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# ANNUAL REPORTS

For the Year 1937

ON THE



# Malvern Urban District

BY

C. R. P. MITCHELL, M.D.,
Medical Officer of Health;

AND

HUGH L. WHITWHAM, M.S.I.A., Sanitary Inspector

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Southfield House,

Malvern,

May, 1938.

# To the Chairman and Members of the Malvern Urban District Council.

Ladies and Gentlemen,

I have the honour to present my Report for the year 1937.

This is my thirtieth Annual Report as your Medical Officer of Health.

The circular from the Ministry makes no mention of the status of the 1937 Report, whether "Ordinary" or "Survey." It states that "it will not be necessary to repeat matter which has appeared in previous reports save where it is wished to call attention to old defects not yet remedied."

Copies will be sent, as usual, to the Ministry of Health, the Home Secretary, and the County Council.

# A .- Statistics and Social Conditions of the Area.

Area (in Acres)					7,288
Registrar General's			f Res		
Population, 1936					17,420
Number of Inhabited	Houses	(end	of 193	7)	5,012
Rateable Value					£144,834
Sum represented by	a Penny	Rate		£54	48 10s. 5d.

Public Health Officers of the Authority.

(a) Medical-Medical Officer of Health:

C. R. P. Mitchell, M.D. (part-time).

Superintendent of the Isolation Hospital:

J. B. Jessiman, M.D. (part-time).

(b) Others—Sanitary Inspector and Inspector under Housing
Acts:

Hugh L. Whitwham, M.S.I.A., Cert. of R. San. Inst., and Sanitary Inspectors' Examination Joint Board as Sanitary Inspector; Cert. of R. San. Inst. as Inspector of Meats and Foods.

Additional Sanitary Inspector:

R. E. Williams, Cert. of R. San. Inst. and Sanitary Inspectors' Examination Joint Board; Cert. of R. San. Inst. as Inspector of Meat and Foods.

Veterinary Surgeon:

B. Secker, M.R.C.V.S.

#### SOCIAL CONDITIONS.

Malvern is chiefly a residential town and educational centre. In recent years it may be said to have become also a dormitory town, to some extent, for occupants of houses who are engaged in business in other districts.

There are no local industries which could affect the general health of the inhabitants.

Unemployment, I understand, showed some increase over 1936.

#### VITAL STATISTICS.

BIRTH RATE.

165 births were registered in the District as compared with 181 in 1936. There were 15 inward transfers as compared with 29 the previous year. The total live births was 180, and of these 6 were illegitimate. The total still-births were 4. The birth rate was 10.3 per 1,000 of the population.

The figure for England and Wales was 14.9.

#### DEATH RATE.

There were 213 deaths registered in the District, but the number allocated to the District from inward and outward transfers was 255. This is the highest figure I can trace looking over back reports. From 1908 to 1915, the number was anything from 150 to 200, in 1916 it went over the 200 mark, but after the war it dropped back to 170 or so, and from that level has gradually crept up to the maximum last year. I take this to be due to the altered age incidence of the population in a town like Malvern.

The figure given above shows an annual death rate of 14.5 per 1,000 of the population, as compared with 13.4 last year,

and 12.7 for 1935.

In my early days here the residential part of the town was populated by comparatively young parents with children, and their comparatively young grooms and gardeners. This is no longer the case, and for some years I anticipate an increase in the number.

For England and Wales the Death Rate was 12.4 per 1,000 of

the population.

#### DEATHS FRON PUERPERAL CAUSES.

There were no deaths from Puerperal Sepsis or other Puerperal causes.

The principal causes of death, with the corresponding figures

for 1935, are given in the following table:-

			1937.	1936.
Influenza			9	4
Tuberculosis of the Respirator	ry System	m	6	13
Other Tuberculous Diseases			3	2
Cancer, Malignant Disease			34	37
Diabetes			5	1
Cerebral Hæmorrhage, etc.			9	14
Heart Disease			96	77
Other Circulatory Diseases			12	14
Bronchitis			5	6
Pneumonia (all forms)			15	6
Other Respiratory Diseases			2	2
Peptic Ulcer			4	1
Appendicitis			1	3
Cirrhosis of Liver			0	1
Diseases of Liver (other tha	n Cirrho	osis)	1	2
Diarrhœa, etc (under 2 years			0	0
Other Digestive Diseases			2	5
Acute and Chronic Nephritis			7	13
Congenital Debility, Prema	ture Bir	rth,		
Malformations, etc			12	7
Senility			1	2
Suicide			4	6
Other Violent Deaths			2	3
Other Defined Diseases		***	21	21
Causes Ill-defined or unknown			1	1
Syphilis	***		1	0

Infantile Mortality.

16 infants under 1 year belonging to the district died during the year, and the resultant Infantile Mortality was 88.8 per 1,000 births registered. There were no deaths of Illegitimate Infants. The Infantile Mortality figure for England and Wales was 58.

Deaths from Cancer numbered 34 as against 37 last year.

There were no deaths from Measles, Whooping Cough, or Diarrhœa (under 2 years of age).

There was no unusual or excessive mortality requiring comment.

In the early months of the year the Influenza epidemic which had appeared in a mild form at the end of 1936, continued to spread and became much more virulent.

