is allowed. Three hundred and seventy-nine animals were slaughtered.

It was not found necessary to condemn any meat as unfit for human consumption.

BURGH OF CUPAR.

The census population was 4621. The birth-rate was 15.1 per 1,000 of population and the death-rate 16.7 per 1,000 of population. A slight increase occurred in the infantile mortality-rate—from 15 per 1,000 births in 1930 to 29 per 1,000 births in 1931. Diseases of the heart and blood vessels, cancer and diseases of the respiratory system were the three principal causes of death. One death from influenza and another from tuberculosis occurred. Otherwise no deaths were due to infectious diseases. Fifty-two per cent. of the total deaths occurred among people of 65 years of age and over.

As a result of a minor outbreak of scarlet fever, there was an increase in the number of cases of infectious diseases notified. Thirty-four cases were reported as compared with 25 cases in 1930. The diseases were:—Scarlet fever 14, diphtheria 1, erysipelas 5, chickenpox 2, acute primary pneumonia 4, acute influenzal pneumonia 4, non-pulmonary tuberculosis 3, puerperal pyrexia 1. All the cases of scarlet fever, the case of diphtheria, the case of puerperal pyrexia, and one case each of erysipelas and non-pulmonary tuberculosis received treatment in hospital. The health of the town was in no wise injuriously affected by the incidence of infectious diseases.

There are five registered dairy farms, one or two of which fall considerably short of the requirements of the County Dairy Bye-laws. The premises are kept reasonably clean, however, and no indications of a contaminated milk supply emerged.

One of the dairy farms was licensed to retail Certified Milk supplied from Hospital Mill Dairy Farm, Springfield. Since the average consumption of milk per head of population in the Burgh is 0.62 pints, it is well that there should be signs of a demand for Graded Milk and it is to be hoped that the demand will increase. Certified Milk is the only type of Graded Milk which is readily available for the Burgh and the precautions which are taken to safeguard its purity ensure its safety and excellence as an article of food. A visit to the Dairy Farm at Springfield would prove both interesting and instructive.

Nothing of an unusual nature occurred in connection with the supervision of the meat supply. Every carcass slaughtered in the public abattoir was examined. 2731 animals were killed and 2425 lbs. of meat were condemned as unsound.

BURGH OF FALKLAND.

At the time of the census the population was 770. The birth-rate was 9.1 per 1,000 of population and the death-rate 11.7. The corresponding figures for the previous year were 4.2 and 9.2. The death-rate, therefore, is still in excess of the birth-rate. No deaths occurred among infants under one year of age. Six out of the 9 persons who died were of 65 years of age and over.

The only notifiable infectious disease which occurred during the year was non-pulmonary tuberculosis in the case of a young adult with enlarged glands of the neck. The Burgh is fortunate to have escaped so lightly, even although the incidence of infectious diseases throughout the County was low.

There are 3 registered dairy farms. They were all found to be sufficiently well kept but two of them are in need of structural alterations. No injurious influences in the milk supply were detected.

The District Sanitary Inspector in his capacity as Detention Officer visited the private slaughterhouse twice weekly and inspected carcasses of animals prepared for consumption. Throughout the year 214 animals were slaughtered and 15 lbs. of meat were condemned.

BURGH OF LADYBANK.

The census population was 1148. The birth-rate was 11.3 while the death-rate was 14.8. No infants under one year of age died. There was one death from influenza and another from phthisis; otherwise no deaths were due to infectious diseases. Cancer was the principal cause of death. 49 per cent. of the total deaths occurred among people of 65 years of age and over.

Notification of infectious diseases numbered 5—scarlet fever 4, acute primary pneumonia 1. Two of the cases of scarlet fever were treated in Auchtermuchty Fever Hospital; the others were treated at home. All the patients made satisfactory recoveries.

There is nothing new to report regarding the small dairy farm. The premises were sufficiently well kept and the milk supply was of satisfactory nature. Most of the milk consumed in the town is obtained from outside sources. The milk consumed per head of population is 0.69 pints, probably the highest amount among the communities in Cupar District.

The private slaughterhouse was visited twice weekly by the Detention Officer who found nothing of an unusual nature. Two hundred and fifty-two animals were slaughtered.

BURGH OF NEWBURGH.

The population at the census was 2171. The birth-rate was 17 per 1,000 and the death-rate 12.4. The infantile mortality rate rose from 51 per 1,000 births in 1930 to 81 per 1,000 births in 1931. Diseases

of the heart and arteries and diseases of the respiratory system were the two chief causes of death. 59 per cent. of the total deaths occurred among people of 65 years of age and over.

The number of cases of infectious diseases notified was 16 :—Scarlet fever 4, diphtheria 2, erysipelas 2, ophthalmia neonatorum 1, acute primary pneumonia 2, pulmonary tuberculosis 3, non-pulmonary tuberculosis 1, cerebro-spinal meningitis 1. Nine cases were removed to hospital for treatment and seven were treated at home. One case of pulmonary tuberculosis and the case of cerebro-spinal meningitis died. Otherwise the patients recovered satisfactorily. There were no indications at any time of a threatening epidemic.

The two registered dairy farms were maintained in a clean state and no evidence of contamination of the milk supply was found. The bulk of the milk consumed in the town comes from the landward part of the County. The average milk consumption is 0.55 pints per head of population. The figure might well be doubled since milk provides the cheapest and most assimilable form of diet for the young growing population.

Business at the three private slaughterhouses continued throughout the year. In view of the extensive nature of the business carried on and of the prolonged hours of slaughter permitted, it is not possible for the Detention Officer to keep the meat supply in one of the premises under adequate supervision. Otherwise arrangements for meat inspection were satisfactory although, for a town of the size of Newburgh, the work entailed is perhaps disproportionately arduous. 15,642 animals were slaughtered and 504 lbs. of meat were condemned as unsound.

BURGH OF NEWBURGH.

St. Andrews District.

Dr. G. MATTHEW FYFE, Depute Medical Officer.

The year 1931 was an uneventful one so far as public health activities were concerned. No insanitary influence of note appeared. The incidence of infectious diseases was about the lowest on record. For considerable periods each of the three Infectious Diseases Hospitals remained empty. An outbreak of Foot and Mouth disease, which was promptly dealt with by the Ministry of Agriculture and the Police, threatened the food supply only remotely. Progress in connection with the improvement of housing conditions was slow. The absence of water supplies and drainage systems is handicapping the development of a housing programme. The following paragraphs record in detail the principal activities of the year.

The District is divided into two sanitary areas—St. Andrews District and Anstruther District. The former, which contains eight parishes, is under the supervision of Mr. R. Just, Sanitary Inspector, St. Andrews, and the latter, containing ten parishes, is under the supervision of Mr. J. Ross, Sanitary Inspector, Gordonshall, Pittenweem.

INFECTIOUS DISEASES.

If the incidence of infectious diseases could be regarded as an indication of the state of health of a community, one would be justified in saying that the inhabitants of the landward part of the District are indeed fortunate above their neighbours. Out of a population of 14,159 only 50 cases of infectious diseases were notified, 26 in St. Andrews District and 24 in Anstruther District.

				Removed to Hospital.
Scarlet Fever	..	..	10	10
Diphtheria	..	..	3	3
Erysipelas	..	..	2	..
Chickenpox	..	..	12	..
Acute Primary Pneumonia	..	..	4	..
Pulmonary Tuberculosis	..	..	8	5
Non-Pulmonary Tuberculosis	..	..	8	2
Puerperal Pyrexia	..	..	3	1
			—	—
Total	..	..	50	21
			—	—

Except for the occurrence of a small group of scarlet fever cases in St. Monans, all the infections were of sporadic nature. One of the cases of non-pulmonary tuberculosis died, otherwise no deaths occurred and all the patients made satisfactory recoveries.

Facilities for immunisation against diphtheria continued to be available, free of charge, in St. Andrews where 40 children received the requisite series of injections. There were indications that medical practitioners in other parts of the District would not be averse to an extension of the service but no demand became manifest. It is clear that popular opinion has not yet awakened to the value of this preventive measure. The process is a simple and painless one and in ordinary circumstances is followed by no harmful effects. Immunity against the disease develops in the course of six months and in the majority of cases is lasting. In St. Andrews since the autumn of 1928 there have been 68 cases of diphtheria, none of which had been immunised. Although several immunised children had been in contact with the disease, all escaped infection. Diphtheria, then, is nowadays a disease which few need suffer.

Hospital Accommodation.

OVENSTONE INFECTIOUS DISEASES HOSPITAL. — Twenty-seven patients were admitted for treatment—1 from Crail, 7 from the united burghs of Kilrenny and Anstruther, 6 from Pittenweem, 4 from Elie and Earlsferry and 9 from the landward part of the District. Sixteen of the cases were suffering from scarlet fever, 9 from diphtheria and 2 cases were admitted for observation. The average duration of stay of patients was 34·7 days. No deaths occurred.

Judged by standards of floor and air space the hospital has accommodation for only 16 patients at one time. Twenty-four beds and 4 cots are however ordinarily available. The addition of an observation ward would be a boon.

The services rendered by the staff of the hospital were held in high esteem. Dr. Page, Visiting Medical Officer, and Miss Newbigging, Matron, were unsparing in their efforts to secure the comfort and well being of their patients.

ST. ANDREWS CITY FEVER HOSPITAL.—Twenty patients were admitted for treatment—18 from St. Andrews Burgh and 2 from the landward part of the District. Eight patients were suffering from diphtheria, 4 from scarlet fever, 2 from acute primary pneumonia, 1 from influenzal meningitis, 1 from erysipelas and 1 from mumps. One case was admitted for observation. One mastoid operation was successfully performed by the hospital surgeon. The average duration of stay of patients was 23·5 days. There were no deaths.

The hospital has floor space for only 10 beds. Seventeen beds and 3 cots are ordinarily available, however.

Towards the end of the year Dr. Catherine MacLaren was appointed Medical Superintendent. Miss Sanderson, Matron, and she were most skilful and attentive in their treatment of the patients.

The Clinic for the immunisation of children against diphtheria, conducted by the Matron, was well attended. Forty-one children were given the necessary series of three injections and 30 children were tested after an interval of 6 months with negative results.

ST. MICHAELS INFECTIOUS DISEASES HOSPITAL.—Sixteen patients were admitted for treatment—Tayport Burgh 2, Newport Burgh 5, Cupar District (Landward) 4, St. Andrews District (Landward) 5. Eleven patients were suffering from scarlet fever, 2 from diphtheria, 1 from acute influenzal pneumonia, 1 from erysipelas and 1 from whooping cough and abdominal tuberculosis. The average duration of stay of patients was 27·4 days. There were no deaths.

According to floor space the hospital should contain no more than 17 beds. Ordinarily, however, 20 beds and 10 cots are available. The water supply and the drainage system are not satisfactory and the absence of reasonable facilities for bathing patients is a handicap. In spite of these difficulties, however, Dr. Rust, Medical Superintendent, and Miss Lamb, Matron, rendered excellent service to the patients.

Ambulance Service.

The motor ambulance at St. Michaels Fever Hospital was used for the purpose of conveying patients both to that hospital and to Ovenstone Hospital, the use of the out-of-date horse-drawn vehicle at the latter institution having been discontinued. At St. Andrews the hospital horse-drawn ambulance conveyed burghal patients. In no case was there difficulty regarding prompt removal of a case of infectious disease to hospital.

WATER SUPPLIES.

Special Water Districts.

Improvements were carried out in one or two of the Special Water Districts during the year.

Scraping of the mains in the *Elie, Earlsferry and St. Monans Special District* had a beneficial effect on the amount of water available in houses situated on the higher parts of the District. No complaints regarding an insufficiency of water supply were received.

The new mains which were laid down in the *Guardbridge Special Water District* have improved the water supply to the village. No progress was made regarding the provision of additional storage to provide against summer drought. There were no indications of a shortage of water supply at any period of the year, however, but the heavy rainfall during the summer months prevented a fair test of the adequacy of the supply.

A full investigation was made into the water supply in *Lathones Special Water District* and reports by the County Engineer and by the

Sanitary Officials advocating the provision of a gravitation supply were considered by the Water Supplies and Drainage Schemes Sub-Committee of the County Council. No definite decision had been reached at the end of the year. Existing arrangements are decidedly insanitary and a scheme for improvement is highly desirable.

A complaint of lack of hot water at Earlshall Mansion House led to an arrangement whereby the pressure in the pipes in *Leuchars Special Water District* was increased for an hour daily to secure the filling of the cisterns in the attics of the mansion house. The adjustment proved successful. The water supply for the District is pumped from a well and an unlimited amount seems to be available, a fortunate situation since some fifty properties have been called upon to instal water carriage sanitary fittings within their houses.

Samples of water taken in June in the *Upper and Lower Largo Special Water Districts* showed that the water supply was free from contamination. Nevertheless the quantity of water available is not sufficient to meet requirements in times of drought or in the event of extensive housing developments. The County Engineer has recommended the erection of an additional reservoir in Balhousie Den. No great progress has been made in regard to the matter, however.

Largoward Special Water District suffered from a scarcity of water supply at all the high points from about 8 a.m. to 3 p.m. daily. There is a sufficient supply at the fountain head but the distributing mains are too small to cope with demand, with the result that when houses at the lower levels are drawing a supply there is not sufficient pressure to keep up a supply at the higher points. A proposal to lay down a new four-inch main is now under consideration.

No complaints were received regarding the water supply in *Dunino Special Water District*.

WATER SUPPLIES IN OTHER AREAS.—An investigation was made into the water supplies of *Kilconquhar and Barnyards*. The gravitation supply to the former was found to be of good quality but of insufficient quantity to allow for the introduction of water carriage sanitary fittings or for the development of a housing scheme. The supply to the latter is from wells which were found to be heavily contaminated by surface pollution. Various proposals were made regarding an improvement of the water supplies. In the meantime, however, adequate steps were taken to cleanse and to protect the wells in Barnyards from contamination.

The provision of a satisfactory water supply would confer a great benefit upon *Strathkinness and Kingsbarns* both of which villages are consuming water from wells which have been found to be contaminated. *Balmullo* also draws its water supply from shallow wells and as the surrounding land is subjected to much fertilisation a considerable degree of pollution occurs.

DRAINAGE.

Special Drainage Districts.

There are five Special Drainage Districts—*Leuchars, Newton Park (Wormit), Colinsburgh, Largo* and *St. Monans*. No complaints regarding unsatisfactory conditions were received during the year. The new sewer at Newton Park, Wormit, operated successfully and has conferred a benefit upon the locality.

Drainage in Other Areas.

The drainage system at *Guardbridge* might be considerably improved. At present about twenty different sewers and house drains discharge separately into the river Eden and from time to time evidence of gross pollution becomes obvious. It would be an improvement if the main sewer at the northern end of the village were extended to meet the Cupar Road sewer. By such an arrangement all house drains could be led into the sewer and one outfall could be laid down in the estuary to below low water mark. As things are, nuisances must continue and in the course of a year or two subsidences will cause interference with the flow of several house drains.

The drainage arrangements at *Strathkinness* are undesirable. Soil water from 25 houses and the effluent from one cesspool is collected into an open ditch which runs down the side of the lower part of the village main highway. At lengthy intervals the ditch is cleaned out but from time to time, especially in the summer months, offensive conditions arise. A satisfactory remedy will not be secured until the ditch is piped in.

Many villages lack sufficiently adequate drainage facilities. Among them are *Boarhills, Kingsbarns, Kilconquhar* and *Barnyards*. To provide drainage schemes for these villages would be both difficult and costly. Nevertheless, until the problem is solved, little progress can be made with housing schemes.

Water Supply and Drainage Schemes Sub-Committee.

This Committee which was appointed to investigate the question of water and drainage services for those areas which lack them, had under consideration the requirements of the following areas :—

Water supply and drainage facilities at :—

Balmullo.	Boarhills.
Strathkinness.	Kilconquhar and Barnyards.
Lathones.	Arncroach.
Kingsbarns.	Upper and Lower Largo.
	Largoward.

Drainage at :—

Wormit.	Dunino.
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In the meantime they have recommended that no action be taken regarding the following :—

Water Supplies :—

Balmullo.	Upper and Lower Largo.
Arncroach.	Kilconquhar and Barnyards.

Drainage :—

Balmullo.	Upper and Lower Largo.
Dunino.	Kilconquhar and Barnyards.
Lathones.	Largoward.
Arncroach.	

The future of many communities in the District will be determined by the actions of the Committee, since without a modern water supply and drainage system no village can hope to attract prosperity. Lacking water carriage sanitary fitments, rural villages as years pass, will prove less and less attractive to visitors of the type desired and a process of disintegration and decline will gradually supervene. Not only does the work of the Committee affect the prosperity of the villages of the District, however, but it will also have an influence upon the whole character of the countryside, because defective housing conditions is an important contributory cause of depopulation of rural areas.

HOUSING.

Building Byelaws.

Plans for the erection of 16 houses under Government subsidy were approved during 1931. Plans for the erection of 3 other subsidy houses were also approved but the work was not proceeded with.

Plans for the erection of 4 private houses were approved. The erection of one of these, however, was not commenced.

In addition, alterations and extensions were approved for 10 houses, 2 schools, and 1 hotel. Permission was also given for the improvement of 10 dairy premises and for the erection of 4 garages, 2 sheds for business purposes and 1 slaughterhouse.

Housing (Inspection of District) Regulations (Scotland) 1928.

So that information on housing matters might be of more accurate nature, a housing register was prepared and supplied to each Sanitary Inspector.

Seven hundred and forty-six houses were inspected and 116 were found to be unfit for human habitation. Intimation as to insufficient water-closet accommodation was given in respect of one dwelling-house and a notice to provide a water supply was served in respect of another. Demolition orders were served regarding an uninhabitable cottage at Denhead and a Farmhouse at Clockmydron. Proceedings under Section 16 (1) of the Housing (Scotland) Act, 1930, were instituted regarding 7 other houses.

It was ascertained that very few of the proprietors at St. Monans who had been served with notices to provide water carriage sanitary fittings had complied. Further action was held in abeyance in view of the application by the Town Council for the formation of a Police Burgh.

Housing (Rural Workers) Act, 1926.

Surprisingly little advantage was taken of the generous terms of the Act. In Anstruther Area only 4 cottages and in St. Andrews Area only 12 cottages were reconditioned and 3 water supplies augmented under the County Scheme. No other housing enactment gives assistance under such favourable terms. As a rule it costs from £160 to £180 to recondition and equip a cottage along modern lines. Towards this sum a grant of £100 is allowed. It is surely a sound investment for a proprietor to expend about £70 in order to secure for a dwelling-house proper lighting and ventilation, sanitary conveniences, facilities for washing clothes and in general such alterations as will give the property an estimated life of at least 60 years. The Act will remain in force until 1936 when it is quite within the bounds of possibility that the grant will be cancelled or reduced. It would seem to be reasonable then, that such an opportunity should not be allowed to pass, lest proprietors find themselves burdened with the obligation of repairing their cottages entirely at their own expense.

Housing Requirements of the District.

In the Report for 1930 it was shown that 114 houses were required to meet the needs of the District. During 1931 negotiations were well advanced regarding the purchase of a site at Leuchars for the erection of eight houses and for a site at Guardbridge for sixteen houses. Otherwise no progress was made. It should be stated, however, that a site was selected and plans were approved for the erection of thirty houses at St. Monans, but proceedings were held in check in view of the application presented by the Town Council for the formation of a Police Burgh.

The great difficulty in the way of the development of a comprehensive housing scheme in the District is the absence of suitable water supplies and drainage systems in those localities which most require houses. Until such time as the County Council define a policy in connection with the work of the Special Sub-Committee on Water Supplies and Drainage Schemes, the District Public Health Sub-Committee have considered it expedient to allow matters to rest. On the other hand it appears that the Sub-Committee on Water Supplies and Drainage are inclined to recommend that no water supply or drainage system should be arranged for Balmullo, Arncroach, Upper and Lower Largo, Kilconquhar and Barnyards. These localities are in need of a total of some 30 to 40 houses so that, unless adjustments are made, the housing programme will, of necessity be considerably curtailed.

Factories and Workshops.

Ninety-six visits of inspection were paid by the Sanitary Inspectors to factories, workshops and workplaces in the District. All the premises were found to be in satisfactory condition and no action was taken in any case.

Meat Inspection and Slaughterhouses.

There are 11 slaughterhouses in the District—in St. Andrews Area, 1 public slaughterhouse at St. Andrews and 5 private slaughterhouses at Tayport, Newport, Strathkinness (2), and Mount Melville; in Anstruther Area, 1 public abattoir at Anstruther and 4 private slaughterhouses at Crail, Elie, Colinsburgh and Upper Largo—rather an excessive number in a District with a population of only 36,065. When, however, the new public abattoir is erected at St. Andrews, it is expected that the two private slaughterhouses at Strathkinness will be closed and there are indications that business in the slaughterhouse at Elie will be discontinued. In certain respects many of the private slaughterhouses fall short of requirements but all were kept in a clean and tidy state.

Meat inspection in the District is carried out for the most part by the Sanitary Inspectors who have been appointed Detention Officers under the Public Health (Meat) Regulations (Scotland), 1930. In cases of difficulty or doubt they are empowered to call in Veterinary Inspectors who also have been appointed under the Regulations.

In order to facilitate proper supervision of the meat supply, hours for slaughter were fixed for each slaughterhouse, when necessary with the co-operation of Town Councils. The arrangement enables the Detention Officer to visit the premises at regular intervals and to inspect all the carcasses slaughtered. In some cases, however, the hours for slaughter defined are too lengthy. The Detention Officers have accordingly been instructed to keep these premises under observation in order that information as to the amount and duration of slaughtering may be collected so that adjustments can be made when next licences are issued.

By a special arrangement, Mr. P. Young, M.R.C.V.S., was appointed Meat Inspector and Detention Officer for St. Andrews Public Abattoir. The appointment is in keeping with the scheme which was in force in St. Andrews prior to the Local Government reform.

When proposals for the erection of a new Public Abattoir were under discussion at St. Andrews, the question of centralisation of slaughter at Cupar was raised. The Town Council made enquiries and having ascertained that the majority of the animals slaughtered in the existing slaughterhouse were purchased locally, decided not to participate in a scheme for centralisation.

The following table shows the number of animals slaughtered and the weight, in pounds, of meat seized as unfit for human consumption :

Slaughterhouse.	Cattle.	Sheep.	Pigs.	Total.	Lb. of Meat condemned.
St. Andrews	805	2,640	269	37,14	3,163
Newport	104	416	36	556	175
Tayport	208	236	32	476	265
Strathkinness (Niven)	182	572	48	802	220
Anstruther	807	992	181	1,980	8,822
Crail	65	169	39	273	156
Elie	87	261	31	379	37
Colinsburgh (Brunton)	170	471	130	771	442
Upper Largo (Wallace)	84	192	35	311	208
	2,512	5,949	801	9,262	13,488

MILK SUPPLY.

In the landward part of the District there are 88 dairy farms ; in the burghal part there are 21 dairy farms and 9 dairy shops. The total number of cows for which dairy farms are registered is 1596.

The number of dairy premises licensed to sell milk under special designations was increased during the year by 2 dairy farms and 2 dairy shops. The total number of premises now registered under the Milk (Special Designations) Order (Scotland) 1930, is as follows :—

<i>Owners.</i>	<i>Premises.</i>	<i>Type of Milk.</i>
<i>Producers—</i>		
Wm. Lohoar.	Wester Balrymonth, St. Andrews.	Certified.
J. W. Clement.	Kilrenny Mill, Anstruther.	Grade A.
R. & W. Anderson	Monturpie Farm, Largo.	Grade A.
J. W. Black	Grangehill Farm, Elie.	Grade A.
Mrs. Brunton.	Grange Farm, Elie	Grade A.
<i>Retailers—</i>		
Jas. Martin.	Woodburn Dairy, St. Andrews.	Certified.
Miss Agnes McBryde.	The Bay Tea Room, St. Andrews.	Certified.
E. Dobie.	Elie & Earlsferry Dairy Co., Elie.	Certified.
S. S. Melville.	55 High Street, Elie.	Certified.

It is highly satisfactory that supplies of graded milk should be available from so many sources in the District. It will be observed, however, that of a total of 9 premises, 6 are situated in Anstruther Area. There is undoubtedly room for an extension of the sale of this milk in the northern part of St. Andrews Area. At present little or no graded milk is sold in Newport and Tayport.

The cows, equipment and methods of production were inspected at regular intervals and samples of milk were collected for bacteriological and chemical examination. In every respect the production of milk came up to requirements.

All the other dairies in the District were kept under observation. Several of them fall short of the standards laid down by the County Dairy Bye-laws, but on the whole a creditable degree of cleanliness was maintained. Nevertheless, alterations will require to be carried out in many premises.

Mr. Ross, Sanitary Inspector, carried out a comprehensive survey of all the dairy premises in Anstruther Area and has completed a detailed record of their state. The information will be laid before the District Public Health Committee in order that they may define the nature and extent of the alterations which should be called for in those premises which have been found to be defective.

PUBLIC HEALTH SERVICES IN BURGHS IN ST. ANDREWS DISTRICT.

The following brief account is submitted of the major public health services which were transferred from the control of Small Burghs to that of the County Council under the Local Government (Scotland) Act, 1929.

BURGH OF CRAIL.

At the time of the census the population was 1056. The birth-rate was 17 per 1,000 of population as compared with 14 per 1,000 in 1930. The death-rate was 18·9 per 1,000. There were no deaths among infants under one year of age. Sixty-five per cent. of the total deaths occurred among people of 65 years of age and over.

Eleven cases of infectious diseases were notified—erysipelas 3, puerperal fever 1, puerperal pyrexia 1, chickenpox 5, acute primary pneumonia 1. No cases of scarlet fever or of diphtheria occurred. The case of puerperal fever was removed to hospital for treatment. Otherwise all the patients were treated at home. No deaths occurred.

There are no registered dairies in the Burgh. On the other hand there are four non-registered premises containing 9 cows, which supply a considerable number of people. One of the dairy farms could readily be altered to conform with modern standards, but at least one of the others is in a very defective state. All the tenants are to be approached with a view to registration and alteration of their premises.

The District Sanitary Inspector who is Detention Officer under the Public Health (Meat) Regulations (Scotland), 1930, paid regular visits of inspection to the single private slaughterhouse which is situated within the Burgh. There was no occasion to call in the Meat Inspector. Two hundred and seventy-three animals were slaughtered and 156 lb. of meat were condemned and destroyed as unfit for consumption.

The system of heating in the school was investigated and found to be defective in the infant classroom. It has been decided to introduce a proper system of heating during the summer vacation of the present year.

BURGH OF ELIE AND EARLSFERRY.

The population at the time of the census was 966. The birth-rate was 12·4 per 1,000 of population and the death-rate was 18·6 per 1,000. No deaths occurred among infants under one year of age. Fifty-six per cent. of the total deaths occurred among people of 65 years of age and over.

Only 7 cases of infectious diseases were notified :—Scarlet fever 3, chickenpox 3, puerperal pyrexia 1. The cases of scarlet fever and the case of puerperal pyrexia were removed to hospital for treatment. Unfortunately, the latter succumbed to the severity of her infection.

There are no dairy farms within the Burgh but one dairy shop and grocer's shop are licensed to sell Certified Milk. The premises were kept in a satisfactory state. The Burgh is fortunate in its milk supply since 85 per cent. of the milk consumed is obtained from premises licensed to produce graded milk. That the situation is appreciated by the citizens is emphasised by the fact that the milk consumed exceeds 1 pint per head of population.

Supervision of the meat supply was in the hands of the District Sanitary Inspector who is Detention Officer for his area. Three hundred and seventy-nine animals were slaughtered and 37 lbs. of meat were seized as unfit for human consumption.

BURGH OF KILRENNY AND ANSTRUTHER.

The population at the time of the census was 3332. The birth-rate was 12·9 per 1,000 of population, while the death-rate was 9·4 per 1,000. As compared with the previous year a rise in the birth-rate and a fall in the death-rate had occurred. One infant under one year of age died, the infantile mortality rate being 23 per 1,000 births. Of the total deaths 49 per cent. occurred among persons of 65 years of age and over.

The incidence of infectious diseases was low. Twenty cases were notified :—Scarlet fever 2, diphtheria 4, erysipelas 7, chickenpox 1, acute primary pneumonia 1, puerperal pyrexia 1, pulmonary tuberculosis 3, non-pulmonary tuberculosis 1. All the cases of scarlet fever, diphtheria, puerperal pyrexia and one case of pulmonary tuberculosis were removed to hospital for treatment. The remaining cases were treated at home. All the cases admitted to Ovenstone Infectious Diseases Hospital made satisfactory recoveries. Unfortunately the three persons notified as suffering from pulmonary tuberculosis died.

There are eight dairy farms and one dairy shop all of which were kept in a reasonably clean state. Several of the dairy farms showed defects in structure which threatened the health of the cows and the safety of the milk supply. Remedies will be discussed with the dairy-men who will be asked to co-operate in an endeavour to improve existing standards.

The Grade A Dairy Farm at Kilrenny underwent considerable alterations and extensions. The premises were well kept and samples of milk collected for analysis were found to comply with requirements. There is room for a considerably increased consumption of milk of this type in the Burgh.

Accommodation for the slaughter of animals is of extremely satisfactory nature. Arrangements for the supervision of the meat supply are in the hands of the District Sanitary Inspector who is Detention Officer under the Regulations. He visits the premises daily and inspects all carcasses slaughtered. In cases of difficulty or doubt he is empowered to call in Mr. W. Anderson, M.R.C.V.S., Pittenweem, who is a part-time meat inspector under the County Council. During the year 1984 animals were slaughtered and 8822 lbs. of meat were condemned.

BURGH OF PITTENWEEM.

According to the census of 1931, the population was 1632. The birth-rate per 1,000 of population was 16·5 as compared with 11·6 in 1930. The death-rate was 14·1 per 1,000. One death occurred among infants under one year of age. The total number of deaths was 23 of which no less than 20 occurred among people over 55 years of age.

There were 9 cases of infectious diseases—scarlet fever 4, diphtheria 3, pulmonary tuberculosis 2. All the patients were removed to hospital for treatment. One of the cases of tuberculosis died.

The five dairy premises situated within the Burgh were surveyed during the year. All were found to fall short of the requirements of the County Dairy Bye-laws and one of them at least could be reconditioned only at great cost. Remedial measures will be called for gradually so as not to place too great a burden upon the tenants. In view of the proximity of several dairy farms producing milk under special designations, it is strange that little or no graded milk is consumed in the Burgh.

The meat supply of the Burgh is drawn from the public abattoir at Anstruther, where the arrangements for safeguarding the food supply are of excellent nature.

BURGH OF NEWPORT.

The population was 3294 according to the census—an increase on the estimated number of 3088 for 1930. The birth-rate was 9·1 per 1,000 of population and the death-rate was 13·7 per 1,000. Both figures were less than the corresponding rates for the previous year. No deaths occurred among infants under one year of age. Sixty-two per cent. of the total deaths occurred among people of 65 years of age and over. Diseases of the heart and arteries and cancer were again the two chief causes of death.

A considerable fall occurred in the incidence of infectious diseases. Only 12 cases were notified—Scarlet fever 6, erysipelas 2, chickenpox 1, malaria 1, pulmonary tuberculosis 1, acute primary pneumonia 1. The cases of scarlet fever were treated in hospital, the other patients at home. All made satisfactory recoveries.

The number of registered dairy premises in the Burgh comprise 3 dairy farms and 2 dairy shops. A reasonably satisfactory degree of cleanliness was maintained in the premises but structurally the dairy farms fall short of the requirements of the County Dairy Byelaws. Alterations will be called for gradually. It is noticeable that little or no graded milk (*i.e.*, milk which has passed certain statutory tests for purity and nutritive value) is consumed in the town. The fact that no dairy farms in the immediate vicinity produce such milk may have a bearing on the situation. Certified milk, the first and best grade of milk, is produced at Hospital Mill Dairy Farm, Springfield, and at Wester Balrymonth, St. Andrews, and Grade A milk, the third grade of milk, at various farms still further away in the neighbourhood of Anstruther and Elie. Since the average of consumpt of milk per head of population in Newport is 0.6 pints it is evident that, although the amount might be greater, the value of milk as an article of diet is recognised and doubtless the safe and clean conditions under which graded milk is produced will be appreciated. Should any dairyman in the neighbourhood, then, determine to produce Certified Milk, Grade A (Tuberculin Tested) Milk, or Grade A Milk, he can depend upon every help and encouragement from the County Public Health Department.

The District Sanitary Inspector who acts as Detention Officer under the Meat Regulations visited the private slaughterhouses in the Burgh at least twice weekly. Mr. Spruell, M.R.C.V.S., Dundee, who has been appointed one of the County part-time Meat Inspectors is available for consultation in cases of difficulty or doubt. No unusual circumstances were encountered during the year. Five hundred and fifty-six animals were slaughtered and 175 lbs. of meat were condemned as unfit for human consumption.

BURGH OF TAYPORT.

The population at the time of the census was 3179. The birth-rate was 16.4 per 1,000—an increase on the previous year—and the death-rate 14.1 per 1,000—a slight decrease on the previous year. The infantile mortality rate fell from 146 to 96 per 1,000 births during the year. There can be little doubt but that the recently organised Mother and Child Welfare Clinic contributed in some measure to the welcome decline. Fifty-three per cent. of the total deaths which occurred were among people of 65 years of age and over. Diseases of the heart and lungs, cancer and diseases of the respiratory system were respectively the three chief causes of death.

Only 8 cases of infectious diseases were notified as compared with 39 in the previous year. They were scarlet fever 1, erysipelas 4, acute primary pneumonia 1, non-pulmonary tuberculosis 2. The case of scarlet fever, two cases of erysipelas and the cases of tuberculosis received hospital treatment. All made satisfactory recoveries.

A satisfactory state of cleanliness was maintained in the two dairy farms within the Burgh. The consumpt of milk per head of population is only 0·4 pints, an amount which is less than half the desirable quantity and which compares badly with the consumpt in other towns in the East of Fife. Doubtless trade depression and the fact that many mothers are wage earners have an influence on the situation but, on the other hand, it has been found that much money is being spent on the purchase of artificial milks.

Regular visits of inspection were made by the District Sanitary Inspector in his capacity of Detention Officer to the private slaughter-house in the burgh. No difficulties of an unusual nature were encountered. Four hundred and seventy-six animals were slaughtered and 265 lbs. of meat were condemned.

BURGH OF ST. ANDREWS.

The censual population was 8403. The birth-rate was 11·5 per 1,000 of estimated population and the death-rate was 12·9 per 1,000, a figure which exceeded the birth-rate by 1·4. The infantile mortality rate was 93 per 1,000 births, the highest rate recorded for the past twelve years. The principal cause of death in the Burgh was diseases of the heart and blood vessels. Cancer was the next main cause. Sixty-two per cent. of the deaths from all causes occurred among persons over 65 years of age.

Fifty-four cases of infectious diseases were notified :—Scarlet fever 3, diphtheria 8, erysipelas 2, puerperal fever 1, ophthalmia neonatorum 2, chickenpox 16, acute primary pneumonia 8, acute influenzal pneumonia 1, pulmonary tuberculosis 7, non-pulmonary tuberculosis 4, puerperal pyrexia 1, anterior poliomyelitis 1. Only a few cases of measles and of whooping cough occurred. There was no marked prevalence of influenza. The incidence of infectious diseases was, therefore, on the whole, remarkably low. Twenty patients were admitted to the City Fever Hospital and all made good recoveries. Three cases of tuberculosis were admitted to Glenlomond Sanatorium. No deaths from any of the infectious diseases occurred.

Forty-one children were brought to the City Fever Hospital for protective inoculation against diphtheria.

Periodic inspections were made of the four dairy farms and the four dairy shops in the Burgh. No conditions having an injurious influence

on the safety of the milk supply were detected. Certified Milk continued to be supplied to the town from Woodburn Dairy, Wester Balrymonth Dairy Farm and Hospital Mill Dairy Farm, Springfield. The decrease in the incidence of epidemic sore throat which followed the introduction of this milk into St. Leonards School for Girls in 1928 was sustained. An enquiry held in the month of April showed that the average consumpt of milk in the Burgh per head of population was 0.54 pint, slightly more than half the desirable amount.

Plans were approved for the erection of a new public abattoir situated outside the Burgh boundaries.

In order to secure more intensive supervision of the meat supply, Mr. P. Young, M.R.C.V.S., was appointed Meat Inspector and Detention Officer for the existing St. Andrews Slaughterhouse. The arrangement is in keeping with that which was in force before the local government reform. In the course of the year 3714 animals were slaughtered as compared with 3662 in 1930 : 3163 pounds of meat and offal were seized as unfit for human consumption as compared with 2266 pounds in 1930.

Scavenging.

In the two Special Scavenging Districts—Guardbridge and Leuchan—no change has to be reported regarding the methods of scavenging from those of the preceding year. The work is carried out by a scavenger and the collection and removal of household refuse is carried out by a cart passing through the villages at stated times, three days per week. The work has been carried out satisfactorily and few complaints have been received.

The refuse is deposited at dumps. The condition of the dumps is kept under observation and rat poison is laid from time to time to keep down rats.

Infectious Diseases.

The houses of premises disinfectant where infectious disease had occurred numbered 30 and 319 sets of bedding, clothing, etc. were disinfected or destroyed. This includes houses vacated by persons suffering from tuberculosis.

Sanitary Inspection Districts.

The Annual Report in respect of each sanitary inspection district has been submitted for the information of the local public health sub-committee and to the Department of Health for Scotland. The following are brief excerpts from the reports of the Sanitary Inspectors :

ST. ANDREWS AREA—Robt. Just, Sanitary Inspector.

Water Supply.

LATHONES SPECIAL WATER DISTRICT.—Reference was made in the Annual Report for 1930 to the unsatisfactory condition of the water supply to the hamlet of Lathones, which is obtained from a roadside ditch.

The matter was under consideration by the Local Authority and a Report was submitted by the County Engineer regarding the introduction of a gravitation supply. The whole matter is presently being considered by the Special Sub-Committee appointed to deal with the question of Water and Drainage Schemes in the County. It is very desirable that a more satisfactory water supply be provided. The situation urgently requires attention.

GUARDBRIDGE SPECIAL WATER DISTRICT.—Reference was also made in last year's report to the renewal of the pipe line to Guardbridge. During the spring of the year, the four-inch delivery pipe was replaced by a six-inch pipe from reservoir to Milton, and a six-inch pipe was also laid throughout the village. The entire pipe line is now laid with six-inch pipe—the intervening section having been laid the previous year. There is now an ample pressure of water to all parts of the District.

Scavenging.

In the two Special Scavenging Districts—Guardbridge and Leuchars—no change has to be reported regarding the methods of scavenging from those of the preceding year.

Street sweeping is carried out by a Scavenger, and the collection and removal of household refuse is carried out by a cart passing through the villages at stated times, three days per week. The work has been carried out satisfactorily, and few complaints have been received.

The refuse is deposited at dumps. The condition of the dumps is kept under observation, and rat poison is laid from time to time to keep down rats.

Infectious Diseases.

The houses or premises disinfected where infectious disease had occurred numbered 39, and 390 sets of bedding, clothing, etc., were disinfected or destroyed. This includes houses vacated by persons suffering from Tuberculosis.

Dairies.

The methods employed at the dairies continue to improve slowly, and in the course of inspection every opportunity was taken of impressing upon dairymen the necessity of a pure and clean milk supply. No doubt the improvement in methods is due in a large measure to an increasing knowledge of hygiene and to the stimulus derived from the holding of clean milk competitions, etc.

CUPAR AREA—Marshall Gorrie, Sanitary Inspector.

Water Supplies.

BALMBLAE, FALKLAND, SPECIAL WATER DISTRICT.—The special service of water to the inhabitants of this area comprising thirty dwellinghouses is by a pipe of small dimensions connected up to one pillar well located on the public street. For this privilege the Town Council of Falkland are paid £8 per annum by the County Council who are meantime considering the advisability of obtaining the Town Council's agreement to allow them to lay down a 2 inch pipe throughout the area so that water may be taken into houses, and likewise a sewer connected up to the Burgh sewer. If these proposals materialise the inhabitants will greatly benefit, and the recurring nuisance caused by using the open water course as a sewer will be obviated.

GATESIDE PRIVATE WATER SUPPLY.—Gateside has a privately owned gravitation water supply which appears sufficient meantime to supply the needs of the inhabitants of the village, but complaints were received of failure of water for short periods. Examination disclosed that insufficient attention was being given to gathering ground, storage cistern and scouring of water mains.

In my opinion this scheme of supply would receive more satisfactory attention if the village was formed into a Special Water District and the works taken over by the County Council.

FERNIE WATER SUPPLY.—This water supply was augmented by additional storage cisterns and new water main to provide supply sufficient for needs of householders whose premises were provided with modern sanitary fitments. On completion of work the water was analysed and reported upon by the County Analyst as satisfactory and fit for drinking.

GLENDUCKIE WATER SUPPLY.—A new supply of gravitation water was provided to augment existing supply to cottage dwellings in each of which individual modern sanitary fitments were provided. A sample of water from the combined supply was analysed and reported satisfactory and fit for drinking.

CERES WATER SUPPLY (THE MANSE).—After samples of well water from the Manse had been analyzed and found unfit for drinking a bore was put down in the well and a sample of water from this new source submitted for examination. In his report on this latter sample the

Analyst states that in his opinion the water after recovery from boring operations will become fit for drinking.

FREUCHIE VILLAGE SUPPLY.—On receipt of complaint regarding sediment, etc., a sample of water was collected in Freuchie village and submitted to the Analyst who reported that the water was fit for drinking and general domestic purposes.

LOCH COTTAGES, CERES.—A sample of water from the well at Loch Cottages, was submitted for analysis and reported upon by the Analyst as unfit for drinking and general domestic purposes. Negotiations are in progress with the owner to provide a new supply.

LONGRIGG COTTAGE, CERES.—Sample of water submitted to Analyst for examination was reported upon as “not a desirable supply.”

WELL WATER SUPPLIES.—Other water supplies throughout the District call for no special remarks; there has been no scarcity complained of during the year and the quality of the water generally has been satisfactory.

Drainage.

The sewers and purification works in Freuchie continue in a satisfactory condition. The sewers extend for $2\frac{3}{4}$ miles and flushing manholes are provided at the upper end of all branch sewers. Regular scouring of sewers and cleansing of manholes is carried out by the local scavenger who also gives attention to the sewage purification works. The works, which have now been in operation for twenty-one years, were inspected periodically and found to be receiving satisfactory attention.

Drainage facilities of villages and populous places remain unchanged since previously reported. All drainage systems require careful and constant supervision, and where defects are found on property and alterations carried out special care requires to be exercised, consequently a large proportion of time is devoted to this work.

Progress is being made in the introduction of water supply and sinks to farm cottages and other dwellings throughout the District, also water closets in lieu of privies.

The smoke testing machine was applied to all new drainage systems, including fitments, and to existing systems on which repairs or alterations had been executed before permission was granted to cover in same.

Scavenging.

Difficulty is experienced in many of the smaller villages in finding suitable places to deposit refuse and as carting is now rather expensive the common practice of many householders is to deposit refuse at all odd corners. Bye-laws, however, are now in force prohibiting deposits of this kind in private roads and elsewhere and are assisting largely in preventing nuisances of this kind.

Where no built and roofed ashpits exist these are asked for as it is obvious that their absence gives rise to nuisance and is a serious menace to public health. To facilitate uniformity of built ashpit structures a working plan is generally enclosed with the notice sent to owners, which enables them to get a price for the work and a satisfactory structure is accordingly obtained.

Housing (Rural Workers) Act, 1926.

As required by statute, inspections of dwellinghouses throughout the area are being made, and in cases where premises, through deterioration and inattention to maintenance, have become so defective as to be "not reasonably fit for occupation," the Housing (Rural Workers) Act, is brought to the notice of the owners and every assistance given them in finding ways and means whereby the houses could be economically reconditioned or improved. I am pleased to say that preliminary action on these lines has proved invaluable in obtaining consent of owners to carry out various necessary improvements. Invariably where owners have decided to improve housing conditions under the Housing (Rural Workers) Act whereby grants are available, the improvements obtained are extensive and generally restore the houses to a modern standard which without grant, I am bound to say, would not be possible.

Since the adoption of the Housing (Rural Workers) Act, 1926, by the County Council in June of 1927, ninety-nine applications have been lodged and dealt with generously by the Committee, and in only a very few instances did they feel bound to refuse applications.

During the year under review 29 applications were received, three of which were refused. Of the three applicants refused grant, one carried out improvements without grant, one built a new subsidy dwellinghouse and the remaining applicant abandoned proposals and the house was vacated.

Slaughterhouses.

There are 20 licensed slaughterhouses in Cupar Area, 12 licensed by Town Councils, viz. :—Cupar 6, Ladybank 1, Newburgh 3, Falkland 1, Auchtermuchty 1, and 8 by the County Council, viz. :—Ceres 1, Kettle 2, Auchtermuchty 1, Freuchie 1, Strathmiglo 1, and Cupar-Muir 2.

To facilitate arrangements for more systematic meat inspection and on remit from the Public Health Committee, the Deputy Medical Officer of Health and myself entered jointly into negotiations with butchers in the County Area and with Town Councils in Burghs, and were able to tabulate days and hours when slaughtering was to take place. On completion of our negotiations a report was submitted and approved of by the County Council. Since the hours of slaughter were

fixed the work has been undertaken by the butchers with much more strict regularity than formerly. When the fixed hours of slaughter are departed from the butchers notify either the County Clerk or myself and inspection is duly carried out.

Under the Slaughter of Animals (Scotland) Act, 1928, the qualifications of applicants for licences to slaughter were duly enquired into and reported to the County Clerk who issues licences for landward parts of the Area, and to the Town Clerks for Burghs, and thereafter supervision was exercised when visiting premises to make sure that only those holding licences were engaged in slaughtering work.

In most cases bye-laws respecting cleansing and removal of offal and other offensive refuse received reasonable attention. In one instance where sheep are killed in large numbers for the London Market and where offal and refuse were creating offensive nuisance, the owner was required to provide an iron float cart to convey same to refuse depot. This order was subsequently withdrawn on the owner providing a sufficient number of iron bins with covers.

Under the Public Health (Meat) Regulations (Scotland) 1930, action was taken as Detention Officer on 13 occasions in examination of doubtful carcasses and detention of same until examined by the Veterinary Surgeon. Under Section 43 of the Public Health (Scotland) Act, 1897, action was taken on 16 occasions, and in all 3,791 lb. of meat were condemned and destroyed as unfit for human food.

The following is the statement required by the Department of Health for Scotland :—

Class of Animals.	Number of Animals.			Weight in lb. of condemned meat and offals.
	Slaughtered.	Wholly Condemned.	Partially Condemned.	
Cattle ..	1,632	4	11	3,403
Sheep ..	2,523	11	3	388
Pigs ..	917	..	..	..

ANSTRUTHER AREA—John Ross, Sanitary Inspector.

Water Supply.

LARGOWARD.—During the year complaints were made regarding a shortage of water. This supply is obtained from 2 springs situated in the field to the south-west of Bowhill Farm, and to the immediate west of the field in which the intake, filters and clear water well are situated. From these springs a 4-inch diameter pipe is led to the intake chamber (3 feet 4 inches by 2 feet 4 inches—3 feet 8 inches deep). From the intake chamber another 4-inch pipe conveys the water to the filters, of

which there are two, both 6 feet 3 inches by 3 feet 0 inches. The filtering medium consists of graded gravel to a depth of between 3 feet and 4 feet. From the filters the water is led to the clear water well. The water from the well is conveyed to the village in a 2 inch diameter cast iron main. Various branches are taken off the main to supply the village taps of which there are 18 in use. Several houses have had the supply introduced into the house. About 5 years ago an auxiliary supply was taken in. The source of this supply is said to be an old well. The supply is tapped in a small triangular piece of ground where the water appears on the surface. A 4 inch pipe with rose attachment is led to the pipe leading from the springs. This supply has only once, so far as I can learn, been used. Its quality is doubtful.

It is of interest to note that at the higher levels when no water flows from the tap, the tap is frequently turned on with the receptacle for the water left under it by the householder who leaves it like this and returns later. Under these circumstances the bucket is often found to overflow before the tap is turned off on the return of the householder. This practice results in a wastage of the supply which would not occur if the supply was adequate at all times. It is not a desirable practice and would not take place under more favourable circumstances.

ST. MONANS.—Detailed particulars of this supply were recorded in last year's report and these need not be repeated here. It was ascertained, however, that a shortage of water occurred in a number of houses and to obviate this arrangements were made throughout the year to have the 6-inch main from the reservoirs to the Railway Bridge scraped. Pressures of the supply were taken before and after these operations were carried out. The points selected for testing the pressures were in the neighbourhood of the Railway Bridge and at Abercrombie, which is situated midway between the reservoirs and the Railway Bridge. The following are the results :—

Abercrombie—47 lb. per square inch before scraping pipes and 65 lb. per square inch after scraping pipes.

Railway Bridge—62 lb. per square inch before scraping pipes and 73 lb. per square inch after scraping pipes.

It is gratifying to report that this work has had the desired result and at subsequent visits to the houses where shortage of supply had been reported no complaint was made.

BARNYARDS.—In this locality, in addition to the individual private wells, there are two public wells from which supplies of water are obtained. One well is situated at the east and the other at the west end of the village. Both wells are "shallow" wells—that at the west end being 8 feet deep and the other 18 feet. Towards the close of the year complaint was received regarding the water drawn from the well at the east end of the village. This was investigated and reported upon.

The cleaning out of both wells was undertaken and the walls of the wells made watertight. It was also arranged to have a quantity of clean fresh sand deposited for a depth of about 9 to 12 inches at the bottom of each well, and to so alter the top of the wells that surface water would not flow into them. This work was executed early in 1932 and since it has been done no further complaint has come to hand.

Scavenging.

LARGO.—There has been no change in the system of collection and disposal of refuse from the Largo Scavenging District throughout the year. The system of disposal of the refuse is, however, far from satisfactory, and a report on this question is at present before the Local Authority. In it is set forth the system which should be adopted in future.

For this purpose an extension of ground is necessary. The present tipping ground is almost exhausted so that the time is opportune to adopt a less offensive system when additional ground is acquired.

Housing.

Reference was made in last year's report to the exceedingly unsatisfactory workmanship on the six bungalows erected at Balcomie Road, Crail, and it was then stated that as the defects were not remedied until well into the present year (1931) details regarding them would be included in this Report.

The bungalows consisted of three blocks of semi-detached houses. Upon inspection at completion of the works it was found that many matters called for remedy.

The condition of these bungalows when the tradesmen left them as completed presented a condition far from satisfactory. A very considerable amount of time and work was involved before the works were fit for being passed. It is, I think, only fair to state that the chief contractors were not local men.

Apart from this case the building work carried out in the area is of a satisfactory nature.

Frequent visits of inspection are made to all buildings being erected or undergoing alterations. On these visits any defects noted in the workmanship or material are pointed out to the contractors and remedied. The damp-proof course receives special attention and consideration. This material is of vital importance—nevertheless, carelessness in its use is not infrequently encountered. Ends of joists where these abut against made up concrete floors are often left unprotected by it ; it is sometimes cut short at sills, and at door standards it becomes displaced. These places are kept under supervision and corrections called for when necessary. (It has been found that all

D.P.C. used complies with the standard called for in the H. & T.P. Circular issued by the Scottish Board of Health on 11th February, 1927.)

A length of dwarf walling was omitted in one instance, but on being pointed out it was built up, complete with founds, through openings, wall plates, and D.P. course. During alterations to existing buildings and where stone, or concrete floors in living apartments are being replaced with wood floors it is sometimes found that the joists are allowed to abut against existing stone walls in which there are no damp proof courses. In all such cases instructions are given to cut the ends of the joists so as to leave a clearance from the stone wall or alternatively to protect the ends of the joists with damp-proof course. All dwarf and scarcement walls in connection with such floors are provided with damp-proof course.

In rural areas where older houses are being brought into line with present day standards and where entirely new houses are erected, it is, almost without exception, usual to find that the plans and specifications provide for a single chamber cesspool. Such a primitive method of disposal of sewage is never permitted to pass. The character of the sewage from houses provided with modern sanitary fitments is of a highly offensive nature and requires some means of purification prior to the effluent leaving the site. This is provided by calling for a filtering chamber or as an alternative to pass the sewage from the tank over a rubble pit previous to it flowing from the site. In addition an assurance is asked that the effluent will be so treated that it will not give rise to any nuisance.

Schools.

There are ten schools situated in the Landward Area all of which were visited during the year. In last year's report detailed particulars were given regarding the sanitary conveniences in each school, and it is not proposed to give these particulars again in the present report except in so far as the schools without modern sanitary fitments are concerned. There are three such schools—Largoward, Newburn and New Gilston—and in view of the fact that in the three schoolhouses adjacent to them are modern sanitary fitments, comprising bath, sink, and water closets, there does not appear to be any reason why modern fitments should not be installed for the pupils attending those schools.

The condition of the playgrounds at some of the schools is exceedingly bad. While so much good work is being done on one hand in looking after the health of the children attending school it is to be regretted that so potential a danger to their health continues unabated. Visited during wet weather the playground at Carnbee School is a perfect quagmire. Under such conditions it cannot be used and during the interval children are forced to use the public road as a playground. In

my report of last year I referred to this particular case, and pointed out the danger which exists from motor traffic when the children play on the road. It is to be hoped that the condition of the playground will have early attention. The drain to the west of Carnbee School periodically overflows. It should be cleared. The undernoted matters should have early attention :—

COLINSBURGH SCHOOL.—Windows of cloak-rooms cannot be opened unless they are prised open with some instrument such as a chisel. Boys urinal requires to be re-coated with cement plaster ; the door standards of the W.C.'s require to be repaired ; the stop cock of supply pipe to boys wash-hand basins is leaking. The question of re-painting the school should be considered.

LARGOWARD.—Rain water enters at roof. The roof should be examined for defects and repairs carried out where required.

NEWBURN SCHOOL.—The taps of the drainage system on the inside of the porch at the back door of schoolhouse should be taken to the outside of the porch.

NEW GILSTON.—There appears to be a small defect in roof where rain enters. Repairs should be effected where required. The re-painting of this school should also be considered.

UPPER LARGO SCHOOL.—Reference was made last year to the under-noted defects which should be remedied. The windows of the water closets for the men and women do not open—these should be adjusted as early as possible. Part of the boys' urinal has no flushing pipe. A flushing pipe is very necessary and should be provided. The cement rendering of the urinal should be repaired.

Dairies.

The survey of all registered dairy premises referred to in last year's report was completed during the year 1931. This survey called for notes regarding condition of walls, ceilings, floors, lighting, inlet and outlet ventilation, floor area, cubic air space, water supply, conditions of milk store, and scalding shed. From these particulars, the cubic air space, floor space, glass area, inlet and outlet ventilation, available per cow were calculated and compared with the standards called for in the Dairy Byelaws. In addition to the above the hours of milking were in each case noted, and particulars regarding the disposal of the milk supplies taken.

The survey revealed that a large number of dairy premises did not comply with the requirements of the Dairy Bye-laws. The standard of cleanliness was, however, satisfactory in the majority of cases, and in the others measures were taken to impress upon the dairymen the extreme importance of cleanliness. In this connection letters were sent to the dairymen confirming the measures to be taken. It is

gratifying to report that the desire to produce clean milk is increasing as may be gathered from the enquiries received from time to time regarding the production of a Special Designated Milk. All such enquiries receive every consideration and full particulars of the measures necessary are furnished. There is still no "Certified Milk" produced in the Area, but supplies of it are retailed in the Area from licensed premises outwith it. There are four producers of "Grade A Milk" in the Area to whom the necessary licence for the production of this milk as called for by the Milk (Special Designations) Order (Scotland) 1930, has been granted.

The undernoted table furnishes particulars of the structural and sanitary defects to be remedied to meet the requirements of the Dairy Bye-laws :—

Premises deficient or defective in—

Wall surfaces, beamfilling, etc.	Glass Area.	Ventila- ation.	Floor Area.	Air Space	Scald'ng facilit's.	Gauze over Wind's.	General Cleanli- ness.
29	38	27	3	8	22	14	10

In addition to the above there are instances where there is no water supply in the byre. Fortunately these are few and efforts will be made to have a supply introduced. On the other hand many byres are provided with individual drinking bowls and taps with attachments for hose connections fitted.

Remedial measures by the dairymen involved are being called for by degrees, and the defects which are of primary importance receive first attention.

By the adoption of these measures it is hoped to bring all dairy premises into line with the standards called for in the Dairy Bye-laws framed under the Milk and Dairies (Scotland) Act, 1914. Towards the fulfilment of this objective I am of opinion that the issuing of copies of the Dairy Bye-laws to all dairymen would be of considerable help.

Apart from the structural defects in the premises, important as these undoubtedly are, the question of cleanliness in the handling of the milk, the utensils, and the cows is more vital. As utensils cannot be adequately cleaned where the facilities for scalding purposes are not satisfactory, this point is stressed during visits to dairies and improvements suggested where necessary. The grooming of the cows is another point to which attention is directed. The cows udders are washed with clean water prior to milking, the milkers hands are thoroughly clean and in many cases the milkers wear overalls and caps. In two byres the Alfa-Laval milking machines are installed, the plant in both cases being four-unit.

It is, in my opinion, desirable that all premises from which milk is retailed should require to be registered in terms of the Act and the Dairy Bye-laws. Registration should be called for irrespective of the quantity sold. From this I do not wish it to be imagined that in premises where a limited supply is retailed the standards of structural requirements in the byres and milk stores should be strictly in accordance with the standards called for in the Bye-laws—reasonable latitude could be given in such cases—but the facilities for cleanliness the scalding arrangements and the handling of the milk should in all cases be of a uniform standard, and that standard should be that called for in the Dairy Bye-laws. Until these measures are demanded the control of the milk supplies can not be entirely satisfactory.

DUNFERMLINE AREA—William Davison, Sanitary Inspector.

Drainage.

The only extension of the drainage systems in the Special Drainage Districts during the year was at Tulliallan, where the main sewer in Toll Road was extended for a distance of 900 yards in order to provide drainage facilities to a number of cottages erected near to Newraw Farm, by the Forestry Commission.

The sewage outfalls from the Special Drainage Districts discharge on to the foreshore of the Forth at points below low water mark with the exception of Blairhall, Crossgates and Saline, where sewage disposal works have been provided. At Saline, the installation is of recent construction and is adequate for the needs of the district. The two distributors are of the revolving type and a minimum amount of trouble and expense are involved in maintenance. At Blairhall, the population is far in excess of that for which the present sewage disposal works were constructed and the size of the installation is now inadequate to deal satisfactorily with the amount of sewage. The distributors here are of the rotary type. The need for extending the works has been reported on and the question is under consideration. At Crossgates, the method of treatment is unsatisfactory. The scheme to provide adequate drainage facilities to this and contiguous villages by means of a main sewer to connect with the Dunfermline Burgh sewer at Touch, is still under consideration. At Crossford, which was formed into a Special Drainage District last year, some 20 houses had been, up to the end of the year, provided with proper drainage facilities. Each connection with the sewer was inspected and all drains submitted to the smoke test before being covered up. A complete survey of the houses in the Special District has been carried out by this Department and preparations are in hand for the issue of intimations calling upon owners of properties who have not already done so, to provide sufficient drainage facilities connected to the public sewers.

The villages of Cairneyhill, Carnock, Hillend, Fordell, Oakley and Wellwood are still without proper drainage facilities. The cost of providing these facilities at Cairneyhill, Carnock and Hillend has been reported on. At Oakley, the condition of all but a few of the houses is such that they are being closed as they are vacated. The provision of drainage here would, therefore, appear to be unnecessary unless other houses are to be erected in that area. The question of the provision of drainage to Wellwood, with a connection to the Burgh sewer from Townhill, is presently under consideration.

Housing.

A careful survey was made of the housing conditions throughout the Area and reports submitted showing the number of houses required to replace unfit houses in certain districts. A commencement has been made with the erection of 20 houses at Aberdour. This scheme consists of four blocks comprising 16 houses of 3 apartments and one block of four apartment houses. Additional houses are also proposed to be erected at Crossgates, Crossford, Carnock, Kincardine, Limekilns and North Queensferry. Suitable sites at these places have been inspected and their acquisition is under consideration.

Houses are most urgently required in Carnock and Oakley area in order to provide accommodation for the people living in Oakley Rows. These houses, the condition of which has been frequently reported, have long past served their day and should be demolished. The number of unfit houses in this area is as follows:—Gowkhall 16, Carnock 6, Oakley 68 and Comrie 6; a total of 96.

The owners of houses found to be in need of repair were written to, details being given of the work necessary to make the houses in every respect habitable. In this manner considerable improvement was effected without the serving of Statutory Notices.

The number of new dwellinghouses erected during 1931 shows a favourable increase over the number for the previous year. It is, in fact, the highest recorded for the past seven years. There were 13 sets of plans submitted for the erection of 45 dwellinghouses. Of these, two consisted of 2 apartments, twenty-one of 3 apartments, twenty-one of 4 apartments and one of 5 apartments. With the exception of one, all of these were also approved for purposes of subsidy in terms of the 1924 Act.

Dairies.

Due to persistent propaganda and rigid administration of the bye-laws relating to methods of production and handling, dairymen and their employees are showing an ever increasing interest in clean milk production. The many advantages of a clean product are now fairly well realised and comparatively few irregularities in this respect are

now detected. What appears to be now urgently required is some means of enforcing the adequate protection of the milk supply within the homes of the consumers. Evidence is not lacking that much ignorance prevails amongst some housewives as to the necessity of protecting this particular commodity from contamination. Milk is produced, handled and delivered to the consumer in a manner calculated to maintain its purity, only to be exposed to gross contamination in the homes of those whose interests much care and labour have been taken to protect.

KIRKCALDY AREA—Andrew Stewart, Sanitary Inspector.

Drainage.

There is no proper drainage system at Coaltown of Balgonie and the conditions there are still very unsatisfactory and are a source of nuisance as the sewage runs in an open ditch and enters the lade in a crude state. A septic tank was provided for the 20 new houses built by Fife County Council and a drain was laid from the tank to the river. A large number of houses in this village could be brought up to modern standard if drainage was introduced throughout.

At Thornton the drainage, as stated in my last report, is still in a very unsatisfactory condition. During the year considerable trouble was experienced at Strathore Road where the sewer there connects with the sewer from the new houses. Considerable inconvenience was caused at the farm adjoining the road, owing to the sewer being unable to cope with the surface water during heavy rains, and flooding occurred. The Council had the drain there cut off from the main sewer and a new drain led to a septic tank in the field. Since then no trouble has arisen in this direction. During the year the sewer in Main Street was opened and it was found to be running full bore at a point above where it connects with the sewer from Strathore Road. This, in my opinion, is the cause of flooding as the sewer in Main Street is not large enough to carry all it should. A new sewer is to be laid through the field where it is proposed to build the next Housing Scheme and this will greatly help to stop flooding as the drainage from the new houses already built will be carried through this sewer and thus relieve the Main Street sewer to a large extent. The South Purification Works, as reported last year, are quite inadequate for the work required and if new drainage is put in, the reconstruction of the filter beds or other means of disposing of the sewage will have to be considered.

Housing (Rural Workers) Act, 1926.

Inspections of houses occupied by rural workers and others in the same economic position were carried out during the year. Plans for alterations to 67 houses were submitted in terms of the County Scheme in force under the above Act but 6 were not gone on with. The

alterations and improvements carried out consisted of additions of sculleries, larders, coal-cellars, etc., provision of bathrooms and inside water-closets, increased lighting and ventilation, strapping and lathing of solid walls, replacing of brick or concrete floors with wooden floors properly under-ventilated, etc.

Housing.

A survey was made of the housing conditions in the area and reports submitted showing the number of houses required to replace unfit houses in certain districts. Plans were submitted for the erection of 20 houses at Thornton, 54 houses at Boreland and 20 houses at Burntisland. These schemes were all commenced during the year and the Burntisland scheme was nearing completion at the end of the year.

WEMYSS AREA—Robert J. Wigston, Sanitary Inspector.

Scavenging.

In connection with the refuse disposal in the Wemyss Area I would respectfully call your attention to my observations on this matter in my report for the previous year. It is becoming increasingly difficult to secure land suitable for a refuse depot, more especially when the Superior stipulates conditions which would add tremendously to the cost of using the ground as to make it almost prohibitive. I refer to the stipulation that soil to a depth of 18 inches must be provided for the top of the depot and if the depot is situated at the roadside it must be covered daily. The nett cost of doing this work alone is almost prohibitive, but it is practically an impossibility to secure the amount of soil which is required, and I would recommend that in the event of the Boreland Housing Scheme being added to the Wemyss Area for cleansing purposes, the question of providing a destructor for the whole Area be seriously considered. The capital cost of providing a suitable destructor to serve a population of from 15,000 to 20,000 people would be £1,515, exclusive of site and any extra cost which would be incurred for attendance, etc., would be very small when compared with the additional costs of the present system.

Housing.

During the year 13 houses were reconstructed or improved, 12 under the Rural Workers Act, 1926, with assistance by the County Council and one by private enterprise.

Plans were passed for three houses to be built by private enterprise without subsidy, while one house was passed to qualify for subsidy under the Housing Acts.

Additional houses are required within the Wemyss Area for rehousing people who are at present living in insanitary houses, and I think it is a matter for consideration that when the new houses are completed

the tenants of insanitary property should be the first to be re-housed in the new houses so as to allow action being taken regarding insanitary dwellings.

LOCHGELLY AREA—John S. E. Riddle, Sanitary Inspector.

Drainage.

AUCHTERDERRAN SPECIAL DRAINAGE DISTRICT.—This district, which covers a wide area, has Purification Works situated near the River Ore to the east of the district. Two full-time men are employed in connection with the Works and sewage system.

Some portions of the main sewers have very little fall and at places the levels have been affected by underground workings. This necessitates keeping a careful watch on the sewers and during the summer, when the lamplighter is available for other work, portions of the sewers are cleaned.

LOCHORE AND GLENCRAIG SPECIAL DRAINAGE DISTRICT.—The main outfall is at the south end of this district, when the sewage discharges into the Fitty Burn. Before reaching the Burn the sewage passes through four troughs partly filled with large stones. This helps to break up the solids and to a certain extent aerates the sewage. The ground here has been taken off for the erection of purification works. These troughs are cleaned out during the summer.

There were two bad chokes on the sewers caused in both instances by covers being taken off and the manholes filled with stones. In one case a heavier cover was put on and in the other the manhole was covered up. Another choke was caused by waste from a potato washer. The sewer was cleaned out and the proprietor had a small catch pit built to take the waste from the washer which he cleans out regularly. Otherwise, the sewers are working well.

To provide for the drainage of 60 houses erected at Crosshill Housing Scheme about 200 yards of 9 inch and 100 yards of 6 inch sewer were laid at an estimated cost of £145 15s.

LUMPHINNANS SPECIAL DRAINAGE DISTRICT.—In 1922 new sewers were laid to serve the village. Later the outfall was continued for a considerable distance to join the Lochgelly Burgh sewer and afterwards new sewers were put in to serve the Housing Schemes. Twenty houses at Zetland Place, on low ground to the south of the village, the schoolhouse and the janitor's house drain into a manhole with an overflow into the ditch forming the Cowdenbeath Burgh boundary. The sewers serving the rest of the district are connected to the Lochgelly Burgh system.

In July a serious choke occurred on the outfall sewer to the north of the village. This was part of the system taken over from the Fife Coal Company. The sewer was found to be badly silted up and a large number of tin cans, pieces of iron, etc., were taken out of the pipe.

Extra men were engaged and this section of the sewer was opened in several places and thoroughly cleaned. A new manhole was also constructed on the sewer.

KINGLASSIE SPECIAL DRAINAGE DISTRICT.—This is only a drainage district in name as nothing has been done beyond preparing plans for a sewerage system. It is a considerable time since these plans were prepared but the matter has gone no further.

There is a sewer serving the Housing Scheme which is connected to a septic tank, the effluent from which joins a ditch to the south-east of the scheme. There are drains of a kind which have been put in by feuars but in most cases the waste water joins field drains or open ditches and finds its way to the Lochty Burn. The houses erected by the Fife Coal Company a few years ago have cesspools; the overflow pipes from these discharge into the burn.

If additional houses are to be built and the provision of water closets and inside water supplies to the older properties insisted on, the question of providing a proper sewage system cannot be delayed much longer.

Scavenging.

LUMPHINNANS SPECIAL SCAVENGING DISTRICT.—I mentioned in my last year's report as to the state of the private streets and drying greens adjoining the Fife Coal Company's houses. After correspondence a Sub-Committee of the Public Health Committee met the General Manager of the Company and promises were given that a start would again be made to have the streets made good. A start was made and Beveridge Place and the drying greens between Beveridge Place and Sligo Street were surfaced with red ashes but the workmen were withdrawn before the work had been half finished, and although I have written the Company on different occasions the work had not been started again at the end of the year.

Provision of Water Supply and Water Closets.

As mentioned in previous reports practically every house within the Auchterderran, Lochore and Glencraig and Lumphinnans Special Drainage Districts have a supply of water inside the house and also a water closet.

The old houses at Lumphinnans, which previously got their water supply from street wells, have all been demolished.

In only a few cases do the water closets serve more than one house.

In Lochore and Crosshill there are 29 houses provided with privy closets. Of these, 19 have a closet to each house and the others have one closet between two tenants. No drainage facilities are available and moreover the houses are old and not worth the expenses required to provide inside water supply and water closets.

In Auchterderran area one house previously using a privy closet was provided with a proper scullery and water closet during the year.

In Kinglassie Special District, which only came into this area about a year and a half ago, there are still a large number of houses without water closets and inside water supply, but until drainage facilities are provided it is difficult to make any headway with the provision of these conveniences.

Schools.

At Glencraig and Ballingry Schools and Kinglassie Old School automatic closets of the open trough type are provided for the use of the boys. At Lumphinnans, Auchterderran Higher Grade, Auchterderran South and Auchterderran East there is another type of automatic trough closet. In this case there is a basin in each compartment which is connected direct to a pipe beneath; this pipe takes in a range of closets and is trapped at one end. After each flush a certain amount of water is retained in the pipe. These closets are not a very great advance on the open trough closets.

Both these types of closets should be taken out and modern individual closets installed, more especially at schools where children attend up to the age of fourteen years.

Food Inspection, Imported Food, etc.

During the year printed notices to shopkeepers under the Merchandise Marks Act, 1926, regarding the marking of Imported Foodstuffs were issued by the Public Health Department and were distributed to all the shopkeepers in the area.

Shops are inspected as time permits but no contravention of the Act was observed.

An anonymous complaint regarding the making of icecream in a dwellinghouse was investigated. It was a two-apartment house occupied by six adults. The icecream was being made in the room and was retailed from a small cart and hand barrow. The room was also used as a sleeping apartment as there was a bed in a recess. The house was visited on several occasions and also inspected by the Deputy Medical Officer. The room and dishes in use were clean and we had no power to stop the making of icecream. We advised that lodgings be got for some members of the family so that the room could be kept solely for the making of icecream. This was not done but shortly afterwards the making of icecream was stopped for the season. The sender of the anonymous letter was a rival icecream dealer.

Housing.

There is still a shortage of housing accommodation throughout this area and sub-letting is much too prevalent.

Two years ago there was a large number of empty houses, but at the end of the year there was not an empty habitable house in Cardenden and Kinglassie and very few in either Lochore, Glencraig or Lumphinnans, while there are still far too many living in sub-let rooms in all these districts. With the present state of the coal trade in this area, it is very difficult to make much progress in reducing the number of sub-let tenants as so many of them are unemployed.

At the end of the year, I estimated that within the Auchterderran Special District, 60 to 65 newly married couples had taken up residence during the year and that there were 44 sub-let houses and not an empty house available.

BEATH AREA—C. A. Alexander, Sanitary Inspector.

Drainage.

HILL OF BEATH.—The intercepting sewers in Hill of Beath are functioning well.

The question of the outfall is meantime occupying the attention of a Special Committee. We understand the probable life of the village is being considered and we think it right that this should be done. The population of the village meantime is approximately 1,200, *i.e.*, the portion in Beath Parish, and there are something like 270 houses. Practically all of these houses are just the usual miners' row, so prevalent in this district—just dumped down, without regard for anything. Those responsible have passed on a legacy of which they should be anything but proud. These houses or rows offer a fine object lesson as to how houses should *not* be built.

Hill of Beath is at present in a very peculiar position, and it is really difficult to state with any degree of certainty what the position is likely to be. If the coal industry were to revive, would Hill of Beath still be a populated centre? For the present, it would be, but would the Fife Coal Company be prepared to meet the expense of bringing their houses up to modern requirements? The situation of many of them renders such prohibitive. Result—closure.

There is every prospect of at least 40 houses being closed soon. The others, we think, will eventually go the same road. The question is, when? It is hard to say.

We respectfully suggest, therefore, that, despite this uncertainty, an outfall should be provided to serve the existing houses. Even though the rows are closed up, there will be sufficient houses left requiring drainage facilities. There is also the possibility of development along the main Crossgates-Cowdenbeath Road to the east of the Tavern, and there might be new houses in Hill of Beath itself. One never knows. At any rate, the new outfall would always be required, no matter what happened in the village.

Scavenging.

KELTY SPECIAL SCAVENGING DISTRICT.—As indicated, the work is carried out by direct labour, two horses and carts being employed for the purpose. Two scavengers are also employed, who do street cleansing, public convenience and tip dressing work. At the beginning of the year, three horses and carts were employed but in view of the opinion given in our last report, the local Committee investigated the whole matter and ultimately decided to dispense with one horse and cart. Previously a daily system of collection had operated over the whole district. We considered such a system in such an area unnecessary. The Committee agreed to institute a system of collection every second day for a period of two months. At the end of this period it was found that the change over was working satisfactorily and the Committee thereupon decided to make the new system permanent. Naturally, there were one or two complaints at the beginning but after the new system had become known to the population generally, these complaints disappeared and the whole scheme seems to be working satisfactorily and a decided economy has, at the same time, been effected. The carter affected is meantime employed on odd jobs throughout the district, and also in assisting in the Drainage Department.

HILL OF BEATH.—The work here is carried out by the Fife Coal Company, who make their own arrangements for removal and disposal of refuse. We have complained regarding the collection of refuse in an open cart and have offered the Company a suitable cart at a cheap rate. We think the Fife Coal Company should be compelled to provide a suitable cart. Disposal here is by tipping. Street cleansing is carried out by the Fife Coal Company's own men and we had occasion to complain of the tip being used for street sweepings, etc., as same was in close proximity to dwellinghouses.

Housing.

KELTY.—The eighty 3-apartment houses approved were commenced, and by the end of the year, many of them were occupied. These eighty houses were to replace seventy three old uninhabitable houses. At first sight it seemed rather a contract to tackle, but as we indicated last year, the local members were determined to carry out the job. The impossible has been accomplished, and sixty-five of the seventy-three houses are now no more. We are keeping eight houses at Dewars Row in reserve in the meantime, as temporary clearing houses. These houses will go with the next batch of seventy-six houses.

Sixty-five of the houses were built under the 1930 Act, and fifteen under the 1924 Act. The rents, we understand, are £14 10s.

Despite the erection of eighty houses, Kelty was thought to require even more. A survey carried out by ourselves confirmed this view.

After careful consideration, the County Council agreed to provide another sixty houses, which number was later increased to seventy-six houses—all three-apartment. We understand that offers are being taken so that work should commence fairly soon.

Let it be said that while it may be true to say that no further development will take place in this area so far as the predominant industry is concerned, it is certainly true to say that the seventy-six houses about to commence are not being provided for future development. We have overcrowding and sublets in Kelty which deserve consideration, and we imagine many of these additional houses will be available for people living under these conditions. There are still a number of uninhabitable houses, as our report indicates, so that in the near future, we should be in a very favourable position.

Before passing on, we must record our disappointment that more of the dispossessed tenants could not see their way clear to take a new house for one reason or another. In practically every case, a new house was granted where it was requested. This fact was ascertained by plebescite. But we have the great satisfaction of knowing that all of those who could not take a new house are now living in comfortable and excellent houses. We congratulate the County Council on their effort, and we say that it has been well worth while.

LASSODIE.—Lassodie, we think, should be allowed to die. If the village is to remain, then drainage services would require to be introduced, and water closets and sinks fitted into the houses. The property is not worth it, and the introduction of sanitary improvements would be an impossible burden on owners and tenants alike.

It may sound callous to suggest the total abandonment of a village with cherished memories for many, but let us say here that sentiment must not be allowed to stand in the way of progress, especially when such progress is towards better health and happier lives.

By all means secure temporary safety for the remaining residents, but as the houses are vacated, clear them out until Lassodie is only a name.

HILL OF BEATH.—The position here is much as before, and is very obscure. We believe that Hill of Beath will eventually become another Lassodie. At the moment there is no work near the village, and a large number of its inhabitants are unemployed. The houses, with the exception of a few blocks, are not suitable for various reasons for habitation, and we would like to see a gradual clearance of the worst blocks. Even if industry were to revive, Hill of Beath could not be held to be absolutely necessary, except as a place where dwelling-houses existed. We think that the day is past when groups of dwellinghouses of this type should be scattered over the country in such a way as to make the provision of essential services a heavy burden, and in many cases both a physical and a financial impossibility.

Food Inspection.

An ever-increasing interest is noticeable with regard to the production and handling of foodstuffs. Great headway has been made, but still greater headway could be made. For instance, it does not seem worth all the bother in producing a good clean milk if it is to be immediately contaminated as soon as it passes into the premises of the consumer. Foods other than milk come under the same remark.

The various bake-houses, milk shops, etc., were frequently visited. The premises are excellently suited, but a hint has still to be given here and there with regard to matters, small in themselves, but which have an important bearing from a Public Health viewpoint, such as dirty floors, etc.

A look was often taken at fruit, fish, meat and bread vendors' vehicles. It was not necessary to object, although in one case a technical offence was found and speedily remedied—a van was minus the owner's name.

Sale of Food and Drugs Acts.

During 1931, nine hundred and nine samples of food and drugs were taken by the County Sampling Officers, under my direction as Chief Sampling Officer, and analysed by the County Analyst. Of these, eight hundred and twelve were official samples and ninety-seven were test samples. On analysis, twenty-seven official samples and eight test samples were found not to be of the nature and substance of the article demanded. The nature and number of the adulterated official samples were sweet milk, thirteen; mince, nine; diluted spirits, two; skimmed milk, one; sausages, one; and sausagemeat, one.

Of the vendors of the twenty-seven adulterated official samples, ten were fined in sums varying from £1 to £6, a total of £28, whilst in addition one vendor was required to pay £2 2s towards the cost of the Government analysis; five cases were dropped on payment of expenses varying from 15s to £2 10s, a sum of £9 5s in all; three cases were dropped after appeals to the court and for other reasons, no payments towards expenses being sought: in six cases no proceedings were taken, while warnings were issued in three cases.

The following statement sets forth the work undertaken under the Acts by the Sampling Officers.

CUPAR DISTRICT.—Official samples, eighteen, all genuine; test samples, nil.

BURGHES IN CUPAR DISTRICT.—Official samples, one hundred and forty-five, of which three were adulterated; test samples, ten, all genuine; one hundred and fifty-five samples in all.

Total samples taken, therefore, numbered one hundred and seventy-three, of which one hundred and sixty-three were official and ten test samples.

DUNFERMLINE DISTRICT.—Official samples, one hundred and ten, of which three were adulterated; test samples, twenty-five, all genuine; one hundred and thirty-five samples in all.

BURGHES IN DUNFERMLINE DISTRICT.—Official samples, twenty-two, of which four were adulterated; test samples, fifty-one, of which seven were adulterated; seventy-three samples in all.

Total samples taken, therefore, numbered two hundred and eight, of which one hundred and thirty-two were official and seventy-six test samples.

KIRKCALDY DISTRICT.—Official samples, one hundred and forty-nine, of which two were adulterated ; test samples, five, all genuine ; one hundred and fifty-four samples in all.

BURGHs IN KIRKCALDY DISTRICT.—Official samples, one hundred and seventy-nine, of which twelve were adulterated ; test samples, five, all genuine ; one hundred and eighty-four samples in all.

Total samples taken, therefore, numbered three hundred and thirty-eight, of which three hundred and twenty-eight were official samples and ten test samples.

ST. ANDREWS DISTRICT.—Official samples, thirty-three, of which one was adulterated ; test samples, one adulterated ; thirty-four samples in all.

BURGHs IN ST. ANDREWS DISTRICT.—One hundred and fifty-six samples, of which two were adulterated ; test samples, nil.

Total samples taken, therefore, numbered one hundred and ninety, of which one hundred and eighty-nine were official and one test samples.

Tables of Samples and Results of their Analyses.

CUPAR DIVISION.

COUNTY DISTRICT.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	10	..	10
Butter, Salt, ..	2	..	2
Baking Powder,	1	..	1
Jam, Black Currant,	1	..	1
Mustard ..	1	..	1
Salts, Liver ..	1	..	1
Sugar ..	1	..	1
Tea ..	1	..	1
Total, ..	18	..	18

	TEST.		
	Gen.	Adult.	Total.
	Nil.		

AUCHTERMUCHTY BURGH.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk ..	9	..	9
Allspice, ..	1	..	1
Butter, ..	1	..	1
Cake, Cherry, ..	1	..	1
Cinnamon, ..	1	..	1
Cornflour, ..	1	..	1
Ginger, Ground,..	1	..	1
Lard, ..	1	..	1
Margarine, ..	1	..	1
Peas, Green, ..	1	..	1
Rennet, ..	1	..	1
Vinegar, ..	1	..	1
Total, ..	20	..	20

	TEST.		
	Gen.	Adult.	Total.
Sweet Milk, ..	3	..	3
Total, ..	3	..	3

The above noted adulterated sample of Skimmed Milk contained 1.00 per cent of Fat and 8.22 per cent of Non-Fatty Solids.

The above noted adulterated sample of Sweet Milk contained 7.78 per cent of Fat and 8.53 per cent. of Non-Fatty Solids.

CUPAR BURGH.

	OFFICIAL.				TEST.		
	Gen.	Adult.	Total.		Gen.	Adult.	Total.
Sweet Milk, ..	9	..	9	Sweet Milk, ..	1	..	1
Skimmed Milk, ..	2	1	3	Skimmed Milk, ..	1	..	1
Arrowroot, ..	1	..	1				
Borax, Powdered, ..	1	..	1				
Butter, Fresh, ..	2	..	2				
Butter, Salt, ..	3	..	3				
Chemical Food, ..	1	..	1				
Egg Substitute, ..	1	..	1				
Flour, Plain, ..	1	..	1				
Margarine, ..	1	..	1				
Oatmeal, ..	1	..	1				
Oil, Olive, ..	1	..	1				
Tartaric Acid, ..	1	..	1				
Total, ..	25	1	26	Total ..	2	..	2

The above noted adulterated sample of Skimmed Milk contained 1.00 per cent. of Fat and 8.22 per cent. of Non-Fatty Solids.

FALKLAND BURGH.

	OFFICIAL.				TEST.		
	Gen.	Adult.	Total.		Gen.	Adult.	Total.
Sweet Milk, ..	14	..	14	Sweet Milk, ..	1	..	1
Barley, ..	1	..	1	Dripping, ..	1	..	1
Butter, Salt, ..	1	..	1	Fish Dressing, ..	1	..	1
Cinnamon, ..	1	..	1				
Cocoa, ..	1	..	1				
Fat, Roast, ..	1	..	1				
Flour, ..	1	..	1				
Fruit, Preserved, ..	1	..	1				
Jelly, Apple, ..	1	..	1				
Mincemeat, ..	1	..	1				
Oil, Olive, ..	1	..	1				
Relish, Yorkshire, ..	2	..	2				
Sago, ..	1	..	1				
Sugar, ..	2	..	2				
Tea, ..	1	..	1				
Wine, Grape, ..	1	..	1				
Total, ..	31	..	31	Total, ..	3	..	3

LADYBANK BURGH.

	OFFICIAL.				TEST.		
	Gen.	Adult.	Total.		Gen.	Adult.	Total.
Sweet Milk, ..	12	1	13	Cream, ..	1	..	1
Skimmed Milk, ..	2	..	2	Margarine, ..	1	..	1
Baking Powder, ..	1	..	1				
Butter, ..	2	..	2				
Certo, ..	1	..	1				
Cocoa, ..	1	..	1				
Cornflour, ..	2	..	2				
Creamola, ..	1	..	1				
Flour, ..	1	..	1				
Margarine, ..	1	..	1				
Rice, Ground, ..	1	..	1				
Rice, Whole, ..	1	..	1				
Semolina, ..	1	..	1				
Sugar, ..	1	..	1				
Sweets, ..	1	..	1				
Tapioca, Pearl, ..	1	..	2				
Tea, ..	2	..	1				
Total, ..	32	1	33	Total, ..	2	..	2

The above noted adulterated sample of Sweet Milk contained 2.65 per cent. of Fat and 9.10 per cent. of Non-Fatty Solids.

NEWBURGH BURGH.

	OFFICIAL.				TEST.		
	Gen.	Adult.	Total.		Gen.	Adult.	Total.
Sweet Milk, ..	18	1	19	<i>Nil.</i>			
Beer, Draft, ..	1	..	1				
Butter, Salt, ..	1	..	1				
Ginger, Ground, ..	1	..	1				
Lard, ..	1	..	1				
Milk, Malted, ..	1	..	1				
Nitre, Sweet							
Spirits of ..	1	..	1				
Oil, Almond, ..	2	..	2				
Oil, Camphorated, ..	1	..	1				
Pepper, White, ..	1	..	1				
Sausages, ..	1	..	1				
Sausage meat, ..	1	..	1				
Tea, ..	1	..	1				
Tomato Puree, ..	1	..	1				
Whisky, ..	2	..	2				
Total, ..	34	1	35				

The above noted adulterated sample of Sweet Milk contained 2.36 per cent. of Fat and 8.82 per cent. of Non-Fatty Solids.

DUNFERMLINE DIVISION.

COUNTY DISTRICT.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	78	3	81
Pasteurised Milk, ..	5	..	5
Butter, Salt, ..	5	..	5
Chicken and Ham Roll, ..	1	..	1
Mince, ..	11	..	11
Sausages, ..	4	..	4
Sausagemeat, ..	1	..	1
Whisky, ..	1	..	1
Wine, Raspberry, ..	1	..	1
Total, ..	107	3	110

	TEST.		
	Gen.	Adult.	Total.
Sweet Milk, ..	5	..	5
Butter, ..	3	..	3
Honey, ..	1	..	1
Jam, Raspberry, ..	1	..	1
Margarine, ..	1	..	1
Mince, ..	3	..	3
Peas, ..	1	..	1
White Pudding, ..	1	..	1
Sausages, ..	2	..	2
Spiced Beef and Tongue, ..	1	..	1
Tea, ..	2	..	2
Whisky, ..	4	..	4
Total, ..	25	..	25

The above noted adulterated samples of Sweet Milk contained the following :

Fat. per cent.	Non-Fatty Solids per cent.
3.53	8.04
3.68	8.20
3.94	7.84

COWDENBEATH BURGH.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	4	..	4
Pasteurised Milk, ..	1	..	1
Sausages, ..	1	..	1
Total, ..	6	..	6

	TEST.		
	Gen.	Adult.	Total.
Sweet Milk, ..	7	..	7
Apricots, Dried, ..	1	..	1
Bacon, ..	1	..	1
Baking Soda, ..	1	..	1
Butter, ..	3	..	3
Currants, ..	1	..	1
Dripping, ..	1	..	1
Gin, ..	1	..	1
Jelly, Bramble, ..	1	..	1
Lard, ..	1	..	1
Margarine, ..	1	..	1
Mince, ..	12	1	13
Pepper, White, ..	1	..	1
Rum, ..	1	..	1
Sausages, ..	2	1	3
Veal Loaf, ..	1	..	1
Whisky, ..	3	..	3
Total, ..	39	2	41

CULROSS BURGH.

	OFFICIAL.				TEST.		
	Gen.	Adult.	Total.		Gen.	Adult.	Total.
Arrowroot, ..	1	..	1	Sweet Milk, ..	1	..	1
Baking Soda, ..	1	..	1				
Butter, Salt, ..	1	..	1				
Cream of Tartar	1	..	1				
Lard, ..	1	..	1				
Sausages, ..	1	..	1				
Total, ..	6	..	6	Total, ..	1	..	1

INVERKEITHING BURGH.

	OFFICIAL.				TEST.		
	Gen.	Adult.	Total.		Gen.	Adult.	Total.
Sweet Milk, ..	5	2	7	Sweet Milk, ..	2	2	4
Mince, ..	1	2	3	Mince, ..	..	3	3
				Sausages, ..	2	..	2
Total, ..	6	4	10	Total, ..	4	5	9

The above noted adulterated samples of Sweet Milk contained the following :

Fat per cent.	Non-Fatty Solids per cent.
2.84	8.92
2.94	8.76

One test sample was deficient in milk fat to the extent of 0.64 per cent. while the other was deficient in non-fatty solids to the extent of 0.23 per cent.

KINGHORN BURGH.

	OFFICIAL.				TEST.		
	Gen.	Adult.	Total.		Gen.	Adult.	Total.
Sweet Milk, ..	3	..	3				
Total, ..	3	..	3				

KIRKCALDY DIVISION.

COUNTY DISTRICT.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	85	1	86
Condensed Milk, ..	1	..	1
Pasteurised Milk, ..	3	..	3
Skimmed Milk, ..	3	..	3
Acid, Boric, ..	1	..	1
Acid, Tartaric, ..	1	..	1
Butter, Fresh, ..	1	..	1
Butter, Salt, ..	12	..	12
Cocoa, ..	1	..	1
Cream of Tartar	4	..	4
Currants ..	3	..	3
Flour, ..	3	..	3
Jam, Black Currant,	1	..	1
Ginger, Ground,	1	..	1
Lard, ..	3	..	3
Margarine, ..	4	..	4
Mince, ..	4	1	5
Oil, Olive, ..	1	..	1
Peas, Tinned, ..	1	..	1
Pepper, White, ..	3	..	3
Pickles, Mixed, ..	1	..	1
Powder, Custard,	1	..	1
Rice, Ground, ..	1	..	1
Semolina, ..	2	..	2
Soda, Baking, ..	1	..	1
Tea, ..	1	..	1
Vinegar, Malt, ..	1	..	1
Whisky, ..	3	..	3
Total, ..	147	2	149

The above noted adulterated sample of Sweet Milk contained 3.01 per cent. of Fat and 8.04 per cent. of Non-Fatty Solids.

	TEST.		
	Gen.	Adult.	Total.
Cream of Tartar	1	..	1
Sausage, Sliced,	1	..	1
Soda, Baking, ..	2	..	2
Vinegar, Malt, ..	1	..	1
Total, ..	5	..	5

The above noted adulterated samples of Sweet Milk contained the following:

Non-Fatty Solids per cent.	Fat per cent.
8.02	3.84
8.70	3.04

Apricots, Dried, ..	1	..	1
Bacon, ..	1	..	1
Baking Soda, ..	1	..	1
Butter, ..	1	..	1
Currants, ..	1	..	1
Drooping, ..	1	..	1
Gin, ..	1	..	1
Jelly, Bramble, ..	1	..	1
Lard, ..	1	..	1
Margarine, ..	1	..	1
Mince, ..	12	1	13
Pepper, White, ..	1	..	1
Rum, ..	1	..	1
Sausages, ..	2	..	2
Veal Loaf, ..	1	..	1
Whisky, ..	3	..	3
Total, ..	39	2	41

BUCKHAVEN BURGH.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	11	1	12
Baking Powder, ..	1	..	1
Butter, Salt, ..	3	..	3
Cheese, ..	2	..	2
Cream of Tartar,	1	..	1
Lard, ..	1	..	1
Mince, ..	2	..	2
Pepper, White, ..	3	..	3
Sausages, ..	5	1	6
Sausagemeat, ..	..	1	1
Soda, Baking, ..	1	..	1
Tea, ..	3	..	3
Dripping, ..	1	..	1
Total, ..	34	3	37

The above noted adulterated sample of Sweet Milk contained 2.91 per cent. of Fat and 8.63 per cent. of Non-Fatty Solids.

TEST.

Gen. Adult. Total.
Nil.

BURNTISLAND BURGH.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	40	1	41
Skimmed Milk, ..	1	1	2
Mince, ..	1	2	3
Total, ..	42	4	46

The above noted adulterated sample of Sweet Milk contained 2.67 per cent. of Fat and 8.79 per cent. of Non-Fatty Solids.

TEST.

Gen. Adult. Total.
Nil.

KINGHORN BURGH.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	3	..	3
Total, ..	3	..	3

TEST.

Gen. Adult. Total.
Nil.

ST. ANDREWS DIVISION.

COUNTY DISTRICT.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	14	1	15
Butter, Fresh, ..	1	..	1
Cocoa, ..	2	..	2
Cornflour, ..	2	..	2
Ginger, Ground, ..	1	..	1
Oatmeal, ..	1	..	1
Oatmeal Pudding, ..	1	..	1
Relish, Chef, ..	1	..	1
Relish, Yorkshire, ..	1	..	1
Rice, Ground, ..	2	..	2
Rice, Whole, ..	2	..	2
Sugar, ..	2	..	2
Tea, ..	2	..	2
Total, ..	32	1	33

The above noted adulterated sample of Sweet Milk contained 2.75 per cent. of Fat and 8.64 per cent. of Non-Fatty Solids.

	TEST.		
	Gen.	Adult.	Total.
Sweet Milk,	1
Total,	1

The test sample was deficient in milk fat to the extent of 0.32 per cent.

CRAIL BURGH.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	9	..	9
Cornflour, ..	1	..	1
Rice, Ground, ..	1	..	1
Rice, Whole, ..	1	..	1
Semolina, ..	1	..	1
Sugar, ..	1	..	1
Tea, ..	1	..	1
Total, ..	15	..	15

	TEST.		
	Gen.	Adult.	Total.
<i>Nil.</i>			
Total,

KILRENNY, ANSTRUTHER EASTER AND ANSTRUTHER WESTER.

	OFFICIAL.		
	Gen.	Adult.	Total.
Butter, Fresh, ..	1	..	1
Cheese, ..	1	..	1
Cream of Tartar,	1	..	1
Oatmeal, ..	1	..	1
Rice, Ground, ..	1	..	1
Rice, Whole, ..	1	..	1
Sugar, ..	2	..	2
Tea, ..	3	..	3
Total, ..	11	..	11

	TEST.		
	Gen.	Adult.	Total.
	Nil.	..	..

NEWPORT BURGH.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	12	..	12
Arrowroot, ..	1	..	1
Butter, Salt, ..	1	..	1
Cake, Genoa Slab,	1	..	1
Cheese, ..	1	..	1
Cinnamon, Ground,	2	..	2
Creamola, ..	1	..	1
Farola, ..	1	..	1
Flour, ..	1	..	1
Oatmeal, ..	1	..	1
Pastry, Puff, ..	1	..	1
Pepper, Black, ..	2	..	2
Rice, Ground, ..	1	..	1
Rice, Whole, ..	1	..	1
Semolina, ..	1	..	1
Sugar, ..	1	..	1
Tea, ..	2	..	2
Total, ..	31	..	31

	TEST.		
	Gen.	Adult.	Total.
	Nil.	..	..

PITTENWEEM BURGH.

	OFFICIAL.		
	Gen.	Adult.	Total.
Sweet Milk, ..	5	..	5
Coffee, ..	1	..	1
Oatmeal, ..	1	..	1
Pepper, Black, ..	1	..	1
Rice, Ground, ..	1	..	1
Rice, Whole, ..	1	..	1
Semolina, ..	1	..	1
Sugar, ..	1	..	1
Tea, ..	1	..	1
Total, ..	13	..	13

	TEST.		
	Gen.	Adult.	Total.
	Nil.	..	..

TAYPORT BURGH.

	OFFICIAL.				TEST.		
	Gen.	Adult.	Total.		Gen.	Adult.	Total.
Sweet Milk, ..	4	..	4				Nil.
Barley, Pot, ..	1	..	1				
Butter, Salt, ..	1	..	1				
Cheese, ..	1	..	1				
Cheese, Cheddar, ..	1	..	1				
Cocoa, ..	1	..	1				
Coffee and Chicory, ..	1	..	1				
Cream of Tartar, ..	1	..	1				
Marcaroni, ..	1	..	1				
Rice, Ground, ..	2	..	2				
Rice, Whole, ..	2	..	2				
Semolina, ..	1	..	1				
Sugar, ..	2	..	2				
Tea, ..	2	..	2				
Total, ..	21	..	21				

ST. ANDREWS BURGH.

	OFFICIAL.				TEST.		
	Gen.	Adult.	Total.		Gen.	Adult.	Total.
Sweet Milk, ..	43	..	43				Nil.
Milk, Certified, ..	1	..	1				
Cinnamon, Ground, ..	1	..	1				
Cocoa, ..	1	..	1				
Coffee, Ground, ..	1	..	1				
Creamola, ..	1	..	1				
Flour, ..	1	..	1				
Icecream, ..	6	..	6				
Margarine, ..	1	..	1				
Mince, ..	1	2	3				
Oatmeal, ..	1	..	1				
Pepper, Black, ..	1	..	1				
Rice, Ground, ..	1	..	1				
Rice, Whole, ..	1	..	1				
Sugar, ..	1	..	1				
Tea, ..	1	..	1				
Total, ..	63	2	65				

Fife County Council.

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Fife County Council.

ANNUAL REPORT on the Medical Inspection of School Children for the Year ended July 1931.

I.—(a) NUMBER OF SCHOOLS.

Primary Schools,	90
Primary Schools with Advanced Division (1-2 years course), ..	50
Primary Schools with Advanced Division (3 years course), ..	13
Advanced Division Schools (3 years course),	3
Secondary Schools,	8
Total,	164

(b) NUMBER OF CHILDREN ON REGISTER AND IN AVERAGE ATTENDANCE.

	Fife County.	Dunfermline Burgh.	Kirkcaldy Burgh.
Primary	39997·23	4755·73	5940·83
Advanced Division	4514·45	718·27	610·50
Intermediate and Secondary	4766·47	801·29	956·06
Total	49278·15	6275·29	7507·39
Roll (Total) as at September 1930	49429·		
Average weekly roll to 31st July, 1931,	49278·15		
Average Attendance to 31st July, 1931,	44472·46		
Percentage Attendance,	90·25%		

II. SANITARY CONDITIONS OF SCHOOLS.

HEATING OF SCHOOLS.—A number of complaints were made by the staff regarding the unsatisfactory heating arrangements in some of the schools. These were Boarhills, Dunbog, Ceres, Springfield and Gate-side Schools. At Rathillet School a defect had developed in the heating installation which required attention. At Lochgelly South School the heating in the temporary hut was unsatisfactory.

WATER SUPPLY.—Complaint was made by the Area Medical Officer regarding the water supply at Moonzie. The water from one of the wells was suspect and dirty.

LATRINES.—As a result of the defective state of the wall of the boys' latrine at Foulford School, it was reported that unpleasant smells were

noticeable in one of the classrooms. The very unsatisfactory condition of the W.C.'s on the south side of Lochgelly H.G. School is commented upon by the Area Medical Officer. "The pans are so badly broken that the children refuse to use them."

CLINIC.—The Clinic at Burntisland had a geyser for the supply of hot water. Owing to complaints of it being the cause of unpleasant sensations to the staff, this geyser had to be discontinued and replaced by an electric heater.

MISCELLANEOUS.—Attention had again to be drawn to the unsatisfactory conditions at Ceres. Most urgent of all is the lack of staff-room accommodation and the necessary sanitary arrangements. The condition of the walls in the school also require to be attended to.

Attention is drawn to the bad planning in regard to Tayport School "access to classrooms is frequently to be had only through classrooms" or "to pass from one part of the building to another ordinarily means a detour round the outside."

Similarly in the case of Leslie Public School the classrooms are badly arranged and a number of them "are small for the size of the class."

At Culross Public School the steps in the temporary building are dangerous and the classrooms in the old building are dark.

The common complaint to which attention must be drawn in the Lochgelly-Glencraig district is the condition of the gymnasium floors. "It is almost a daily duty for the headmaster or some other teacher to extract wood splinters from the children's feet or hands." Faulty floors of this nature have been complained of at Lochgelly East and West, Glencraig, Ballingry, Lumphinnans, Auchterderran South and Higher Grade.

III. ORGANISATION AND ADMINISTRATION.

In May, 1930, the School Medical Staff was taken over by the Fife County Council. The consequent re-organisation brought about certain important changes. The County was divided into areas and each placed under the charge of an Area Medical Officer. There are seven such areas, namely :—(1) St. Andrews, (2) Cupar, (3) Buckhaven (4) Kirkcaldy Landward (Burntisland and Markinch), (5) Kirkcaldy Landward (Lochgelly, etc.), (6) Cowdenbeath Burgh and Dunfermline Landward (Kelty), (7) Dunfermline Landward (West Fife).

Each Area Medical Officer, besides the work under the Maternity and Child Welfare Scheme is responsible for the work under the School Medical Scheme. The latter scheme includes the routine medical inspection of definite groups of children (entrant infants, 9 year olds, 13 year olds and 16 year olds) as well as the inspection of 7 year old children for visual acuity, of non-routine cases and the re-examination of special cases.

Associated with each area there are the Health Visitors whose duties include work under the Maternity and Child Welfare and School Medical Schemes. As school nurses, they help the Medical Officers at the medical inspection visits, they inspect children on their school visits and re-inspect supervisory cases, as well as visiting the homes where necessary.

In the country districts the duties of school nurses are performed, by arrangement with the Fife County Nursing Association, by the District Nurses.

In the two large Burghs, Kirkcaldy and Dunfermline, the work of school medical inspection was in abeyance during the first part of the school session. Eventually it was decided that the medical staff of the two Burghs should carry out the medical inspection of the school children.

In Table I. the figures are given relating to the work and findings of the school nurses. These figures do not include those for Dunfermline where some of the information is not available. In Dunfermline Burgh 5,166 children were inspected and re-inspected by the nurses and these necessitated 132 home visits.

TABLE I.—CASES SEEN AT INSPECTIONS BY NURSES.

Conditions.	Dunfer'ine Area. (Landward)	Kirkcaldy Area. (Landward)	Kirkcaldy Area. (Burgh)	North-East Fife.	Totals.
Head Vermin ..	676	1043	258	301	2278
Body Vermin ..	57	45	13	14	129
Ringworm (Scalp)	24	14	1	11	50
Scabies ..	22	32	8	4	66
Uncleanliness or Neglect ..	42	83	81	143	349
Impetigo Contagiosa ..	246	569	49	233	1,097
Other Skin Conditions ..	47	28	13	54	142
Otorrhoea ..	76	153	23	32	284
Eye Diseases (external) ..	191	312	62	53	618
Ear Cases ..	16	19	5	35	75
Nose and Throat Cases ..	113	77	5	89	284
Other Cases ..	612	1,116	15	421	2,164
Accidents ..	4	16	5	67	92
Advisory Cases	4	305	39	51	399
Children Inspected and re-inspected	9,732	19,649	5,520	10,412	45,313
Follow-up Cases	939	1,177	107	877	3,100
Home Visits ..	877	1,072	225	1,607	3,781

When comparing these figures (total) with those of former years, a distinct increase in conditions found is recorded in the case of head vermin, uncleanliness and neglect, and scabies. The reason for the increase in the first two is a result of the curtailed time for school work due to the re-organisation. There was also a considerable amount of illness amongst the staff and a definite reduction in the amount of supervision of the schools took place with the result that some of the more chronic cases took advantage of the absence of the nurses and an increase and spread to other children resulted.

The work carried out by the District Nursing Staff under the able guidance of Miss Carnegie is recorded in the special table—Appendix. I.

TOTAL NUMBER OF CHILDREN EXAMINED AND INSPECTED BY MEDICAL STAFF.

	Kirkcaldy Burgh	Dunfer- line Burgh	Kirkcaldy Landward	Dunfer- line Landward	North-East Fife	Total
Entrant Infants ..	730	553	2,037	911	854	5,085
7 year Olds ..	28	413	1,488	834	796	3,559
9 year Olds ..	827	508	1,993	944	997	5,269
13 year Olds ..	596	551	1,099	773	603	3,622
15 year Olds ..	100	143	43	44	63	393
Non-Routines ..	871	827	1,971	1,536	1,230	6,435
Totals ..	3,152	2,995	8,631	5,042	4,543	24,363
Re-examinations ..	747	86	1,594	973	954	4,354
Special Class Child- ren	14	47	7	66	..	134
Junior 15b Students	3	12	18	18	6	57
Number of children seen at Clinics otherwise than for Treatment ..	26	..	288	191	..	445
Totals ..	790	145	1,847	1,248	960	4,990
Number of Children inspected by :—						
(a) Whole-time Nurses ..	6,782	3,012	15,172	9,732	577	35,275
(b) District Nurses ..	..	..	1,264	2,419	8,571	12,254
Totals ..	10,724	6,152	26,914	18,441	14,651	76,882

IV. PHYSICAL CONDITION OF THE SCHOOL CHILDREN.

The heights and weights for boys and girls as formerly were taken by the teaching staff in the various schools. Unfortunately, as a result of the re-organisation and the depletion of the clerical staff, it was impossible for my staff to work out the average figures of the heights and weights of the boys and girls for the County. The figures of the findings of the medical staff at the School Medical Inspections (Routine and Non-Routine) have been collected and tabulated in Appendix III. Arising out of the examinations of the school children the medical staff reported certain children as suffering educationally because of some physical or mental defect. Particulars regarding these are given in the following sections.

(A) Children Suffering Educationally because of Physical Defects.

The children notified under this heading are those who are suffering from some physical defect which acts as a handicap to their educational progress and because of which it might be better if the child were placed in a special class. The number of such cases reported for the different areas was as follows :—

(a) ST. ANDREWS AND CUPAR DISTRICTS.—Twenty children (11 boys and 9 girls) were found to be suffering in their education because of some physical defect such as bronchitis, rheumatism, asthma, tubercular cervical glands, etc.

Two boys were found to be markedly deaf. One of these is very young and is being kept under observation. The other is mentally retarded as well as deaf and certainly should be in a special class for mentally backward pupils.

There are two girls in this district whose eye-sight was such that they had to be considered as educationally blind and both are now attending the myope school in Dundee. There are also two boys whose eye-sight is very defective. One is an albino with a nystagmus and the other has disseminated chorioiditis. Both these cases are getting along fairly well in the ordinary class.

(b) WEMYSS—LEVEN DISTRICT.—Seven girls and five boys were found to be suffering educationally because of physical defects. Five of these are congenital hearts (3 girls and 2 boys). One of these is excluded from School. One case of rheumatic heart, 4 severe cases of poliomyelitis (3 girls and 1 boy), one birth paralysis and one girl who ought to be considered as educationally blind is suffering from extreme corneal opacities.

(c) BURNTISLAND—MARKINCH DISTRICT.—Seventeen children (10 boys and 7 girls) were found with marked physical defects. Two of these were markedly deaf and two had a definite stammer. One girl

had a congenital heart. Seven children had some tubercular condition such as tubercular abdomens or tubercular glands in the neck. Two were markedly debilitated and three are educationally blind.

(*d*) LOCHGELLY DISTRICT.—In this district about 60 children are attending school who are handicapped to a greater or lesser degree by physical infirmities. Of these about 12 ought to be in a special class.

(*e*) COWDENBEATH DISTRICT.—Fourteen children (7 boys and 7 girls) were found to be suffering with definite physical defects such as tubercular conditions (8) such as glands and lung conditions. There is one chorea, one asthma, 3 educationally blind and one congenital heart.

(*f*) WEST FIFE.—Eight children with physical defects (4 boys and 4 girls).

(*g*) KIRKCALDY BURGH.—One boy was reported as requiring either special school education or treatment at an institution because of his physical defect (paralysis—both legs). He has been unable to attend school. His case is being investigated.

(*h*) DUNFERMLINE BURGH.—Nothing to report.

(B) Number of Children suffering in their Education because of Mental Retardation.

(*a*) ST. ANDREWS AND CUPAR DISTRICT.—In this district 76 children (48 boys and 28 girls) were examined and specially mentally tested (by Cyril Burt's modified Binet test). Of these it was found that 10 had an intelligence quotient below 50, 20 between 50 and 69, 14 between 70 and 75 and 30 over 75. From the examination, it seems that about 29 definitely require special class education and further 19 would probably benefit by it. Dr. MacLeod reports further that "from information received from Headmasters and from a superficial examination of other mentally retarded pupils, it is safe to estimate that about 60 children in Cupar and Anstruther Areas are suffering in their education through marked mental backwardness and would benefit from special class education. When the survey of backward children in the area is completed, this figure will, of course, be revised." Owing to the scattered nature of the district, it is practically impossible to set up special classes except possibly in Cupar and St. Andrews. In Cupar where a fairly complete survey was made, Dr. MacLeod found that 10 children had intelligence quotients below 70, whilst there were over 10 in the region of 70 and 75. In St. Andrews there are at least 7 with an intelligence quotient below 70, but here the survey was not so complete.

(*b*) WEMYSS—LEVEN DISTRICT.—Thirteen children (10 boys and 3 girls) are reported as requiring special class instruction. Arrangements are being made for the transfer of these pupils from the ordinary school to the Special Classes at Methilhill School.

(c) BURNTISLAND — MARKINCH DISTRICTS. — Five children are reported as requiring to be placed in special classes. Owing to the distance from centres, where there are special classes, arrangements cannot at present be made for these.

(d) LOCHGELLY DISTRICT.—Over 40 pupils were specially examined in this area, by the Area Medical Officer and six were recommended for transference. Of these, three already have been transferred to the special classes at Lochgelly East and Auchterderran East Schools. The class at Lochgelly is for the younger pupils (below 11) in the Lochgelly and Glencraig district. Those from Auchterderran Schools are centralised in a special class in Auchterderran East. Arrangements are to be made for the other three.

(e) COWDENBEATH DISTRICT.—In this district 13 children (9 boys and 4 girls) were found who would be the better of their transference to the special classes at Crossgates.

(f) WEST FIFE.—Nine children (5 boys and 4 girls) are reported as being suitable for special classes. As most of these children live in remote districts, arrangements for their transference to special classes are not possible at present. In the case of a few others consideration is being given to their transference to the special classes in Dunfermline and in Culross.

(g) KIRKCALDY BURGH.—One boy at Dysart School was found to be suffering educationally because of mental defect. He was recommended to be transferred to the Special Classes at North School, Kirkcaldy, and this was carried out. Further 6 or 7 children were reported as being educationally backward but these have not yet been examined as to their suitability for transfer.

(h) DUNFERMLINE BURGH.—Three boys and 1 girl were reported to be suffering educationally because of mental defect. The transfer of these cases is receiving attention.

(c) Number and Condition of Children suitable for Institutional Treatment.

(a) CUPAR AND ST. ANDREWS DISTRICTS.—There are 20 children who are suitable for institutional treatment and are not at present attending school. Twelve of these were boys and 8 girls. The greater number of these were uneducable mental defectives. There was one case of severe rickets requiring home treatment and there was also a bad epileptic case. Besides these there are other 4 children (2 boys and 2 girls) who will probably prove to require institutional treatment later. There are three cases who are believed to be uneducable mental defectives wards, but they have not yet been seen.

(b) WEMYSS—LEVEN DISTRICT.—There were no cases requiring institutional treatment brought to the Area Medical Officer's attention.

(c) BURNTISLAND—MARKINCH DISTRICTS.—In this area 9 boys and 3 girls were reported as being suitable cases for institutional treatment. Here also the majority are mentally defective cases.

(d) LOCHGELLY DISTRICT.—Six cases have been reported for institutional treatment. One of these is a case of infantile paralysis, two are deaf, and the others are uneducable mental defectives. Regarding the two deaf children, some difficulty has been experienced in obtaining the consent of the parents for their admission to a proper institution. This has now been removed and applications are being made for admissions to institutions in Edinburgh.

(e) COWDENBEATH DISTRICT.—Nine children were reported as being cases for institution treatment. Three of these were educationally blind and ought to be in a special class. Two were markedly deaf and inquiries are being made as to whether a special class can be arranged for or whether they will have to be transferred to an institution. The other two cases are mentally uneducable.

(f) WEST FIFE.—Six children were reported as suitable for institutions. One of these, a deaf boy, has been placed in an institution for the deaf and the other five (all girls) are mental defective cases. It has been possible to place one of them in an institution. This case was one where asocial habits were outstanding such as stealing and violent in her behaviour to other children.

(g) KIRKCALDY BURGH.—Nothing to report.

(h) DUNFERMLINE BURGH.—One girl, at present in a special class, has been reported as a case suitable for institutional treatment. This case will be considered next session provided accommodation can be found.

(d) Number of Children who are suffering in their Education because of lack of (i) Nutrition and (ii) Clothing.

(a) ST. ANDREWS DISTRICT.—(i) There were 16 children in whom the state of nourishment was such that they could not take full advantage of the education provided. "Two of these were suffering from post influenzal debility of long duration. Six were classified as pre-tubercular cases and 8 were suffering from malnutrition in whom no signs of physical disease were detected." The former were referred to the family doctors for treatment. All the latter were dealt with by their parents being approached by the School Management Committee and by the Inspector of the Royal Scottish Society for the Prevention of Cruelty to Children. A considerable improvement took place in the state of nutrition of these children. The remaining 3 children were supplied with cod liver oil either by their parents or by private bodies.

(ii) Twelve children were found to be neglected to such a degree as to interfere with their education. Intimation from the School Management Committee and visits by the Inspector of the R.S.S.P.C.C. effected a great improvement in one family of five. Visits by the nurse, the Inspector of the R.S.S.P.C.C., or by the A.M.O. were, for the most part, followed by beneficial results in other cases. One family of two was supplied with boots by the School Management Committee.

CUPAR DISTRICT.—(i) Forty-seven children (29 boys and 18 girls) were found to be suffering in their education because of malnutrition. Thirteen boys and girls were supplied with special nourishment at school by the School Management Committee. In 10 cases cod liver oil was supplied by the District Nurse. In 20 cases the parents were approached and asked to supply extra nourishment. Definite improvement resulted in the greater number of cases. On the whole the nutrition in the area is good.

(ii) Only two children were found to be suffering by reason of defective footgear. This was remedied after a visit by the nurse.

(b) WEMYSS—LEVEN DISTRICT.—(i) During the session some 80 children were found to be showing evidence of lack of nutrition and to these special nourishment was supplied through the School Management Committee. Most of these children were referred to the A.M.O. by the teachers because of lassitude and inattention. On questioning the children the impression was that they suffered not so much from lack of food but from a diet deficient in the essential vitamins, and marked improvement resulted. In the case of 2 families (five children) feeding was given by the S.M.C. at School. Besides the foregoing, some 200 children in Methilhill and a lesser number in Denbeath, Buckhaven, Methil and Leven Schools were certified by the teachers as suffering from lack of feeding during the coal strike in December, 1930, and these were fed in the schools.

(ii) No children were found to be suffering in their education from lack of clothing.

(c) BURNTISLAND—MARKINCH DISTRICTS.—Sixteen boys and 8 girls were reported to the School Management Committee as requiring extra nourishment and this was supplied mainly in the form of a milk ration daily. The A.M.O. reports that all the children were much improved in their general condition. They became more active in movement at games and in the playground and their colour improved. The teachers also remarked on this improvement. Besides the foregoing 9 boys and 6 girls were given extra nourishment through the School Management Committee in the form of a special cod liver oil preparation. In most of the cases a month's treatment was sufficient to bring about an improvement and it was unnecessary to continue treatment further.

(ii) Three boys and 2 girls were found to be suffering educationally because of lack of clothing. These cases belong to two families and were being kept at home owing to lack of clothing. Articles of clothing were recommended and, on being supplied, the children returned to school.

(d) LOCHGELLY DISTRICT.—As a result of school visitation the following was found :—

There were 96 slight cases of malnutrition to whom the addition of extra nourishment in the form of cod liver oil (supplied by the School Management Committee) brought about improvement. There were 37 cases more marked and these were recommended to be supplied with milk (through the S.M.C.). The amount supplied was $\frac{1}{2}$ pint, forenoon and afternoon. Besides these there were 32 more serious cases to whom the giving of three meals a day was recommended. All these cases were fed at the school kitchen. These children were kept under constant supervision. In April in all these cases full feeding was cancelled. Similarly the milk cases and extra nourishment cases were reduced as the winter passed and they all showed definite signs of improved health. These numbers do not include the emergency ration given in December 1930 during the week following the coal strike.

(ii) Out of 911 applications for boots and clothing, 84 cases were brought before the A.M.O.

(e) COWDENBEATH DISTRICT.—Eight boys and 18 girls were found to be suffering from malnutrition. In all these cases the parents were interviewed and instructed in the matter of treatment and where additional nourishment was beyond their means, an adequate supply of milk or cod liver oil preparation was recommended to be supplied by the School Management Committee. All these cases made marked progress. At the end of the session there were none under treatment. These figures do not include the temporary cases caused by industrial disputes.

(ii) Two girls and 1 boy, all of one family, were found to be insufficiently clad. The matter was reported to the Inspector of the R.S.S.P.C.C. and the condition was rectified. These children were re-examined and kept under observation at frequent intervals.

(f) WEST FIFE.—(i) Seventeen boys and 20 girls were found to be suffering from malnutrition. Two families were supplied with meals at school by the School Management Committee. Three children were recommended to be supplied with milk. In the case of 15 boys and 19 girls a cod liver oil preparation was recommended to be given at school. In all these cases there has been definite improvement.

(g) KIRKCALDY BURGH.—(i) Seventeen children (10 boys and 7 girls) were examined because of application having been received from

their parents for extra nourishment or clothing. Four boys and 1 girl applied for the supply of meals, but in all these cases the children were found, on examination, to be well nourished and not suffering educationally because of lack of nourishment.

(ii) The parents of 9 boys and 7 girls applied for boots and clothing. Boots were recommended in the case of 7 boys and 1 girl, and clothing for 1 boy and 4 girls. The other applications were refused on the ground that the children were not unable, by reason of lack of boots and clothing, to take advantage of the education provided for them.

No cases were found to be suffering in their education because of parental neglect.

(h) DUNFERMLINE BURGH.—There is nothing to report with regard to lack of nourishment and clothing or neglect by parents.

At the Medical Inspections certain cases had to be referred for special examination, namely, eye, ear, nose and throat conditions. Besides these cases there were also those with crippling ailments. Of the latter most of the cases were referred to Edinburgh to the surgeons interested in these cases.

(e) Total Number of Children whose visual acuity was inspected (Routine and non-Routine Cases) and the number found with Defective Vision.

(a) ST. ANDREWS DISTRICT.—The eye-sight of 853 children (441 boys and 412 girls) was tested during routine and non-routine inspections. Seventy-six (35 boys and 41 girls) were referred for further examination to the eye Clinics at St. Andrews and Dundee. In addition, 2 boys and 5 girls were sent to Dr. Angus MacGillivray, Dundee, for specialist advice. Dr. Fyfe further reports “a few children were found not to have been provided with glasses after prescriptions had been given. The parents of these children were notified of the undue delay which had occurred. Most of them took immediate steps to provide glasses as ordered and there is every reason to believe that the other will comply with requirements.” None of the children who had not received glasses at the end of the school year were suffering in their education.

CUPAR DISTRICT.—One thousand nine hundred and thirteen children (901 boys and 1,012 girls) were examined at routine and non-routine inspections. Of these it was found necessary to carry out a further examination at the eye clinics in Cupar, Newburgh, Ladybank, Anstruther and Dundee of 257 children (108 boys and 149 girls). Of these latter, 13 boys and 18 girls were referred to the eye specialist. Dr. MacLeod reports further that in six cases (3 boys and 3 girls), the parents refused, after written intimation followed by a visit of the nurse, to have the children's eyes examined. In only one of these cases was the child's eye-sight markedly defective and this child was eventually brought to the clinic after a warning letter had been sent

and the child (a boy) is now wearing glasses regularly. The remaining 5 cases are being kept under strict observation and if any deterioration of vision is noted or if the school work appears to suffer, steps will be taken to see that eye examination is carried out." In 8 cases where the children were examined there appeared to be undue delay in the provision of spectacles. As in 3 of these cases there was a complaint that the children were suffering in their education because of defective vision, 1 boy and 2 girls were referred to the School Management Committee Clerk for investigation. Two of these were found to be necessitous and glasses were supplied free of cost. In the third case pressure had to be brought to bear upon the parents by the School Management Clerk before glasses were provided. In the remaining 5 of the 8 cases, it is hoped that the nurse will be able to persuade the parents to obtain the necessary glasses.

Dr. MacLeod states that "it is gratifying to record that the parents in the Cupar and Anstruther Districts as a whole are quick to take advantage of the opportunities afforded in the school clinics for eye examination of the children. The attendance at the Clinics is good and this is specially to be commended in view of the long distances many of the children have to travel (especially in the severe weather that East Fife experienced during the past winter)."

The above remarks also apply to St. Andrews where the proportion of absenteeism is gratifyingly low.

It was impossible to carry out any colour vision testing during the past winter.

(b) WEMYSS—LEVEN DISTRICT.—One thousand nine hundred and five children had their eye-sight tested. At the routine examinations 826 boys and 914 girls were seen and non-routine cases (82 boys and 92 girls) were brought forward by parents and teachers as well as the medical staff for eye examination. Two hundred and nineteen cases were referred for further examination at an eye clinic. Of this number 12 did not attend and 5 of these, after repeated visits by the school nurse, promised to attend, but there has been no success with the remainder. Fifty-six children were referred to the eye specialist for examination but 9 failed to attend. They will be given another opportunity on a future occasion.

(c) MARKINCH—BURNTISLAND DISTRICT.—The total number of children inspected as routine and non-routine cases was 1,207 (616 boys and 591 girls). Of these 155 were referred to the eye clinic and there 61 boys and 65 girls were examined. Where the parents refused examination, the nurse called at the house or a note was sent through the child to the parent. In the case of parents who refused examination and where no interference with education could be made on consultation with the teacher, the staff tried to persuade the parents to seek other advice with the result that some of the parents went to an

optician and got glasses and a few went to Edinburgh Royal Infirmary. There are two outstanding cases where the children have been asked repeatedly to attend the eye clinic but have failed to do so. These children are again being notified after the school holidays, and, if necessary, a further report will be made. Dr. Williams further reports "there are no cases of eye-sight sufficiently bad as to interfere with education and no parents have neglected the condition other than these mentioned above ; at least they have not been brought to my notice."

(*d*) LOCHGELLY DISTRICT.—The eye-sight of 1,790 children was tested and of these 184 were found defective and were asked to go to the eye clinic. One hundred and thirty-four were examined for errors of refraction and 32 were submitted for examination by the eye specialist. Eleven parents refused to have their children's eyes examined at the clinic, the reason being that they preferred their own oculist. Two cases, however, gave no reason. The parents were interviewed without success. Further steps are to be taken next school session.

Colour vision tests (Nagel's modification) were carried out in the advanced division classes, but only three were found defective and none of these seriously.

(*e*) COWDENBEATH DISTRICT.—At the routine and non-routine examinations about 1,873 boys and girls were tested for their visual acuity. Of these 241 were specially examined at the eye clinics. There were 23 cases seen by the eye specialist. None of the cases seen were certified as being educationally blind.

(*f*) WEST FIFE DISTRICT.—The eye-sight of 1,324 children was tested and of these 63 boys and 121 girls were referred to the eye clinic for examination. Nine boys and 21 girls were referred to the eye specialist. There were no refusals in the case of children with very defective vision. There was one refusal, a child with slightly defective vision, but here an interview with the parents was helpful in having the case brought before the specialist. Dr. Macdonald reports that there were a few cases with apparently normal vision (6/6 with test types), where complaints of headaches or sore eyes after reading were made and these did not turn up for examination. There is also one case of a boy with defective vision for whom glasses were prescribed but these have not yet been supplied. Unfortunately time did not permit investigation of the reason fully, meantime.

(*g*) KIRKCALDY BURGH.—The total number of children whose eye-sight was inspected was 1,141 routine cases and 204 non-routine cases. Of the latter 54 boys and 42 girls were referred to the eye clinic for further examination. Of the routine cases 73 boys and 65 girls were referred to the eye clinic for further examination. Dr. McIntosh reports that "the parents of 3 boys and 9 girls refused, after repeated

intimations to have the children examined. In all these cases the school nurse has visited the homes of the children in an endeavour to persuade the parents to have them examined at the clinic. It is too early yet to say what the result of a personal appeal will be."

Twenty-one cases were referred to the eye specialist for further examination and report.

(h) DUNFERMLINE BURGHS.—The number of children whose eye-sight was inspected was 2,002. Of these 80 were referred to the eye clinic for examination. It was found necessary to bring 13 cases before the eye specialist for special examination and advice. There were 5 refusals. These cases will be again notified next school session.

In Tables II. and III. the number of cases examined by the Area Medical Officers and the Specialist are given and their findings tabulated.

TABLE II.—EYE CASES EXAMINED BY SCHOOL MEDICAL OFFICER.

	Buckhaven, Leven.	St. Andrews, Anstruther.	Cupar, Ladybank, Newburgh	Kirkcaldy, Markinch, Bur'island	Beath.	Dunfermline.	Inverkeithing and West Fife.	Lochgelly, Auchterderran.	Totals.
Cliniques held ..	31	14	15	30	28	36	20	13	187
No. of cases examined ..	219	137	125	230	241	183	141	169	1,445
No. of those re-examined ..	7	52	33	67	86	25	26	143	339
Hypermetropia ..	78	50	39	92	71	101	91	42	564
Myopia ..	17	5	6	32	23	27	12	16	138
Hyper Astigmatism	69	35	34	75	90	30	29	21	383
Myopic "	15	14	12	12	31	10	4	18	116
Mixed "	13	7	6	9	9	2	0	12	58
Anisometropia ..	8	24	26	4	12	4	..	2	80
Both Eyes Emmetropic ..	9	1	2	..	5	3	4	4	28
Spasm of accommodation	1	2	3	..	1	2	2	0	11
Irregular Refraction	1	..	..	..	..	2	1	15	19
No. with Squints	36	35	34	73	38	21	37	33	307
Nystagmus ..	2	..	1	2	3	3	..	3	14
Corneal Ulcers ..	1	..	..	..	1	..	1	3	6
Corneal Nebulae	2	2	4	3	11	4	2	6	34
Bleph and Conj. ..	14	4	3	9	11	11	12	4	68
Other Conditions	1	6	2	6	5	2	3	1	26

TABLE III.—Ophthalmic Examination of Pupils in School (Number under the Eye)

TABLE III.—OPHTHALMIC EXAMINATION OF FIFESHIRE SCHOOL CHILDREN UNDER THE FIFE COUNTY COUNCIL BY SPECIALIST.

	Buckhaven, Leven.	Kirkcaldy, Markinch.	Beath.	Dunfermline.	Inverkeithing and W. Fife.	Lochgelly.	Cupar.	Dundee.	Totals.
No. of Clinics ..	2	3	1	2	2	1	2	..	13
No. of Cases Examined ..	47	53	23	30	20	32	36	55	296
No. of Cases Re-examined ..	..	5	..	3	1	32	8	10	59
Hypermetropia ..	7	13	..	3	6	10	8	6	53
Myopia ..	10	13	1	5	3	6	4	2	44
Hyp. Astigmatism ..	7	16	4	5	..	3	8	21	64
Myopic ..	12	5	15	9	6	1	5	12	65
Mixed ..	6	3	2	1	..	3	4	2	21
Anisometropia ..	2	..	1	1	3	2	3	9	21
Both Eyes Ametropic ..	1	1	..	3	1	..	..	1	7
Spasm of Accommodation ..	..	1	..	2	..	..	2	6	11
Irregular Refraction ..	1	..	..	2	1	5	..	..	9
Squints ..	9	9	..	3	2	6	6	6	41
Nystagmus ..	2	1	..	3	1	2	2	..	11
Corneal Ulcers ..	..	..	1	..	1	1	..	1	4
Corneal Nebulae ..	1	4	..	3	1	3	2	4	18
Bleph. and Conjunct ..	2	1	..	1	1	..	3	2	10
Educationally Blind ..	..	3	..	5	2	..	2	..	2
Other Conditions ..	2	..	..	..	..	..	5	..	17
<i>e.g.</i>—	..	..	..	..	..	..	1	..	1
1. Albino ..	..	..	..	..	..	..	..	..	..
2. Chorioido-Retinitis ..	..	..	..	..	..	..	1	..	1
3. Optic Atrophy ..	..	..	..	..	..	..	1	..	1
4. Coloboma ..	..	..	..	..	..	..	1	..	1
5. Microphthalmos ..	..	..	..	..	..	..	1	..	1

(f) Number of Cases of Children in whom defects of the Ear, Nose or Throat were found.

(a) ST. ANDREWS DISTRICT.—The number of children showing severe disorders of the ear, nose and throat was not sufficiently high to warrant the attendance of a specialist. Of the 36 boys and 32 girls in whom pathological processes were observed, 19 boys and 13 girls were referred to their family doctor.

CUPAR DISTRICT.—No specialist clinics were held as there was not a sufficient number of cases to warrant the holding of a clinic.

(b) WEMYSS—LEVEN DISTRICT.—Twenty-seven cases were referred to the Ear, Nose and Throat Specialist. Of these 16 were recommended to have an operation performed and the family doctors concerned were duly notified. Dr. Chisholm reports, "in this area only a small percentage of cases recommended for operation by the specialist had this carried out. As the majority of the children examined by the specialist at his last visit have not yet been re-examined, I cannot give any figures as to those who have had an operation carried out. The majority of the operations recommended are tonsilectomy and removal of adenoids." All the 27 cases attended the clinic before and after the specialist consultation and a few have improved with the treatment recommended.

(c) MARKINCH—BURNTISLAND DISTRICTS.—Fourteen children (7 boys and 7 girls) were referred to the Ear, Nose and Throat Specialist at the clinic held in Markinch. The family doctors were communicated with concerning 6 boys and 7 girls. Three of the boys and 5 of the girls were advised to have their tonsils and adenoids removed, along with conservative treatment for discharging ears. Two boys and 1 girl were advised to have a radical mastoid operation carried out. It was necessary, in the case of one girl, in order to carry out a proper examination of her nose, to have a general anaesthetic. At the end of the school year none of the children had received operative attention.

In the Markinch and Burntisland areas, there are some 40 cases of otorrhoea. Of these only 6 or 7 have cleared up under treatment. Three of these were treated at Markinch clinic and one at Burntisland clinic.

(d) LOCHGELLY DISTRICT.—Dr. Nisbet reports, "these still occupy a prominent place in the ailments of the school child in this area, especially among the middle groups of children. It would appear to be considerably less among the entrant infants. Whether this is due to the effects of other public services on behalf of infant and pre-school life or to a wiser and better way of feeding, one cannot say with certainty. The change is very welcome." Sixteen cases were referred to the specialist and in 7 cases the family doctors concerned were notified of his diagnosis and treatment. The other 9 were to continue conservative treatment at the school clinic. At the end of June 11 cases had improved, 2 are apparently cured and 3 are no better. These 3 are very obstinate cases of chronic otitis media.

(e) COWDENBEATH DISTRICT.—Six boys and 17 girls were referred to the specialist. In every case the specialist's report was at once communicated to the family doctor and the operative treatment recommended was stated, arrangements for that being left in his hands. In some cases the operative treatment has already been carried out while others are to be done during the summer holidays. All the cases but one who did not require an operation have been attending the clinic regularly for conservative treatment. All of these cases are still under observation and all of them have made progress.

(f) WEST FIFE.—Five boys and 8 girls were referred to the ear specialist. Of these 7 were reported to the family doctors for further treatment. Seven of the children are attending the school clinic for conservative treatment. As the specialist's visit was late in the summer, it was impossible to state what operative treatment had been carried out.

(g) KIRKCALDY BURGH.—Up till the end of the summer, the number of cases requiring to see the Ear, Nose and Throat Specialist was small and they have been left over meanwhile. The number referred to the family doctors by the School Medical Officer for operations or for treatment was 55 boys and 33 girls. Thirteen boys and 14 girls were treated at the school clinic and the results of most cases were very satisfactory. Most of the otorrhoea case treatment is slow and difficult.

(h) DUNFERMLINE BURGH.—Nothing to report at present.

(g)—Number of Children with Crippling Ailments.

TABLE IV.—CRIPPLING AILMENTS.

District	Severe Rickets	Tuberculosis—Lesions of Bones and Joints	Tuberculosis—Lesions of Spine	Poliomyelitis Anterior Acuta of Crippling Degree	Congenital Deformities of Crippling Degree	Other Crippling Ailments	Totals
Kirkcaldy Burgh ..	2	..	..	2	..	2	6
Dunfermline Burgh ..	4	3	1	2	1	2	13
St. Andrews District ..	..	..	..	1	2	3	6
Cupar-Anstruther District	2	2	1	1	4	7	17
Kirkcaldy Landward District ..	..	..	..	4	4	..	8
Lochgelly, etc., District ..	6	8	3	2	1	2	22
Dunfermline Landward District ..	1	1	..	..	4	1	7
Beath-Kelty District ..	..	..	..	2	..	1	3
Buckhaven-Leven District	1	2	1	12	3	8	27
Totals ..	16	16	6	26	19	26	109

The figures in the above table (IV.) indicate the number of cases seen by the Medical staff. Of these the number of new cases are as follows—Kirkcaldy Burgh 6; Dunfermline Landward District 1; Kirkcaldy Landward District 1; Cupar-Anstruther District 15; and St. Andrews District 2.

V. SPECIAL SCHOOLS AND CLASSES.

There is nothing to report on the special classes. The building of the special school which was to have been set up near Halbeath and which was approved by the Education Department has now been postponed indefinitely.

It is regrettable that the centralisation of the special classes in the Dunfermline and Cowdenbeath districts will not take place as there is no doubt as to the increased educational efficiency it would have meant.

TABLE V.—(a) MENTALLY AND PHYSICALLY DEFECTIVE CHILDREN IN SPECIAL CLASSES.

Class.	Number on Roll Sept. 1931.	Number Admitted.	Number Discharged.	Number on Roll July 1931.
Cowdenbeath, etc., District :				
(a) Crossgates P.S. — 4 Special Classes ..	44	14	10	48
(b) Lochgelly East P.S. — 1 Class	18	1	3	16
Kirkcaldy District :—				
(a) North School — 3 Special Classes ..	46	4	4	46
(b) Myopic Class — East School	10	1	1	10
(c) Auchterderran East P.S. — 1 Class	14	5	3	16
Wemyss and Leven District :				
(a) Methilhill P.S. — 3 Special Classes ..	62	12	8	66
Dunfermline District :—				
(a) Pittencrieff P.S. — 2 Special Classes ..	25	10	7	28
(b) Park Road, Rosyth — 1 Special Class ..	14	..	3	11
Markinch District :—				
(a) Leslie East P.S. — 1 Class	10	..	2	8
Torryburn District :—				
(a) Culross P.S.—1 Class	16	4	4	16
Totals	259	51	45	265

(b) MENTALLY AND PHYSICALLY DEFECTIVE CHILDREN
IN INSTITUTIONS AND HOMES.

Institutions.	Number on Roll Sept. 1930.	Number Admitted.	Number Discharged.	Number on Roll July 1931.
Baldovan (M.D.)	6	3	3	6
Larbert (M.D.)	4	..	..	4
Rosewell Institution, Midlothian (M.D.), (R.C.) ..	2	..	1	1
Waverley Park Home, Kirkintilloch (M.D.) ..	1	..	1	..
Royal Blind Asylum, Edinburgh	12	..	1	11
Donaldson's Hospital, Edinburgh (Deaf)	19	..	4	15
Edinburgh Institution (Deaf)	7	1	2	6
Dundee Institution (Deaf)	4	..	..	4
Dundee Institution (Blind)	6	..	..	6
St. Vincent School, Glasgow (Blind and Deaf) ..	1	..	..	1
East Park Home for Infirm Children, Glasgow ..	2	..	..	2
Lauder Road Home, Edinburgh (Cripples) ..	1	1	..	2
Under Blind Persons' Act, 1920—				
Royal Blind Asylum-Edinburgh	11	2	3	10
Dundee Institution for Blind	1	..	1	..
Royal Glasgow Asylum (Blind)	1	..	1	..
Totals	78	7	17	68

Last year a circular-letter was sent out to the teachers of physical education in which a number of questions were put to the staff regarding their work in primary, post primary and secondary schools. A reading of the Reports submitted by the experts as well as information received from Head Teachers indicated prominently the urgent need for the following improvements :—

(1) The formation of a comprehensive scheme of Physical Education on a County basis.

(2) The development of organised games in a systematic manner and duly related to the scheme of Physical Education.

(3) The further development of Health Education including reference to personal hygiene in its relation to physical education.

(4) The proper supervision of Instructors' work and the evolving of some means of seeing that the scheme is properly carried into effect, and

(5) The fair allocation of staff between schools and between districts in accordance with changing needs.

Following upon the above Report, the Education Committee after long and careful deliberations, decided to appoint a Supervisor of Physical Education. Mr. A. W. George, Supervisor of Physical Education in the City of Aberdeen, who was appointed has already had extensive experience of the work which should be of the utmost help in re-organising the Scheme of Physical Education in the County of Fife.

The figures of the number of children taking spray baths are only approximate especially those relating to Kirkcaldy High School where it is impossible to keep a complete record of all the children availing themselves of the sprays.

(vi)—**Arrangements for Physical Education and Personal Hygiene of Children.**

TABLE VI.—SPRAY BATHS IN SCHOOLS.

(a) NUMBER OF ATTENDANCES.

School.	Term I.	Term II.	Term III.	Total.	1930.
King's Road P.S., Rosyth ..	..	..	..	..	..
Park Road P.S., Rosyth ..	122	22	35	179	412
Crossgates P.S., Ordinary Classes	209	174	201	584	769
Crossgates P.S., Special Classes	207	90	154	451	498
Kirkcaldy North School (Special Classes) ..	..	..	..	110	181
Methilhill P.S. (Special Classes)	105	95	113	313	501
Methilhill P.S. (Ordinary Classes)	205	90	236	531	1,072
Moss-side P.S.	182	..	..	182	..
Totals	1,030	471	739	2,340	3,433

Kirkcaldy High School—2000 Attendances.

(b) NUMBER OF CHILDREN.

King's Road P.S., Rosyth ..	..	..	..	..
Park Road P.S., Rosyth ..	..	..	..	22
Crossgates P.S. (Special Classes), ..	..	..	..	82
Crossgates P.S. (Ordinary Classes) ..	..	..	..	143
Kirkcaldy North School (Special Classes) ..	..	..	..	14
Methilhill P.S. (Special Classes) ..	..	..	..	20
Methilhill P.S. (Ordinary Classes) ..	..	..	..	33
Moss-side P.S. .. ..	..	..	..	38
Totals .. ..	..	..	..	352

VII. MOTHERCRAFT CLASSES.

Towards the end of the session an experimental class was started at Moss-side School, Cowdenbeath. It was placed under the charge of Nurse A. M. O. Wilson and had for its aim the instruction of girls in their last year in methods of handling babies, sick persons, etc. Whilst a certain amount of theory was given, the main object was to give these girls as much practical instruction in mothercraft as possible within the limits of the time. For these classes to be a success, the number of girls must be limited otherwise it is impossible to give all the girls an equal opportunity to participate in the practical instruction.

VIII. ARRANGEMENTS FOR FEEDING SCHOOL CHILDREN.

**Expenditure under Head "Meals and Clothing" (Necessitous Children),
year ended 15th May, 1931.**

Apparatus,	£7 15 0
Meals,	371 7 8½
Boots and Clothing,	3251 11 8
Expenditure on Meals—Non-Necessitous,	1020 6 9
Total,	£4651 1 1½

IX. ARRANGEMENTS FOR MEDICAL TREATMENT.

(a) Minor Ailments.

(a) ST. ANDREWS AND CUPAR DISTRICTS.—Dr. Matthew Fyfe reports: "Children in St. Andrews Burgh attend at the Mother and Child Welfare Centre (66 North Street). Otherwise nothing in the nature of a General Clinic exists in the district. Treatment, when necessary, is carried out by the nurses at the homes of the children and, in some few cases, at their own residences, where children are directed to call." Both Drs. MacLeod and Fyfe are of opinion that the number of children requiring treatment do not warrant the introduction of general clinics. At Tayport, however, "there are several families who are in need of more frequent attention than the nurse is able to give since she resides at a distance and an opportunity might be taken at a later date of arranging for the nurse to take up residence in the Burgh."

(b) WEMYSS—LEVEN DISTRICT.—In this district there are the following school clinics:—Buckhaven Primary School; Parkhill School, Leven; Methilhill School and East Wemyss School. Dr. Chisholm reports: "the children in Aberhill and Methil Schools are too far away from the nearest clinic which is situated in Parkhill School, Leven. The parents object to the distance the children have to walk and I feel it would be to the benefit of the children if a clinic could be organized for these closely situated schools."

(c) BURNTISLAND—MARKINCH DISTRICT.—There are two school clinics, one at Burntisland H.G. School and the other at Markinch School. At both only minor ailments are treated. In the case of Burntisland, the room used as a clinic could be divided by the introduction of a light partition and so provide a room where the Medical Officer could see cases in private.

(d) COWDENBEATH DISTRICT.—General clinics are conducted thrice weekly at Cowdenbeath R.C. High School and at Kelty Public School. The clinic formerly conducted at Moss-side School has now been discontinued and all the cases are treated at the R.C. School.

“ Apart from trivial injuries, the majority of the cases are chronic otorrhoea. Chronic blepharitis is also a cause of prolonged attendance and next in chronicity come ringworm (scalp) and other skin conditions.”

(e) WEST FIFE.—In this district there are the following clinics :— Inverkeithing, Crossgates, Torryburn and Blairhall. Dr. Macdonald reports that there have been a good many impetigo cases at Steelend which would have benefited from clinic treatment if such had been available. There is nothing special to report regarding the cases treated at the clinics.

In Appendix II. the clinic cases and attendances made at the various school clinics are given. In the following table (VII.) the total number of cases treated and the total number of attendances made in the clinics in the County of Fife are given. These figures do not include those for the two large burghs.

TABLE VII.—TOTAL CLINIC TREATMENTS (FIFE COUNTY).

Condition.	Total.	
	Cases.	Attendances.
Clinics Visited	1,733	483
Head Vermin	16	71
Body Vermin .. .. .	..	..
Ringworm (Scalp)	19	655
Scabies	30	105
Uncleanliness or Neglect .. .. .	..	..
Impetigo Contagiosa	1,312	8,235
Other Skin Conditions	286	2,951
Otorrhoea	407	10,783
Eye Disease (Ext.)	668	8,997
Ear Cases	274	802
Nose and Throat Cases	69	355
Other Cases	5,641	20,336
Accidents	187	302
Advisory Cases	419	199
Totals	9,328	53,791

(b) Dental Treatment.

The re-organisation of the medical staff due to the medical inspection being taken over by the Public Health Committee of the Fife County Council did not affect the dental staff until well on in the second half of the school session. As a result of Kirkcaldy Burgh taking over the medical inspection and treatment, dental treatment was also taken over. The School Dentist, Miss Young, L.D.S., applied for, and was appointed to Kirkcaldy Burgh dental appointment. The consequent re-organisation in the County affected the total number of children treated, so that a reduction in numbers treated resulted. Further, the resignation of one of the Dental attendants, Miss Davidson, and her place not being filled, very definitely handicapped the dentist in the north-east of Fife and so considerably increased the number of cases untreated. It must again be emphasised that the help an attendant gives to the dentist allows the latter to devote a greater amount of the treatment time to actual dental work and so incidentally makes for greater economy. From past experience in this County as well as from information obtained from other centres, it has been found that the addition of a dental attendant increases the actual dental work carried out by 50 per cent.

During the school session 13,410 children were inspected. Of these 10,761 (or 80 per cent.) were referred to their parents because of defective teeth which required treatment of some sort. In 5,088 (or 47·6 per cent.) of the cases referred to the parents, the latter indicated that they wished the treatment to be carried out by the school dental staff. The remainder said they were going to send their children to their "own dentist." This generally means that nothing will be done and whenever re-inspections have been carried out, and the cases followed up by the school nurse, a large proportion of the parents then indicated their desire for school dental treatment. Unfortunately time does not allow us to re-inspect all the cases. In fact, at the end of the session the dental staff had over a thousand (1,290) cases where dental treatment had been sanctioned by the parents but for whom the staff had been unable to make appointments.

It is to be regretted that time will not permit of educational propaganda being carried out by the staff. In order to bring home the need for early treatment, more time should be available at the clinics so that the dentists can interview a larger number of the parents and point out to them why conservative treatment is necessary at an early stage. Delay usually means the extraction of necessary teeth as well as suffering and ill-health to the children. In this connection it should be mentioned how important a factor the attitude of the head teacher is to our dental scheme. One of the dentists in reporting on the high percentage (65 or more) in some schools of acceptances for dental treatment states "it is significant that in each of these schools the headmaster is definitely interested in dental work."

In Table VIII. are given the figures of the number of children treated, the attendances made, as well as the total number of extractions, fillings and dressings, for each clinic in the County of Fife and the Burgh of Kirkcaldy. The figures relating to the work done at the Dunfermline Clinic is given in a separate report. It will be noticed that there are a very large number of casual cases. Apart from the fact that these cases come only for urgent extraction treatment, because of advanced dental caries, these cases also tend to seriously upset the time-table of the staff. It has even happened that cases have had to be turned away as it was impossible for the staff to overtake all the work.

TABLE VIII.—DENTAL CLINICS.

	Casuals	Appoint-ments	Attend-ances	Extract-ions	Dress-ings, etc.	Fillings	Total
Kirkcaldy							
Burgh ..	1,413	1,158	2,765	4,646	968	504	6,118
Buckhaven ..	192	632	1,085	2,230	222	448	2,900
Leven ..	127	448	756	1,003	164	367	1,534
East Wemyss	30	43	76	104	21	35	160
Methilhill ..	62	143	243	413	47	91	551
Elie ..	..	11	27	25	5	11	41
Burntisland	240	305	615	834	226	209	1,269
Lochgelly ..	291	383	624	1,310	135	202	1,647
Crosshill ..	174	348	691	1,031	114	313	1,458
Auchterderran	163	380	816	1,090	181	382	1,653
Inverkeithing	96	266	542	511	167	216	894
Markinch ..	196	193	404	504	364	348	1,216
Beath R.C. ..	130	327	697	1,209	405	230	1,844
Kelty ..	150	140	340	528	197	113	838
Crossgates ..	88	176	333	373	268	186	827
Torryburn ..	77	284	516	575	291	210	1,076
Blairhall ..	36	142	213	240	94	76	410
Tulliallan ..	58	84	136	198	84	36	318
St. Andrews	76	258	437	565	139	213	917
Anstruther ..	50	121	231	247	111	134	492
Cupar ..	28	171	317	359	88	149	596
Ladybank ..	12	44	98	137	39	35	211
Newburgh ..	30	81	204	341	48	78	467
Tayport ..	51	131	231	306	59	115	480
Totals ..	3,820	6,269	12,397	18,779	4,437	4,701	27,917
Country Sch'ls	66	515	984	1,540	344	513	2,407
Totals ..	3,886	6,784	13,381	20,319	4,781	5,214	30,324

At the school clinics pre-school cases are now also treated since the re-organisation. The number brought forward was not great (35) but with more enlightenment on the subject, greater numbers will be expected.

After school hours a number of necessitous adult cases was treated. These were cases referred to the dentist by the Public Assistance Officer, or the medical staff.

TABLE IX.—DETAILED ANALYSIS OF TREATMENT IN COUNTY DISTRICTS.

	Temporary.			Permanent.			Total.
No. of Clinic Visits, 911							
No. of Extract'ns (no anaesthesia)	699	1,237	37	..	14	8	1,965
(Local ..)	3,783	6,020	180	51	1,070	568	11,672
(General ..)	813	594	10	21	297	172	1,907
No. of Dressings	176	219	3	23	846	348	1,615
No. of Ag. N.O.3	543	337	2	32	498	143	1,555
No. of Scalings	6	7	2	10	534	152	711
No. of Fillings—							
(Cement)	408	247	2	38	528	143	1,366
(Amalgam)	473	320	..	134	1,655	427	3,009
(Silicate)	..	2	..	..	151	125	278
No. others	2	22	1	..	7	14	46
Totals	6,873	9,005	237	309	5,600	2,100	24,124

X. ACCIDENTS IN SCHOOLS.

In the County of Fife an arrangement has existed for a number of years whereby some dressings were supplied to headteachers for the first aid cases. All the schools do not require such material although the number ordering first aid material is increasing and it seems that the number of teachers capable of treating emergencies has rapidly increased.

The types of cases requiring treatment are, mainly, bruises and cuts to arms and legs and mostly got at playtime in the playground. The total number of such cases treated during the past year was well over 3,000. More than 50 children were treated for epistaxis (bleeding nose), and a fair number required attention because of splinters in their feet. About 60 pupils and a few teachers required attention because of fainting, and 4 pupils are reported as having had fits. A few years ago a number of requests were made for the supply of rest couches for cases of fainting. A few were supplied to schools where cases were reported as being frequent. In view of these returns it is unnecessary to supply such couches generally throughout the County.

The number of children with major accidents (fractures, bad sprains or cuts) was 51, and 23 required attention by a doctor. Two children were killed by passing vehicles (Balmullo and Forgan).

It is satisfactory to note that there are relatively few accidents in the classrooms. The majority here are burns (laundry or chemical laboratory) or cuts (woodwork room). Only a few are reported from the gymnasias and these are mainly splinters—boys and girls taking the floor in their stocking soles.

1910-1911. District of Glasgow. Summary of school accidents. (continued)

District	Name of School	1904	1914	1910	1911
Glasgow	St. Andrew's	402	54	132	132
	St. Andrew's	300	25		
	St. Andrew's	321	20		
	St. Andrew's	361	14		
	St. Andrew's	412	16		
	St. Andrew's	310	63		
	St. Andrew's	450	112		
	St. Andrew's	354	63		
	St. Andrew's	32	9		
	St. Andrew's	286	22		
Glasgow	St. Andrew's	1013	14		
	St. Andrew's	363	26		
	St. Andrew's	68	14		
	St. Andrew's	303	43		
	St. Andrew's	244	10		
	St. Andrew's	33	20		
	St. Andrew's	1030	116		
	St. Andrew's	1341	111		
	St. Andrew's	330	27		
	St. Andrew's	300	114		
Glasgow	St. Andrew's	45	6		
	St. Andrew's	45	21		
	St. Andrew's	334	21		
	St. Andrew's	20	10		
	St. Andrew's	66	23		
	St. Andrew's	20	23		
	St. Andrew's	20	23		
	St. Andrew's	20	23		
	St. Andrew's	20	23		
	St. Andrew's	20	23		

Summary of school accidents for the District of Glasgow for the year 1910-1911

APPENDIX I.

Summary of School Work done by the District Nurses for the Fife Education Committee, 1930-1931.

District.	Name of Nurse.	School Visits.	Children Inspected & re-inspected.	Home Visits.	Follow-up Cases.	Home Treatment.
Anstruther	M. B. Connachie	59	719	87	92	218
Boarhills	I. Cameron	50	1,382	16	49	75
Broomhall	Margt. Fisher	34	573	27	19	11
Burntisland	M. Forbes	42	1,264	84	100	152
Cameron	I. K. Spence	40	212	9	12	13
Ceres	M. Farquhar	30	259	142	56	60
Crail	M. J. A. Smith	31	815	26	17	11
Culross	J. Barbour	75	1,441	111	118	199
Cults	Marj. Stewart	34	140	101	62	16
Cupar	D. Gerrard	33	33	50	21	25
Dairsie	I. K. Fraser	23	344	19	16	1
Elie	— Dinwoodie	29	309	43	39	6
Falkland	M. S. Willis	18	69	24	14	15
Ladybank	B. M. Cleeton	37	397	68	67	13
Largo	F. A. M. Anderson	45	613	50	26	17
Leuchars	B. Sharpe	44	739	37	37	37
Luthrie	C. A. Moffat	47	28	3	3	20
Monimail	— McDougal	36	334	62	20	42
Newburgh	E. Campbell	31	420	147	82	163
Newport	— Hayes	36	319	97	40	4
North of Fife	M. McPherson	41	415	46	55	29
Pittenweem	E. Stewart	39	112	13	11	32
St. Andrews	M. Campbell	35	361	39	44	22
Strathkinness	J. A. Andrew	36	351	79	55	221
Strathmiglo	A. Calligan	37	200	82	80	99
Tulliallan	C. F. Robertson	42	405	84	32	43
Totals		1,004	12,154	1,546	1,381	1,544

Note.—Under Home Treatments are included only those cases treated by the District Nurse at her or the patients' homes, recognised clinics are not included. Treatments in

APPENDIX II.
CLINIC ATTENDANCES.

Condition.	Torryburn.	Blairhall.	Inverkeithing.	Crossgates.	Beath.	Kelty.	Lochgelly.	Crosshill.	Auchterderran.	Burntisland.	Markinch.	East Wemyss.	Methilhill.	Buckhaven.	Leven.	Kirkcaldy Burgh.	Total
Home Treatments	193	5	4	..	..	..	..	..	105	162	14	..	..	..	..	83	566
Head Vermin	..	..	..	..	6	..	..	..	..	50	..	..	..	..	15	..	71
Body Vermin	..	..	..	..	23	..	..	227	..	278	14	..	..	..	..	..	752
Ringworm (Scalp)	..	6	27	..	..	52	..	..	..	..	..	..	..	28	..	97	167
Scabies	19	26	..	..	15	..	9	31	..	..	..	..	..	..	3	62	..
Uncleanliness or Neglect	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	67
Impetigo Con- tagiosa	430	239	577	501	574	224	872	868	1059	116	68	443	774	853	637	2,888	11,123
Other Skin Con- ditions	604	745	99	529	551	19	118	94	22	6	40	..	..	93	31	290	3,241
Otorrhoea	148	327	649	641	942	660	358	963	596	357	283	881	982	2,254	742	2,425	13,208
Eye Disease (Ext.)	353	208	574	862	1,367	397	566	441	708	315	91	521	576	1,230	688	2,667	11,664
Ear Cases	11	88	45	62	170	90	73	24	37	8	42	..	16	88	68	79	881
Nose and Throat Cases	..	11	106	8	103	84	..	2	1	1	3	..	..	..	36	134	489
Other Cases	555	82	2,966	2,857	1,819	2,928	1,823	1,523	1,805	524	271	655	920	886	722	5,004	25,340
Accidents	48	149	..	11	20	23	..	5	..	..	45	..	..	..	1	26	328
Advisory Cases	..	2	..	24	85	63	..	..	..	..	4	14	..	..	7	30	229
Totals	2,168	1,883	5,043	5,495	5,675	4,540	3,819	4,178	4,228	1,655	861	2,514	3,270	5,432	4,520	13,769	67,560

APPENDIX II.
TREATMENT (MINOR AILMENTS).
CLINIC CASES.

Condition.	Torryburn.	Blairhall	Inverkeithing.	Crossgates	Beath.	Kelty	Lochgelly	Crosshill	Auchterderran.	Burntisland.	Markinch.	East Wemyss.	Methilhill.	Buckhaven.	Leven.	Kirkcaldy Burgh.	Total.
Clinics Visited ..	82	55	110	131	200	148	161	132	138	72	77	74	101	138	114	570	2,303
Head Vermin ..	..	..	..	..	1	..	..	..	..	10	..	..	..	..	5	..	16
Body Vermin ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ringworm (Scalp)	..	1	..	..	3	2	..	5	..	6	1	..	..	1	..	6	25
Scabies ..	6	5	..	..	6	..	4	7	..	..	..	..	1	..	9	..	39
Uncleanliness or Neglect ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3
Impetigo Con- tagiosa ..	58	48	59	57	101	24	131	175	133	33	18	126	137	122	90	486	1,798
Other Skin Con- ditions ..	46	128	3	18	44	2	6	6	5	3	6	..	..	19	..	29	315
Otorrhoea ..	4	20	19	23	41	19	18	46	25	30	11	6	30	73	42	106	513
Eye Diseases (Ext.)	30	37	54	36	87	35	55	53	47	28	21	16	36	79	54	216	884
Ear Cases ..	5	26	1	11	51	15	14	14	14	6	6	..	3	88	20	35	309
Nose and Throat Cases ..	..	7	7	2	33	7	..	1	1	..	1	..	..	..	10	54	123
Other Cases ..	49	25	779	757	244	602	777	603	303	136	76	221	253	650	166	1,160	6,801
Accidents ..	48	42	12	11	20	23	..	5	..	..	11	3	2	9	1	8	195
Advisory ..	..	2	17	24	85	63	..	..	..	..	4	53	43	114	14	26	445
Totals ..	246	341	951	939	716	792	1,005	915	528	252	155	425	505	1,155	403	2,138	11,466

APPENDIX III.

Defects found at Routine and Special Examinations during Session 1930-1931.

	Dunfer- line Burgh.	Kirkcaldy Burgh.	Dunf'line Landward.	Kirkcaldy Landward	North East Fife.	Percent- ages.	Totals.	Non- Routines.
No. of Children	1,755	2,253	2,672	5,172	2,517	..	14,369	6,849
<i>Clothing—</i>								
Dirty	11	3	12	23	25	.51%	74	50
Insufficient	4	..	1	64	11	.55%	80	31
<i>Footgear—</i>								
Defective	57	22	56	206	21	2.4%	362	24
Useless	9	1	21	37	10	.54%	78	13
Barefooted	1	..	1	55	2	.41%	59	..
<i>Cleanliness of Head and Body—</i>								
Head—								
Nits and Dirty	102	250	217	374	293	8.6%	1,236	208
Verminous	29	89	90	141	124	3.2%	473	303
Body—								
Dirty	135	76	195	264	323	6.9%	993	114
Verminous	25	14	61	26	35	1.1%	161	50
<i>Condition of Skin—</i>								
Head—								
Ringworm	1	..	1	3	..	.035%	5	11
Impetigo	13	9	29	95	22	1.16%	168	444
Other Diseases	14	2	3	27	13	.41%	59	86
Body—								
Ringworm	1	..	..	2	2	.035%	5	13
Scabies	..	1	2	19	..	.15%	22	18
Impetigo	8	3	..	6	4	.14%	21	31
Other Diseases	19	12	12	30	38	.77%	111	240

APPENDIX III.—Continued.

	Dunfer- line Burgh.	Kirkcaldy Burgh.	Dunf'line Landward.	Kirkcaldy Landward.	North East Fife.	Percent- ages.	Totals.	Non- Routine.
<i>Nutrition</i> —								
Below Average ..	230	309	180	691	481	13·1°/o	1,891	370
Very bad ..	15	4	12	123	40	1·35°/o	194	54
<i>Teeth</i> —								
1-4 decayed ..	638	1,205	1,321	2,468	1,421	49·08°/o	7,053	138
5 or more decayed ..	359	398	611	855	491	18·8°/o	2,714	82
Oral Sepsis ..	1	67	28	218	151	3·2°/o	465	27
<i>Nose</i> —								
Catarrh ..	110	3	3	74	88	1·2°/o	278	43
Obstruction ..	13	12	58	125	84	2·03°/o	292	125
Other Diseases and Defects ..	113	2	2	4	21	·98°/o	142	30
<i>Tonsils</i> —								
Slightly enlarged ..	341	340	409	761	562	16·7°/o	2,413	259
Markedly enlarged ..	72	77	117	772	290	9·2°/o	1,328	311
<i>Lymphatic Glands</i> —								
<i>Cervical</i> —								
Slightly enlarged ..	962	833	1,530	3,235	2,048	59·9°/o	8,608	232
Markedly enlarged ..	31	6	72	185	212	3·52°/o	506	74
<i>Submaxillary</i> —								
Slightly enlarged ..	464	566	736	1,653	1,795	36·3°/o	5,214	23
Markedly enlarged ..	1	2	..	68	10	·5°/o	81	8
<i>External Eye Disease</i> —								
Blepharitis ..	27	74	42	241	69	3·2°/o	463	335
Conjunctivitis ..	5	3	1	109	4	·84°/o	122	90
Corneal opacities ..	3	4	2	30	..	·27°/o	39	15
Squints and other Defects ..	26	47	35	155	118	2·6°/o	381	168
Other Diseases ..	8	10	8	81	1	·75°/o	108	77

APPENDIX III.—Continued.

	Dunfer- line Burgh.	Kirkcaldy Burgh.	Dun'line Landward.	Kirkcaldy Landward.	North East Fife.	Percent- ages.	Totals.	Non- Routine.
<i>Visual Acuity</i> —								
6/6 with one eye ..	795	1,150	2,274	4,055	2,259	82·01°/°	10,533	967
6/9 to 6/12 do.	709	336	192	440	130	14·07°/°	1,807	389
6/18 do.	111	65	129	128	70	3·9°/°	503	159
Wearing Glasses ..	9	10	19	133	56	1·7°/°	227	
<i>Ears</i> —								
Wax ..	43	181	3	280	74	4·04°/°	581	114
History of Otorrhoea ..	1	9	5	128	24	1·1°/°	167	48
Otorrhoea ..	18	10	18	77	16	·96°/°	139	142
Other Diseases and Defects ..	..	9	1	70	4	·58°/°	84	27
<i>Hearing</i> —								
Slightly deaf ..	6	2	2	54	8	·5°/°	72	27
Markedly deaf ..	1	..	2	10	8	·14°/°	21	31
<i>Speech</i> —								
Defective Articulation	14	24	10	128	45	·84°/°	121	30
History of Stammering	..	1	..	35	4	·27°/°	40	13
Stammering ..	6	1	3	21	9	·27°/°	40	12
<i>Mental Condition</i> —								
Dull or Backward ..	17	13	6	132	52	2·22°/°	320	57
Markedly Backward	5	11	8	80	17	·84°/°	121	77
<i>Heart and Circulation</i> —								
Functional Disease	4	7	26	10	18	·45°/°	65	8
Organic ..	7	20	5	104	20	1·08°/°	156	45
Anaemia ..	5	..	..	12	25	·31°/°	45	4

APPENDIX III.—Continued.

	Dunfer- line Burgh.	Kirkcaldy Burgh.	Dunf'line Landward.	Kirkcaldy Landward.	North East Fife.	Percent- ages.	Totals.	Non- Routine.
<i>Lungs—</i>								
Bronchitis ..	16	10	27	32	114	1.3%	199	41
Phthisis—								
Pre-tuber ..	5	40	4	43	60	1.05%	152	8
Susp. tuber ..	1	..	4	3	31	.27%	39	11
Other Diseases ..	3	..	11	66	4	.58%	84	12
<i>Nervous System—</i>								
Chorea ..	..	1	1	..	1	.02%	3	2
Infantile Paralysis ..	..	2	..	12	2	.11%	16	7
Epilepsy ..	..	..	..	..	1	.0069%	1	4
Other Diseases ..	..	..	5	2	4	.11%	17	16
<i>Tuberculosis (Non-Pul- monary)—</i>								
<i>Rickets—</i>								
Slight ..	8	7	11	93	15	.9%	134	11
Marked ..	1	2	..	10	1	.097%	14	1
<i>Deformities—</i>								
Congenital ..	1	4	1	2	11	.13%	19	18
Acquired ..	7	7	7	2	10	.022%	33	32
<i>Infectious Diseases</i> ..	..	..	..	90	2	.64%	92	20
<i>Contagious Diseases—</i>								
<i>Vaccination</i>	..	..	..	..	1	.0069%	1	1
<i>Entrant Infants—</i>								
Vaccinated ..	300	371	352	810	628	47.6%	2,461	..
Poorly marked ..	43	63	42	171	65	7.4%	384	..
Not vaccinated ..	210	296	517	1,036	261	44.9%	2,320	..
<i>Other Age Groups—</i>								
Vaccinated ..	680	775	786	1,216	563	43.7%	2,020	..
Poorly marked ..	65	156	134	218	532	12.01%	1,105	..
Not vaccinated ..	457	592	841	1,711	468	44.2%	4,069	..

MEMO ON CENTRALISING MENTAL DEFECTIVES FOR EDUCATIONAL PURPOSES.

Table showing increase of Mental Defectives in Special Classes in Kirkcaldy, Buckhaven, Cowdenbeath and West Areas.

	1925-26.	Estimated 1 per cent.	1930.
Kirkcaldy	34	77	46 (11)
Methilhill	32	68	62
Auchterderran .. .. .	..	20	16
Leslie .. .. .	..	20	10
Burntisland .. .. .	..	12	..
	66	197	134
Cowdenbeath	40	108	47
Lochgelly .. .. .	..	..	17
Dunfermline	12	43	29
Rosyth .. .. .	..	20	14
Culross .. .. .	..	25	16
	52	196	123

The above table gives the numbers of pupils who were considered very mentally backward and placed in the various Special Classes in 1925, and the numbers in the classes at the beginning of the School Session, 1930. In the middle column the estimated number on the basis of 1 per cent. of such children is also given for the various districts and from these it will be seen that the total number of pupils in the Special Classes is not up to the 1 per cent. figure. The reason for the smaller number is due in the main to the fact that all the possible children have not been examined because of difficulties of time, and to a lesser extent because of difficulties arising out of admission of pupils to Special Classes. I should point out that the 1 per cent. basis is not by any means the recognised maximum figure as most Authorities hold that the percentage figure should be nearer $1\frac{1}{2}$ per cent.

From this it will be evident that if the pupils in Cowdenbeath and West Fife are to be centralised in one school, as was recommended by the late Education Authority and confirmed by the Education Department, provision would have to be found on this basis for about 200 children, or 8—10 classes.

In view of the opposition to centralisation in one school, I would again draw attention to the report which Mr. McGregor and myself drew up and submitted to the Medical Committee on 15th March, 1926. The fourth paragraph reads as follows :—

“ The advantages of centralising mentally defective children into two central schools would be that owing to the larger numbers grading could be carried out, and that the classes could be larger than if the classes were scattered here and there in the various districts ; also such a centralisation would be advantageous for the vocational and technical training of the pupils. A larger variety of occupations could be arranged for with increased opportunities for the pupils. Another advantage is that the cooking and feeding arrangements being reduced to two schools, they would be more efficiently carried out and less expensive, also any medical treatment that was required could be more effectively carried out. The only disadvantage, however, is the larger amount of travelling required. It must, however, be remembered that even with scattered classes a considerable amount of travelling would be necessary and centralisation would only increase this to a slightly greater extent.”

As here indicated even limited centralising would still require travelling of pupils, and usually where the numbers are small my experience is that either no travelling facilities are provided, with the result that the pupils would not be placed in special classes, or where provided, they are often unsatisfactory. Owing to overcrowding of buses parents complain and it is often because of this more than of the special classes that objections have been raised.

I should also point out that we have now had experience for a number of years of single special classes. To say the least, these are highly unsatisfactory and inefficient in many respects. Old and young pupils are all placed in such a class which is not good for that sense of pride which even low-grade mental defectives may also possess. It is bad for the teacher because of the large number of grades and the difficulty of allocating the necessary variety of work which the different ages require. In this connexion it must be remembered that whilst these classes are taught along Montessori lines these children require far more supervision than normal or bright children of lower chronological age and higher mental age would require when working in groups. Also the teacher loses that mental stimulus which contact with others doing similar work provides.

It is also impossible to refuse to the parents exemption of such pupils after the age of 14, as it is impossible in such classes to provide for special training of these older pupils.

I must, therefore, oppose on educational grounds the tendency to sprinkle the County with Special Classes in this and in that area because of its greater expenditure and very much lower efficiency.

There is no doubt when we study results in communities where this side of the work has been more fully developed, and where greater range of training opportunities is provided that the pupils, even very low-grade cases, have a better opportunity of earning a livelihood and living amongst their fellowmen, and even although such low-grade cases may require definite supervision. From this standpoint a big centralised school has the advantage of keeping in touch with the pupils and arranging for the provision of occupation Centres where pupils are not able to find employment. Proper development along these lines means greater happiness for those pupils and less cost to the State in the long run.

In the foregoing notes I have dealt exclusively with the mentally backward pupil. For the physically defective pupils no arrangements have been made so far. Here also on a conservative estimate of one per cent., there would be about 200 in the Western Area and these would require seven to eight classrooms.

THE TREATMENT OF SCHOOL CHILDREN

IS

DUNFERMLINE CLINICS

FOR YEAR ENDED 31ST JULY 1931.

BY

ALISTER MACKENZIE,

M.A., M.D., D.P.H., F.R.S.E.

Chief Medical Officer of the Carnegie Dunfermline Trust.

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In the foregoing notes I have dealt exclusively with the mentally backward pupils. For the physically defective pupils no arrangements have been made so far. Here also on a conservative estimate of one per cent, there would be about 200 in the Western Area and these would require seven to eight classrooms. It would be a very large amount, never, be remembered that even with scattered classes a considerable amount of travelling would be necessary and centralization would only increase this to a slightly greater extent.

As here indicated even limited centralization would still require travelling of pupils, and usually where the numbers are small the experience is that either no travelling facilities are provided, or as a result that the pupils would not be placed in special classes, or if provided, they are often unsatisfactory. Owing to overcrowding of buses parents complain and it is often because of this more than the special classes that objections have been raised.

I should also point out that we have now had experience for a number of years of single special classes. To say the least, these are very unsatisfactory in many respects. Old and young pupils are all placed in such a class which is not good for that older pupils which even low-grade mental defectives may also possess is bad for the teacher because of the large number of grades which the difficulty of allocating the necessary variety of work which the different ages require. In this connexion it must be remembered that in these classes are taught along Montessori lines these children require far more supervision than normal or bright children of lower chronological age and higher mental age would require when working in groups. Also the teacher loses that mental stimulus which comes with others doing similar work provides.

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Carnegie Dunfermline Trust.

ANNUAL REPORT

ON

THE TREATMENT OF SCHOOL CHILDREN

IN

DUNFERMLINE CLINICS

FOR YEAR ENDED 31ST JULY 1931.

BY

ALISTER MACKENZIE,

M.A., M.D., D.P.H., F.R.S.E.,

Chief Medical Officer of the Carnegie Dunfermline Trust.

INTRODUCTION.

In the report for 1929-30, attention was drawn to the remarkable increase in the number of cases and attendances at the General Clinics, amounting to 602 cases and 10,651 attendances. These results were regarded as exceptional and as following mainly from the opening of an additional General Clinic at Park Road School, Rosyth. The present report shows *decreases* quite as startling. There is a fall of 415 cases and of 11,540 attendances compared with the year 1929-30. While some slight diminution in the work was expected as soon as the Rosyth Centres had become firmly established, the cause of the striking fall in numbers this year must be looked for elsewhere. Under Local Government (Scotland) Act of 1929, School Medical Inspection was transferred during 1930-31, from the Fife Education Authority to the Department of the Medical Officer of Health, Dunfermline, but there was some uncertainty as to its fate for a few months, and an unavoidable gap occurred between the date on which the Medical Staff of the Education Authority was withdrawn from Dunfermline Schools, and that on which the Medical Officers of the Burgh commenced a full scheme of school inspection. During this interval, the Clinics were deplorably quiet. The attendances began to improve as soon as regular inspection under the Burgh Scheme was established. No better proof is required of the intimate relationship between inspection and treatment. It would be a mistake to assume that the figures indicated any notable diminution in the need for treatment or any sudden and permanent improvement in the general health of the children. Careful and systematic examination will continue to disclose large numbers of children who require the help which the General Clinics are able and ready to give.

It is gratifying to find that an increasing number of children under school age come to the General Clinics for treatment. The number of cases is not large as yet, but steadily increases year by year, mainly owing to the enlightened co-operation of the staff of the Child Welfare Department of the Burgh.

The Dental Clinics continue to function effectively. The School Dentists are responsible for both Inspection and Treatment of the children's teeth. Their organisation has escaped the transfers and

upheavals which have affected School Medical Inspection in recent times, and their record of work compares favourably with those of former years.

The number of cases attending the Remedial Clinic has definitely increased. The increase occurred solely in the second half of the school year, *i.e.*, after the Burgh Scheme of Medical Inspection was established.

The number of children attending the Clinic for the control of Malnutrition is less than in 1929-30, but greater than in 1928-29. This Clinic is a valuable clearing-house for children who are not thriving. It gives the Medical Officer and the Nurses intimate knowledge of the home conditions of the children, enables them to enlist the co-operation of parents and is the point from which many children are drafted to Bandrum Country Home.

In January 1931, a new Artificial Sunlight Clinic was established at Inglis Street by the Trustees for the treatment of school children and children under school age. The results so far obtained have been very encouraging, and are recorded in the body of this report.

ARRANGEMENTS FOR MEDICAL TREATMENT IN THE DUNFERMLINE CLINICS.

The various departments of the School Clinic have been described in earlier reports.

See Fourth Annual Report (1909)—General Clinic.

See Fifth Annual Report (1910)—General and Dental Clinics.

See Sixth Annual Report (1911-12)—Eye and Remedial Departments.

See Seventh Annual Report (1912-13)—Resumé of Departments.

Under arrangement with the Fife Education Authority, the Carnegie Dunfermline Trustees took over the treatment of Rosyth school children as from September 1926, in which month they opened a General Clinic at King's Road School, and also provided Dental treatment. In June 1929, the Trustees opened a General Clinic at Park Road School. The figures for treatment at Rosyth are shown separately in the following pages.

A—Minor Ailments (General Clinics), 1930-31.

During the year, 3748 children of school age attended the General Clinics (Inglis Street and Rosyth), and the total attendances of these cases amounted to 28,927, being a decrease over last year of 415 cases and 11,540 attendances.

Any child returning after a month's unprescribed absence was considered to be a new case, as were children returning after any interval with a different defect.

RETURN OF CASES TREATED.

		Inglis Street Clinic.	
		No. of Cases.	No. of Attendances.
<i>Ear—</i>			
Middle Ear Sappuration	.. ..	48*	2516
Middle Ear Catarrh	.. ..	—	—
Other Conditions	.. ..	59	406
		—	107
			—
			2922
<i>Nose and Throat—</i>			
Nasal Conditions	.. ..	36	1238
Sore Throat	.. ..	55	615
		—	91
			—
			1853
<i>Eye—</i>			
Blepharitis	.. ..	41	305
Styes	.. ..	33	152
Conjunctivitis	.. ..	27	141
Corneal Inflammation and Ulcera- tion	.. ..	2	2
Injuries	.. ..	11	40
Errors of Refraction	.. ..	15	36
Other Conditions	.. ..	10	31
		—	139
			—
			707
<i>Skin (Head)—</i>			
Dirty	.. ..	13	21
Ringworm	.. ..	3	28
Impetigo	.. ..	30	351
Other Conditions	.. ..	18	348
		—	64
			—
			648
<i>Skin (Body)—</i>			
Body Vermin	.. ..	—	—
Impetigo	.. ..	229	1711
Scabies	.. ..	17	157
Ringworm	.. ..	4	54
Other Conditions	.. ..	203	2025
		—	453
			—
			3947
<i>General—</i>			
Septic Sores	.. ..	438	3989
Injuries	.. ..	226	1330
Other Conditions	.. ..	372	1269
Sunlight	.. ..	108	1202
		—	1144
			—
			7790
			—
			1998
			—
			17,867

*This figure represents the actual number of discharging ears.

RETURN OF CASES TREATED.

				Rosyth Clinics.	
<i>Ear—</i>				No. of Cases.	No. of Attendances.
Middle Ear Suppuration	..	..	..	33*	692
Other Conditions	..	..	..	33	162
				66	854
<i>Nose and Throat—</i>					
Nasal Conditions	..	..	..	24	742
Sore Throat	..	..	..	96	1373
				120	2115
<i>Eye</i>					
Blepharitis	..	..	..	30	211
Styes	..	..	..	54	170
Conjunctivitis	..	..	..	22	61
Corneal Inflammation and Ulcera- tion	..	..	..	—	—
Injuries	..	..	..	6	9
Errors of Refraction	..	..	..	—	—
Other Conditions	..	..	..	7	9
				119	460
<i>Skin (Head)—</i>					
Dirty	..	..	..	1	2
Ringworm	..	..	..	1	2
Impetigo	..	..	..	24	155
Other Conditions	..	..	..	9	79
				35	238
<i>Skin (Body)—</i>					
Body Vermin	..	..	..	—	—
Impetigo	..	..	..	139	730
Scabies	..	..	..	11	76
Ringworm	..	..	..	5	49
Other Conditions	..	..	..	129	1113
				284	1968
<i>General—</i>					
Septic Sores	..	..	..	650	3532
Injuries	..	..	..	329	1291
Other Conditions	..	..	..	149	602
				1128	5425
Totals—Rosyth Clinics	..	..	..	1752	11,060
Add—Inglis Street Clinic Totals	..	..	..	1998	17,867
„ Children below school age	..	..	..	168	1226
				3918	30,153

*This figure represents the actual number of discharging ears.

INTERMEDIATE GROUP.—Duration from two to six months—four cases only.

	Cases.
Discharge arrested,	None
Continued to discharge under treatment	1
Failed to attend	3
	—
	4
	—

NOSE AND THROAT CASES.—The number of Nose and Throat Cases (91) was considerably less than during the previous year (213). Twenty-nine cases of chronically infected tonsils and/or adenoids were seen. In eight cases, operation was recommended, and in the remainder, conservative measures were successfully carried out. A number of these cases were poorly nourished or debilitated children attending the "Nutrition" Clinic. Other conditions examined and treated included hypertrophic rhinitis, rhinitis associated with congenital syphilis and chronic nasal catarrh.

ROSYTH CLINICS.

CHRONIC SUPPURATIVE OTITIS MEDIA.—The number of cases of Chronic Otitis Media treated at the Rosyth Clinics was larger than in previous years.

1928-29,	15
1929-30,	23
1930-31,	33

No definite data can be given as to duration of discharge before treatment nor as to the results, as the opportunities for regular systematic examination were insufficient.

OTHER EAR, NOSE AND THROAT CONDITIONS.

Other conditions examined and/or located included chronically infected tonsils and/or adenoids, thirty-three cases. Operation was advised in ten cases. Acute "Sore Throat" thirty-seven cases. These were referred to the family doctor for treatment. The remainder comprised minor degrees of sore throat, chronic nasal catarrh, earache, wax in the ears, etc.

REPORT BY CONSULTING AURAL SURGEON.

There is little for me to add to Dr. Meiklejohn's explicit report on the work of the Ear, Nose and Throat Clinics. It is gratifying to find that the number of cases of chronic middle ear suppuration has been less during the past year, and one hopes that this is due to the fact that

cases of the disease are recognised by the parent or teacher during the acute stage, and are then thoroughly treated until healing occurs, instead of receiving perfunctory treatment and being regarded as trivial complaints.

IMPORTANCE OF EARLY DIAGNOSIS AND TREATMENT OF DISCHARGING EARS.—The above experience coincides with the experience of other Ear and Throat Clinics throughout the country. It is generally found that there is a diminution in the number of obstinate cases of chronic middle ear suppuration, thanks to early diagnosis at home or in fever hospitals, and to careful and thorough treatment after the diagnosis has been made.

In consequence, the number of cases requiring the "radical" mastoid operation is yearly becoming less, and this is a fortunate fact, as the operation, though it usually arrests the discharge and obviates serious complications, is often disastrous to hearing, and if both ears are so treated, the patient remains, as a rule, very deaf.

TREATMENT OF CHRONIC EAR SUPPURATION.—In chronic cases of this nature, we have tried various methods of treatment at the Clinic, and we find that the particular variety of antiseptic used as ear drops is not nearly so important as regular cleansing of the ear and mopping away of superfluous discharge. If this is done frequently, and, if necessary, several times a day, great improvement immediately follows in the majority of cases.

THE EFFECT OF ULTRA-VIOLET LIGHT ON ADENOID AND TONSIL CASES.—With regard to the Ear and Throat cases, we have noted that in feeble and under-nourished children, the benefit of ultra-violet light treatment has been very remarkable. This treatment is not applied locally to the ear, but as a light bath to the general surface of the body. It is fortunate that such treatment is now available for the children attending the Clinic, and many children who suffer from adenoids and tonsils derive great benefit from it. In mild cases, this treatment alone may suffice, and in others it is a useful adjunct to removal of the enlarged lymphoid structures by operation.

Further investigations of the interesting relationship between nutrition and the tonsil-adenoid disease are very desirable, with a view to discovering some means of preventing the growth of enlarged tonsils and adenoids, and thus diminishing the enormous number of operations which are performed yearly in Ear and Throat Clinics.

(Signed) DOUGLAS GUTHRIE, M.D., F.R.C.S.

**DEALING WITH THE TREATMENT OF EYE CONDITIONS,
Dr. EMSLIE SMITH REPORTS :—**

With respect to the prevalence of eye affections in Dunfermline School children, the year—1st August 1930 to 31st July 1931—has been a healthy one. There were no epidemics of eye disease, and the majority of the individual cases were of a mild character. The number of new cases and the average number of treatments per case are, accordingly, lower than they were last year.

Two hundred and seventy-two cases were treated at the Eye Clinics in Dunfermline and Rosyth. The number of attendances was 1228, giving an average of 4·5 treatments per case.

	Dunfermline.		Rosyth.	
	Pre-School Children.	School Children.	King's Road Children of School Age.	Park Road.
Blepharitis	5	41	7	23
Styes	3	33	23	31
Conjunctivitis	1	27	10	12
Injuries	—	11	3	3
Refractions and other con- ditions	5	27	5	2
Total	14	139	48	71

BLEPHARITIS.—Seventy-six cases were treated at all the Clinics during the year. Blepharitis is a very common affection in children. Almost any inflammation of the eye may leave, for a time, a certain amount of Blepharitis. Some of the cases treated at the Inglis Street Clinic were of this nature, and were possibly the result of the rather large number of conjunctivitis cases which occurred last year. No deductions as to causation can be drawn from the monthly incidence. In the old Burgh of Dunfermline, the largest numbers sent for treatment were in February and March, but this was probably due to School Medical Inspection having started in January.

There were comparatively few old standing chronic cases, with thickened lids and matted lashes, but quite a large number showed a tendency to relapse. In these cases, the child's eyesight was examined and suitable glasses prescribed. Even a very small degree of defective vision may set up a recurrent Blepharitis, and it is advisable to test the vision of all children who suffer from repeated attacks of red eyelids.

CONJUNCTIVITIS.—Only fifty cases of all types of Conjunctivitis were treated, as compared with 110 last year. Most of them were of a simple nature and soon recovered under treatment.

The number of cases of Phlyctenular Conjunctivitis on the other hand was more than double. Some of them were very severe, with extensive involvement of the cornea.

STYES.—The proportion of styes to other eye conditions was high. They, too, were most in debilitated and ill nourished children.

OTHER CONDITIONS.—These include cases of foreign bodies in the eye, injuries to the globe of the eye—(three of which were the result of snow-balling), and cases of corneal inflammation.

B.—Defective Vision.

The routine examination of school children for errors of refraction is now done by the Department of the Medical Officer of Health, Dunfermline.

Five children of pre-school age were examined for errors of refraction, three on account of squints and two for defective vision. The eyesight of several other children were also examined in connection with the treatment of ocular defects.

Dr. H. EMSLIE SMITH REPORTS ON THE TREATMENT OF SKIN DISEASES AS FOLLOWS :—

During the year ended 31st July 1931, the number of new cases of skin disease treated at all Clinics was 892. The total number of treatments was 7,286, giving an average of 8.1 treatments per case.

Compared with the previous year, the figures show a decrease of 106 cases. Some decrease in numbers was observed at all of the skin Clinics. At the Inglis Street Clinic, it was 12.3 per cent.; at the Rosyth Clinics, 7.2 per cent. In the case of children of pre-school age, the numbers were practically the same as last year.

The following table shows the distribution of new cases treated :—

Inglis Street Clinic—

School Children	..	..	..	..	517
Children of pre-school age	..	..	..	..	56
					—
Total for Inglis Street Clinic	..	..	..	..	573
					—
King's Road School Clinic	..	..	..	..	171
Park Road School Clinic	..	..	..	..	148
					—
					319
					—

In regard to the affections for which treatment was sought, the following groups may be considered :—

GROUP 1—IMPETIGO CONTAGIOSA.—As usual, this group heads the list in point of numbers. Four hundred and sixty-seven cases were treated, of which 163 were in children living in the Rosyth Area, and 45 in children of pre-school age. The disease is, therefore, still very prevalent in Dunfermline school children.

In general, the cases were of a mild type, and there were comparatively few cases of Impetigo of the Scalp. On the other hand, there was a large number of cases of Impetigo Circinata. A few of these cases were seen last year, but this year their number was very considerably increased. In some, the resemblance to Ringworm was most marked. One case was of a very severe nature, the disease spread rapidly all over the face and took a long time to cure. Another member of the family was similarly affected at a later date.

Artificial sunlight was used for the first time this year in the treatment of some of the cases. The numbers, however, so far thus treated are too small upon which to base an opinion regarding its value. Impetigo is, as a rule, easily cured by ordinary methods, but in the case of debilitated children, who so often suffer from Impetigo, the tonic effects of sun baths should prove helpful.

GROUP 2—RINGWORM OF THE HEAD AND BODY.—Only 5 cases of Ringworm of the scalp and 9 of the body were treated during the year, a decrease of 20 cases as compared with last year. Microscopical examinations of the hair and Ultra Violet light as usual proved of service in establishing the diagnosis. Two cases were treated by X-Rays with favourable results. They were still under observation.

GROUP 3—VERMIN OF THE HEAD.—Fourteen cases suffering from nits and pediculi of the head were treated. None of them was severe. The fashion of wearing longer hair has not spread to any considerable extent amongst children, and their heads have consequently remained clean.

There were no cases of vermin of the body treated at the Clinic.

GROUP 4—WARTS, CHILBLAINS AND CORNS.—One hundred and sixty-four cases were treated during the year. This represents an increase of 16 over last year's figure. Some attention should be drawn to the very marked increase in the number of children suffering from warts. Over 72 per cent. of the cases in this group were cases of warts. They were nearly all multiple, many of them in enormous numbers. The hands were the parts most affected, but the face was a common site, and there were, this year, more cases of warts on the feet than ever previously met with in the experience of those working in the Clinic. In some of the cases where the affection was on the soles of the feet, a considerable amount of crippling resulted.

As there appeared reason to expect that good might result from the use of Ultra Violet light, some of the cases were treated accordingly. The results so far have been encouraging.

GROUP 5—ALL OTHER CONDITIONS.—In this group, the following may be noted :—

(1) MOLLUSCUM CONTAGIOSUM.—Forty-six cases attended for treatment. The figures represent an increase of 17 more cases over those of

last year. It would, however, be unsafe from this alone to conclude that the disease was definitely becoming more prevalent. Most of the cases were sent to the Clinic after the School Medical Inspection started in January. Six of the cases were very severe, and many of them multiple.

(2) SCABIES.—The majority of the 28 children treated for Scabies were early cases in which the hands and clefts of the fingers only were affected. They were easily cured.

Other conditions include cases of Herpes, Psoriasis, Eczema, Pityriasis, Alopecia, Seborrhoea, Ichthyosis and Dermatitis.

Artificial sunlight was used with great benefit in the treatment of some of the cases of the last four mentioned diseases. It is a form of treatment which has been found useful and with further experience may prove of still greater benefit in affections of the skin.

C.—Defective Teeth.

THE FOLLOWING IS THE REPORT ON THE WORK OF THE SCHOOL DENTIST IN THE OLD BURGH :—

The work is carried out by Mr. Weir and Mr. Campbell jointly.

DENTAL EXAMINATION.

The age groups examined this year extended from 5 to 13 years. The total number of children examined was 3148 or one less than last year. There are very few in the 12 and 13 year-old groups, as the majority of these children are drafted to Queen Anne and High Schools, and time for the systematic inspection and treatment of the children there has not yet been found. Arrangements have been made with the Headmasters for the treatment of pupils of above schools as casual patients during certain hours.

The following table shows the number of children examined in each group, and the numbers with sound dentition at each age :—

		No. Examined.	No. with Sound Dentition.
At	5 years	386	47
"	6 "	384	71
"	7 "	406	81
"	8 "	429	132
"	9 "	463	188
"	10 "	562	217
"	11 "	332	150
"	12 "	140	68
"	13 "	46	19
		<hr/> 3,148	<hr/> 973

The following figures show the general state of the teeth in children examined and the desire for treatment :—

	1930-31.	Per cent.	1929-30 per cent.
1. Examined	3,148	—	—
2. With Sound Dentition	973	30·90	31·31
3. Requiring Treatment	2,175	69·09	68·69
4. No. in 3 accepting Treatment at Clinic	1,723	79·21	77·02
5. No. in 3 refusing Treatment at Clinic	452	20·78	22·97

The percentage of those refusing treatment is 2·19 per cent. less than last year, making a decline of over 5 per cent. in three years.

In the following table, the 3148 children examined are classified according to the number of decayed teeth in the mouth :—

No. of Decayed Teeth.	No. of Children.			Total.
	Boys.	Girls.		
0	485	488		973
1	276	307		583
2	266	229		495
3	124	128		252
4	136	110		246
5	59	66		125
6	69	68		137
7	42	39		81
8	38	38		76
More than 8	81	99		180
	1,576	1,572		3,148

DENTAL TREATMENT.

During the year, 2782 children attended the Clinic, and made 4108 attendances—an average of 1·47 attendances per child. Compared with last year, this is an increase of 142 in the number of children attending, and an increase of 36 in the attendances made. Two thousand three hundred and seventy of the children treated came as the result of the current or earlier systematic inspections, and 412 children were treated as casual cases.

The following figures show the treatment carried out throughout the year :—

	Temporary Teeth.	Permanent Teeth.
<i>Extractions—</i>		
Without Anaesthesia	1,484	6
With Local Anaesthesia	1,461	373
<i>Fillings—</i>		
Cement	277	5
Amalgam	730	1,992
Silicate	—	579
Roof Fillings	9	54
<i>Other Operations—</i>		
Silver Nitrate Treatment	1,965	9
Dressings Inserted	—	316
Sealing and Cleaning	—	674
Porcelain Crowns Inserted	—	1
Minor Regulation Visits	—	14

The total amount of treatment throughout the school year was as follows :—

	1930-31.	1929-30.
Teeth Extracted	3,324	3,417
Fillings Inserted	3,646	3,602
Teeth Treated with Silver Nitrate	1,974	2,049
Dressings Inserted	316	263
Scaling	674	697
Porcelain Crowns Inserted	1	5
Minor Regulation Visits	14	21

REPORTING ON THE WORK AS SCHOOL DENTIST IN ROSYTH, Mr. RICHARD CAMPBELL STATES :—

Commencing in September, the age groups 8, 10, 11, 12 and 13 years underwent systematic dental examination.

DENTAL TREATMENT.

During the year, 869 children attended the Clinic, and made 1382 attendances—an average of 1.6 attendances per child. Five hundred and forty-eight of the children treated came as the result of routine inspection, and 321 children were treated as casual cases.

The following figures show the treatment carried out throughout the year :—

	Temporary Teeth.	Permanent Teeth.
<i>Extractions—</i>		
Without Anaesthesia	441	—
With Local Anaesthesia	627	132
<i>Fillings—</i>		
Cement	47	—
Amalgam	117	344
Silicate	—	62
Root Fillings	—	5
<i>Other Operations—</i>		
Silver Nitrate Treatment	499	7
Dressings Inserted	—	123
Scaling and Cleaning	—	296
Porcelain Crowns Inesrted	—	—
Minor Regulation Visits	—	5

The total amount of treatment throughout the school year was as follows :—

Teeth Extracted	1,200
Fillings Inserted	575
Teeth Treated with Silver Nitrate	506
Dressings Inserted	123
Scaling	296
Minor Regulation Visits	5

D.—Operations.

Cases requiring operative measures are not dealt with at the School Clinic. They are referred to their family doctor for the necessary treatment.

E.—Deformities and Other Conditions Treated at the Remedial Clinic.

Dr. EMSLIE SMITH REPORTS :—

In last year's report, reference was made to the importance of the work carried out in this Clinic and to the fact that, although the Clinic was better equipped than it had ever been, the numbers treated were very low. It is, therefore, gratifying to have to record that this year's work shows a steadily increasing activity, which is all the more gratifying when one remembers that the aim of remedial treatment is the improvement in health and vigour of those very children who stand in greatest need.

WORKING ARRANGEMENTS.—As in former years, cases were admitted on the recommendation of their own family doctor, and, after a preliminary medical examination, underwent a course of Remedial Exercises, Massage and Postural Training suitable to their particular defect. They were medically examined from time to time, and the course altered as became necessary to bring about the best results.

As the bulk of the patients were children, the Clinic was open on Monday, Wednesday and Friday, from 4.30 p.m., in order that school attendance might not be interfered with.

STAFF.—The work was under the skilled supervision of Miss A. B. Whyte and Miss Armstrong, and the necessary assistance was provided by the Senior Women Students of the College of Hygiene.

ATTENDANCE.—In last year's Report, the figures quoted for the previous ten years showed that the number of cases who attended the Clinic during the years 1929 and 1930 was considerably below what might be regarded as the normal number of children in Dunfermline Schools who require Remedial care. It was suggested that this falling off was an almost inevitable result of the changes which have taken place in recent years in the methods of School Medical Inspection, and as such was likely to correct itself in time. The figures for this year show a satisfactory return to more normal conditions. This satisfactory increase in numbers, which commenced about January 1931 and has steadily continued, has been brought about by the close co-operation which exists between the Clinic, the family doctor and School Medical Inspection Staff. The hope may, therefore, be expressed with confidence that the Remedial Clinic has renewed its role of usefulness.

In this connection, reference might be made to another aspect of the work, namely the preventive side of remedial treatment.

Many cases of actual deformity in children and adults start as mere habits of bad posture. The round back, leading to a permanent

stoop with poor chest development, is a familiar enough example. When such cases are got sufficiently early, they are as a rule easily corrected and given a fresh start ; but, having in view the numbers of cases suffering from more or less fixed deformity, one cannot help feeling that greater advantage might be taken of the unique facilities offered by the Clinic for preventive remedial work. The Clinic does not exist solely for the treatment of deformity. Any such idea might tend to deprive children of that timely help which they need at a critical period of their lives.

During the year under report, 89 cases were admitted, being an increase of 23 cases over last year. The total attendances were 2616, an average of 29.3 treatments per case. The total number of attendances and the average number of treatments per case are a good deal less than last year, the reason being that more than half of the cases were admitted in the latter half of the year. In May and June alone, 21 new cases were admitted. They, therefore, could only have a few treatments before the Clinic closed.

DEFECTS TREATED.—The following table shows the main classes of defects and the number of cases in each group. The cases have been classified under the heading of their major defect only. Many, however, were found to be suffering from more than one defect and were treated accordingly.

TABLE I.

Defect.	No. of Cases.
Antero-Posterior Curvature of the Spine	14
Lateral Curvature of the Spine	11
Paralysis	8
Flat Foot	22
Club Foot	4
Sprains, Fractures and Injuries	14
Rickets and Debility	7
Other Conditions	9
	—
	89
	—

The following sections deal with the causes of the defects and with the results of treatment.

CURVATURE OF THE SPINE.—Curvature of the Spine in all its forms yielded the largest number of cases for any one deformity. This is as might be expected. When a child's strength and vigour falls below par from any cause, the spine—mainly supported by the muscles—is usually the first part of the bony frame to droop.

Twenty-five cases in all attended. Of these, 6 were cured, 10 were greatly improved, and 8 improved. These results must be considered very satisfactory when one remembers that many of the cases were of a severe nature.

As regards causation, in the Antero Posterior Curvature group, 8 were the result of debility from various causes, including too rapid growth. Two were due to posture, and the remainder due to Rickets, Asthma, Bronchitis and Whooping Cough.

In the Lateral Curvature group, 5 were due to posture, and 5 to debility. These included one Tubercular and one heart case.

FLAT FOOT.—Twenty-two cases of flat foot were treated during the year. There can be little doubt that debility is one of the main causes of flat foot in children. Seventeen of the cases were due to this cause. In several the conditions developed after illness such as Measles or Whooping Cough, and it would seem that the heavy child is more liable to be affected than his lighter brother. Two cases were congenital, 2 due to injury of the foot, and 1 to Infantile Paralysis. Debility cases, as a rule, respond well to treatment. All of the cases improved. Five were greatly improved and 5 cured. Had the cases been under treatment longer, the results would have been better.

CLUB FOOT.—Four cases of Club Foot were treated. Three of these were congenital, and 1 due to Infantile Paralysis. Two of them were greatly improved. In one case, an operation was performed in Hospital.

PARALYSIS.—Eight cases of Paralysis attended. Six of them were cases of Infantile Paralysis; 1 was due to Diphtheria and 1 to an injury at birth.

In regard to Infantile Paralysis, the limb affected was in every case the leg. In one case the arms were also affected. Five of the cases showed great improvement. One child, who had both lower limbs extensively affected, and who could only move with double crutches, improved to the extent of being able to stand.

SPRAINS, FRACTURES AND INJURIES.—Four sprains of the wrist, 2 of the ankle, 5 contusions and 3 fractures were treated during the year. They all recovered except two (fractures), who, having been admitted recently, were still under treatment at the end of the term. The results from massage and exercises in such cases are well known.

RICKETS AND DEBILITY.—Seven cases of Rickets and Debility, some of which were very severe, showed improvement according to the severity of their condition and to the length of time they had been under treatment.

OTHER CONDITIONS.—These included cases of Knock Knee, Hallux Valgus, Flat Chest, Torticollis, Rheumatism, Valvular Disease of the Heart and Tubercular affections.

Taking into account the fact that so many of the cases had been under treatment for a comparatively short time, the results of the work as a whole must be considered as very satisfactory.

F.—Malnutrition.

REPORTING UPON CASES OF MALNUTRITION, Dr. MEIKLEJOHN WRITES :—

During the year 1930-31, one hundred and ninety-three children suffering from malnutrition and general debility were seen at the Clinics. Of this number, one hundred attended Dunfermline Old Burgh Schools and ninety-three attended schools in the Rosyth area. In comparison with the numbers for the previous year, there was a decrease of forty-six for Dunfermline Old Burgh, and an increase of five for Rosyth.

	1928-29.	1929-30.	1930-31.
Dunfermline Old Burgh ..	130	146	100
Rosyth	53	88	93

As in previous years, the Old Burgh children were examined from time to time, usually about once a fortnight, at the Inglis Street Clinic. Those attending Rosyth Schools were seen first at King's Road School Clinic and afterwards underwent more complete examination at Inglis Street Clinic. Unfortunately it was impossible in many cases for the children to be brought to Dunfermline, and consequently such examination as could be carried out in a crowded Clinic was all that could be obtained.

In all cases an attempt was made to ascertain the probable cause of the child's condition, and special attention was directed to the previous history and to the habits and feeding of the child. Many children would appear to be under-nourished on account of irregular meals, unsuitable food and lack of sleep. Wherever it was possible, enquiries were made about these matters, and advice given in regard to rest and to suitable food of an inexpensive kind. The vitamin elements are usually lacking in the cheaper foods, and this deficiency leads very frequently to a liability to septic sores and chronic catarrh and to eye troubles. The majority of the cases seen were of this nature, and came to the Clinic in the first instance on account of sores or colds or eye trouble. In such cases, cod liver oil or cod liver oil combined with malt extract was given to supply the deficiency. This treatment generally led to a more rapid recovery.

A search was made in all cases for any cause of malnutrition other than the conditions mentioned above. Septic tonsils and/or adenoids were present in thirty cases. A marked degree of nasal catarrh without tonsillar enlargement occurred in five, and a minor degree of catarrh was the rule. Sixteen of the children suffered from frequent attacks of bronchitis and asthma, seven from glandular tuberculosis, three from abdominal tuberculosis, three showed general signs of tubercular infection, and a family history of tuberculosis was given in seven cases. Signs of rheumatic infection were present in seven cases. Two children suffered from anaemia, one from chronic appendicitis. Ten were infected by intestinal worms. Four were characterised by persistent furunculosis.

During the year, sixty-five of the children attending the "Nutrition" Clinic were admitted to the Country Home at Bandrum. In all cases, the children showed improvement as a result of their stay.

Ultra Violet Ray, or Artificial Sunlight, treatment was available at the Clinic from January 1931, and a number of the cases attending the "Nutrition" Clinic benefited by this form of treatment.

G.—Artificial Sunlight Clinic.

Dr. EMSLIE SMITH REPORTS :—

For some time the Trustees had under consideration the project of making available to the public, and in particular to the children of Dunfermline, the benefits to be derived from exposure to the Ultra Violet Rays. The idea took shape in the opening of an Artificial Sunlight Clinic in the Inglis Street Clinic in January 1931.

Prior to this, a great deal of preparatory experimental work was undertaken. Different forms of apparatus had to be considered and examined to ascertain that which would best fulfil requirements; visits made to inspect existing installations in other places, and finally different types of lamps and apparatus set up in the Laboratory at Inglis Street Clinic for the purpose of carrying out practical tests regarding their efficiency, mode of use, dosage and clinical effects.

EQUIPMENT.—As an outcome of these investigations and of the experience gathered at the Children's Country Home, Bandrum, a large "Sunrae" long flame Arc Lamp was erected in one of the rooms of the Clinic and thoroughly tested. This open Arc Lamp is suspended by a counter balance weight from a movable arm, and is thus capable of adjustment into any position.

The town supply of 440 volts alternating current is transformed down to 110 volts, and then passed through a suitable resistance so that the actual current to the lamp can be varied as required.

For general treatment, this type of lamp has so far been found most suitable, and the bulk of the cases have been treated by it. Three grades of cored carbons can be used giving different strengths of output, but for routine treatment, only cerium cored candles were used, the other grades being reserved for experimental use and special purposes.

In addition to this Carbon Arc Lamp, there is one large Quartz Mercury Vapour Lamp, suitable for general irradiation of the body and one small Mercury Vapour Lamp of convenient size for the detection of Ringworm, and, more recently, a Neon Vitalux Lamp has been added to the equipment.

ACCOMMODATION.—This consists of a treatment room with one large and one small dressing-room adjoining. The treatment room is of ample size and is well lighted. The walls are tiled and the floor of

pictra-dura, upon which is marked a circle of four foot radius surrounding the lamp. This circle is for the purpose of indicating a standard distance from the lamp—an important consideration, as the intensity of Ultra Violet light varies inversely as the square of the distance from the source.

HEATING.—Heating is effected by a large steam radiator, which keeps the temperature of the room at a suitable level.

VENTILATION.—As Carbon Arc lamps give off a considerable amount of fumes, the problem of ventilation is an important one. With the numbers so far treated at any one time, the ventilation has been quite satisfactory. Should, however, these numbers be increased to any great extent, some slight alterations may become necessary.

DRESSING-ROOMS.—The rooms are well adapted for the purpose, and have proved very satisfactory, although at times the accommodation has been a little strained. Children require a good deal of space for dressing and undressing.

WORKING ARRANGEMENTS.—In general the routine adopted was that each child should have at least one treatment per week, boys being treated on Tuesdays and girls on Thursdays. Children living in Rosyth and other outlying parts of the town, who were also attending the Remedial Clinic, were, however, treated on Wednesdays and Fridays just before the Remedial Clinic opened.

On admission each case was carefully examined, and all relevant details noted on a special card. Before each subsequent treatment, the children were weighed and seen by the Medical Officer, and the length of exposure decided upon with reference to the effects produced by the previous dose. The children, naked to the waist, then donned their eye shades and stood in a circle around the lamp to receive their dose which was regulated by a stop watch. Both front and back were irradiated.

ATTENDANCE.—The attendance throughout was most regular, and it was gratifying to note the enthusiastic interest displayed by the large numbers of parents who regularly came with their children. All ages were treated, from mere infants to Secondary School children, and in addition a few adults. The latter, although affording useful clinical data, were in small numbers, and accordingly have not been included in the figures of this report.

NUMBERS TREATED.—During the six months that the Clinic has been open, one hundred and thirty children have been treated for different affections. Sixty-two were boys, forty-six girls, and twenty-two children under school age. In the latter are included some five or six babies. One thousand four hundred and thirty-five treatments were given, being an average of eleven treatments per case.

RESULTS.—As nearly half of the patients were suffering from rather indefinite conditions such as “Debility,” “Malnutrition,” “Not Thriving,” “Frequent Colds,” etc., it was not always possible to estimate the degree of improvement by reference to any specific symptom which might have been there before, but which disappeared or improved after treatment. Classification of results, therefore, had to be based more on the observation of a general improvement in the child’s health, supported by information received from parents and guardians concerning the child’s improved vitality, appetite or sleeping, etc. In other cases, for example—skin affections, adenitis, etc.—it was an easier matter to estimate the degree of improvement. Judged by all standards the results of treatment of the 130 children who attended the Clinic may be summarised as follows :—

TABLE I.
Results per cent. of the cases treated.

					Per Cent.
1. Cases showing no change	..	..	..	..	13·8
2. Improved	..	..	..	..	36·1
3. Greatly Improved	..	..	..	..	40·7
4. Cured	..	..	..	..	9·2

These figures indicate that there was some degree of improvement in 86 per cent. of the cases treated.

The Clinic has only been open for some six months, but the results so far are most encouraging. There seems little doubt that the outlay and trouble involved in starting the Clinic will be fully justified. One was struck by the number of spontaneous expressions of gratitude by parents for the benefit their children were deriving. It was only after the Clinic had been opened for some time that a note was kept of such remarks, but even from these incomplete records, over 29 per cent. of children were reported to have definitely improved in eating, sleeping, and general alertness.

WEIGHT.—A great deal of variation was shown in the matter of weight by the children under treatment. Some increased as much as 6 or 7 lbs., others remained unchanged. The recording was somewhat complicated by the seasonal change into lighter garments. The figures do not show any special feature, but the general impression was that increase in weight was not a marked feature, nor did it correspond with an obvious gain in general fitness.

DISEASES TREATED.

DEBILITY AND MALNUTRITION.—Twenty-three girls, twenty boys and seven infants were treated for Debility and Malnutrition from various causes. Nineteen were improved, seventeen greatly improved and in fourteen, no change was observed. Artificial Sunlight Treatment is well known for its general tonic effects. The children responded well,

becoming more robust and of better colour. Several nervous cases showed considerable improvement. It might be noted that twelve cases in this group had only received three or under three doses by the end of the year under report.

ADENITIS.—Perhaps some of the most striking results obtained were in cases of enlarged glands. Ten boys, seven girls and four infants were treated for Adenitis alone. Some of the glands had supplicated, and some had been operated upon. In three of the cases, the enlargement subsided almost entirely, nine were greatly improved, and eight improved. The figures for "Enlarged Glands" occurring in conjunction with other affections are very similar. Twenty-five cases were met with, of which five were cured, twelve greatly improved, and seven improved.

Children frequently suffer from enlargement of the glands about the neck from a variety of causes—decayed teeth, enlarged tonsils and septic sores, to mention only a few. As it was hardly to be expected that Artificial Sunlight would have much effect without additional treatment of the cause, the results are all the more satisfactory.

ANAEMIA.—Twenty-one cases, of Anemia, mainly in conjunction with other diseases, were treated. The degree of anaemia was estimated from the colour of the conjunctival mucous membrane of the eye-lids. The results obtained were not outstanding. Most of the cases remained unchanged, at least during the earlier months of the year. In the late Spring, a considerable improvement was observed, but it is quite likely that this had no connection with the treatment.

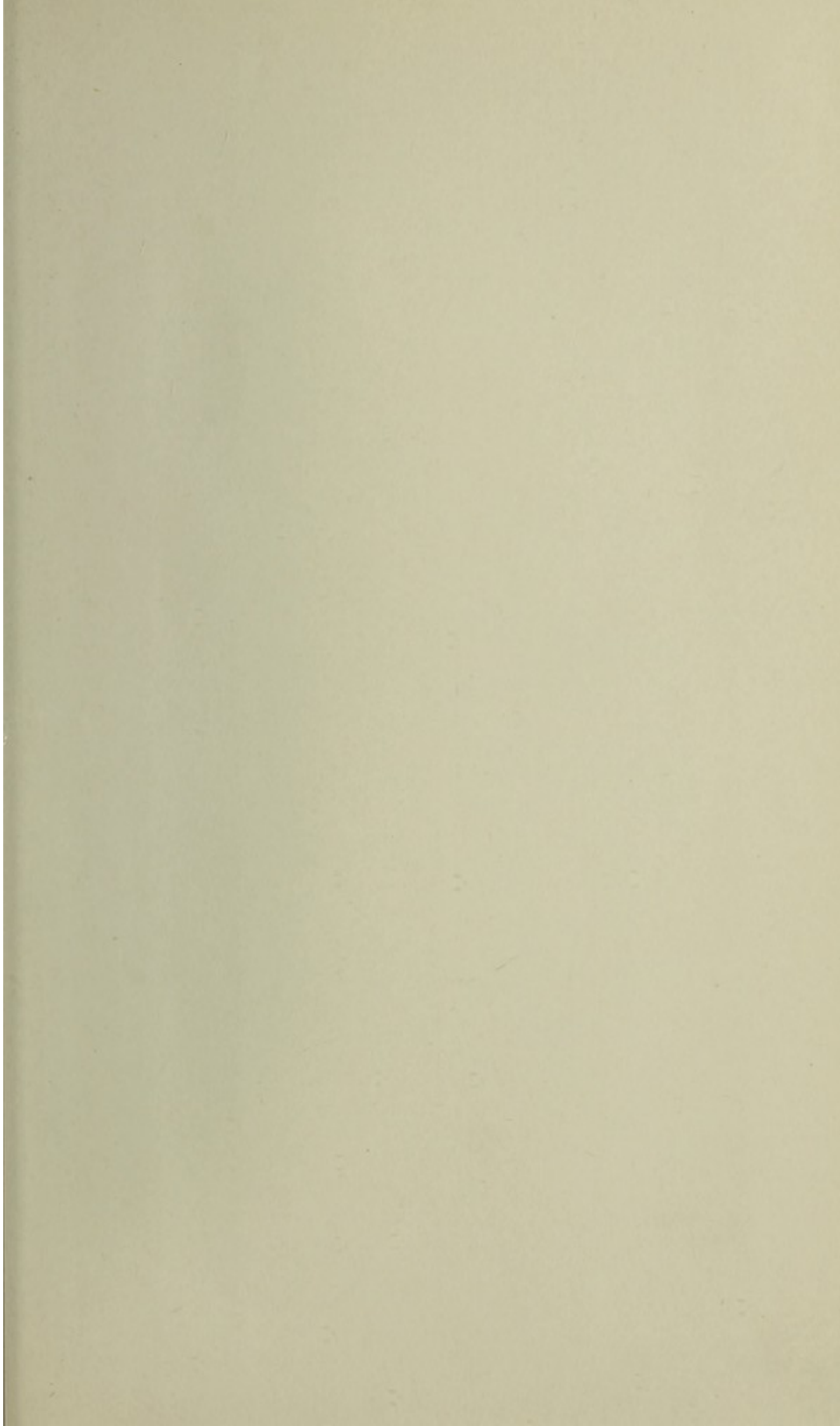
OTHER CASES.—BRONCHITIS AND COLDS.—Twelve cases were treated. The results were quite satisfactory, but the Spring and Summer season was not a good time in which to test the efficiency of Artificial Sunlight, as a preventive of Colds. It might, however, be noted that those who took part in testing the apparatus during the winter were distinctly of the opinion that its use kept them more free from Colds.

RICKETS.—Of the ten cases, those children who were under treatment long enough showed an improvement, and in some of the more recent cases, the improvement was most marked. The established value of Sunlight in Rickets is too well known to need further comment.

SKIN AFFECTIONS, ETC.—Ultra Violet Light has proved useful in certain skin affections. Twenty-three of these cases were treated. They include cases of Psoriasis, Alopecia, Warts, Septic Sores, Impetigo, Ichthiosis, Dermatitis, Seborrhoea, Chilblains and Urticaria. The results were encouraging, but the numbers too small to merit further remark. A few cases of Otorrhoea and of other affections were also treated.

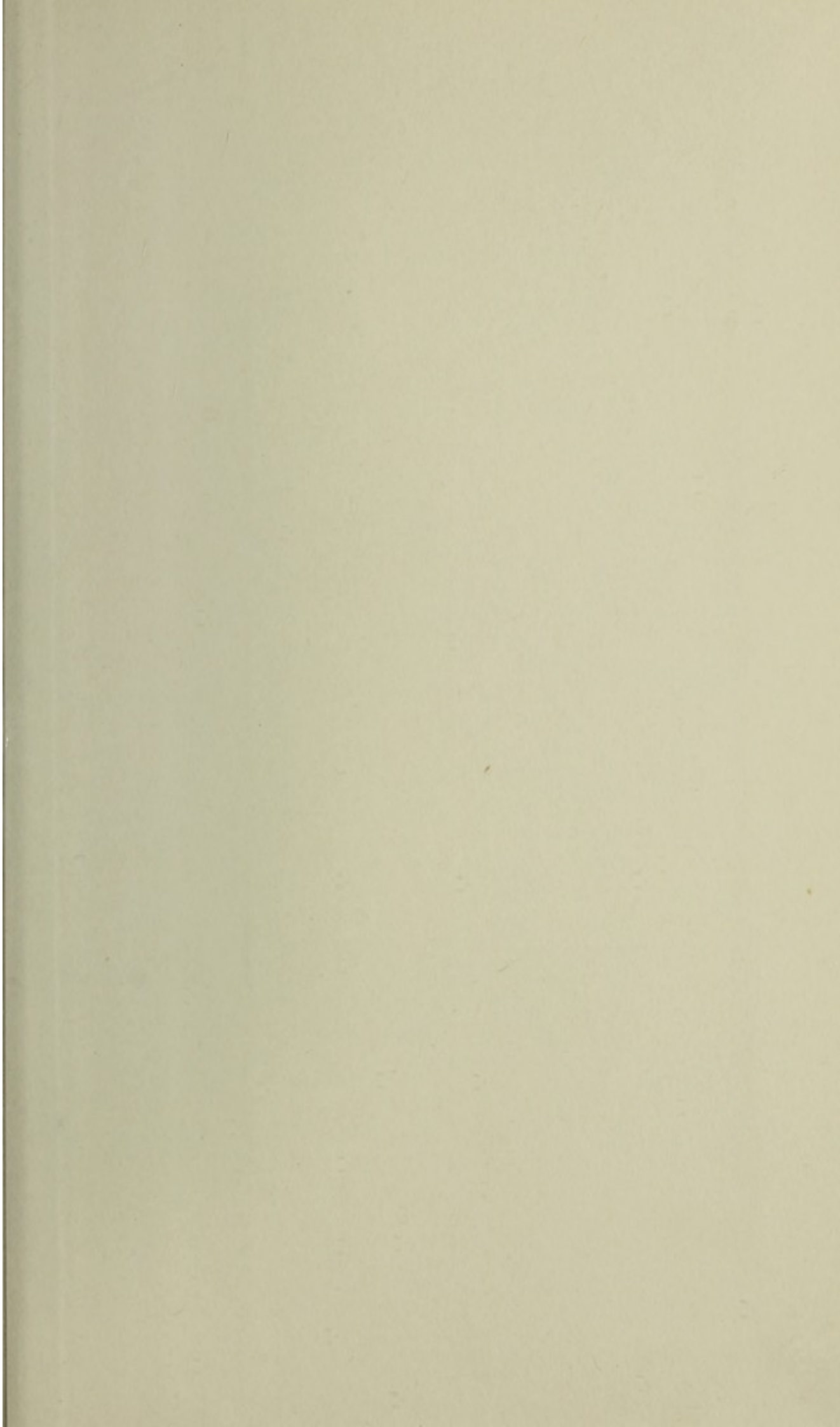
In the above notes and observations, an attempt has been made to give a fair representation of the results obtained. One feels, however, that it would be unsafe to conclude that they are typical of what might always be expected. The numbers treated are far too small upon which to base general conclusions of real value. Furthermore, the season, from Winter to Summer, is one in which a natural improvement might be expected. Nevertheless the results have been encouraging. It is only within recent years that Actinotherapy has aroused much interest. The perfection of apparatus has brought this about, and it is regarded as something new, although Sunlight is possibly the oldest form of treatment used by man, and has always been acknowledged as a great life giver and healer.

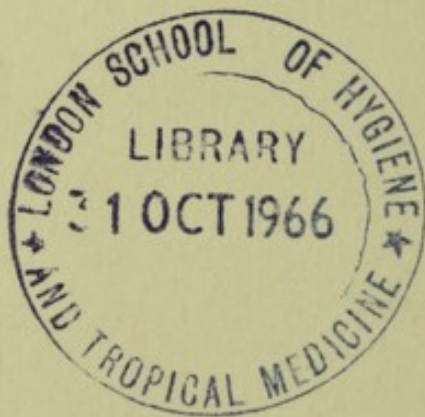
From Ultra Violet light, as from any new thing, too much is perhaps expected at first. Great benefit has certainly followed its use, but it is not a cure-all, and wrongly used may do harm. Much work has been done, but still more remains ere its full benefits are available for the individual case.



In the above collected observations, an attempt has been made to give a fair representation of the results obtained. One does, however, feel that it would be desirable to mention that they are typical of what may always be expected. The numbers treated are far too small to draw any conclusions of general importance of real value. Furthermore, since from Winter to Summer is one in which a natural improvement might be expected. Nevertheless the results have been so striking that it is only within a few years that Antimicrobial has proved its power. The perfection of apparatus has brought this about, and it is regarded as something new, although sunlight is possibly the only form of treatment used by man, and has always been acknowledged as good for fever and heat.

From Ultra Violet light, as far as any new thing, too much is being expected at first. Great benefit has certainly followed its use, but it is not a miracle and wrongly used may do harm. Much work has been done, but still more remains to be done before the full benefits are available to the individual user.





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