A number of the National Schools required closure for "Influenzal Colds," but I had experience of a number of healthy men who were thoroughly debilitated for many weeks by true Influenza. So far as adults were concerned the main symptoms were fever and intense headache, and an absence of respiratory symptoms.

The great majority of Influenzal Pneumonia notifications were of children.

The excessive rainfall in the early part of the year did not appear to have an ill effect on the health of the population.

There was no evidence that unemployment exercised any significant influence on the general health.

#### B.—General Provisions of Health Services for the Area.

- (a) Laboratory facilities are unchanged.
- (b) Ambulance Facilities: Conditions remain as detailed in previous Reports.
- (c) There are five voluntary Nursing Associations in the District, as follows:—

Malvern and Malvern Wells.

Christchurch.

Malvern Link.

North Malvern.

West Malvern.

Up to last year these associations have worked independently and each has provided a District Nurse. The Midwives' Act, 1936, came into force during the year and a meeting of four of the Nursing Committee was held in the Spring. The County Medical Officer kindly attended and briefly outlined the scope of the Act in that the services of a duly qualified midwife should be available for every mother in England and Wales who require such services.

It was agreed that West Malvern should be excluded from any scheme owing to its position.

The services of two qualified Midwives were the number he considered would be required for the number of Births in this District.

If the District Nursing Associations could not agree to provide such services, it would be necessary for the County Council to install that number, when, of course, the Maternity Grant would

be withdrawn from the Associations.

Great Malvern and Christchurch Associations agreed that Nurse Brown, of Great Malvern, should act as Midwife for the combined districts, and Nurse Kendrick, of Christchurch, should help in the first-named area. So far as I am aware up to the present there is no reciprocity between Malvern Link and North Malvern; the former has a full time Midwife and a District Nurse, while the latter continues with a Nurse Midwife.

[I understand an amalgamation was agreed to early in 1938.]

(d) Malvern Maternity and Infant Welfare Association. During the year Miss M. Wookey, who had been Superintendent for three years, resigned, having been elected to the post of County Organiser of the Midwives' Institute. Miss W. M. Slight, with highest testimonials from York and Newcastle, was elected to take her place.

# C .- Sanitary Circumstances of the Area.

1 (a) WATER.

Conditions remain as stated in previous Reports.

Samples are sent to the County Laboratory for Chemical and

Bacteriological Examination.

Mr. W. Osborne Thorp informs me that samples are sent to the laboratory periodically. Average Reports are given as follows:—

#### MALVERN WATER.

	AATT TALL	
ŀ	Red Sandstone Supply.	Hill Supply.
	Parts per 10	00.000,
Solids in Suspension	None	None
Solids in Solution at 100°C	15.0	6.0
Solids in Solution, appearance	White	White
Solids in Solution after ignition	12.0	. 12.0
Behaviour of Solids on ignition	No change	No change
Phosphates	Nil	Nil ·
Chlorine as Common Salt	2.2	1.9
Free and Saline Ammonia	0.0008	0.0008
Albuminoid Ammonia	0.008	0.001
Oxygen absorbed in 4 hours	0.004	0.006
Nitrogen as Nitrates	Trace	Nil
Colour	Clear	Clear
Deposit	None	None
Smell	None	None
Hardness-Permanent	8 Clark	2.5 Clark
Temporary	2 Clark	0.8 Clark
Total	10	3.3

Agar at 37° (2 days)

Bacterial Examination.

10 per 1 M.L.

O per 1 M.L.

1 per 100 M.L.

The water is of good quality and fit for drinking purposes.

# (b) Drainage and Sewerage.

During the year the extension of the sewer in the Guarlford half of the area was completed, and all the sewage is now being pumped back to the Barnards Green Sewerage Works.

The water carriage system of drainage is practically universal in the District.

- (2) RIVERS AND STREAMS. There are none in the District.
- (3) (i.) CLOSET ACCOMMODATION. No change from previous Reports.
- (ii.) Public Cleansing.Conditions remain as detailed in previous Reports.
- (iii.) Sanitary Inspection of Area. See Mr. Whitwham's Report on page 15.

# (iv.) Shops.

For the details and administration of these Acts, see the Report of your Inspector.

# (v.) Smoke Abatement.

No action has been taken under this heading, but one or two warnings have been sent.

# (vi.) Swimming Baths and Pools.

The Public Swimming Bath in Priory Park has a chlorinating plant, and I understand from Mr. Thorp that the result of examinations of samples of the water taken has been satisfactory. The Bath is unheated.

I should like to see provision made for warm Shower Baths for those about to enjoy the Swimming Bath, but it seems that the cost of these amenities is too much, considering the low cost of admission to the Bath.

There are some six or seven Swimming Baths belonging to Schools in the District, of which I have no information.

# (vii.) Eradication of Bed Bugs.

See Mr. Whitwham's Report.

## (4) Schools.

Town water is laid on to all the Elementary Schools in the District, and all are connected with the sewerage system.

There is no Secondary School in the District.

The health of the children was good on the whole, save for the widespread epidemic of Influenzal colds in the first quarter mentioned previously.

The following schools required closure:-

- Malvern Wells Parochial School, from January 21st to January 27th.
- Great Malvern Parochial School, from January 26th to February 5th. Certificate for decreased attendance in mixed department, February 11th.
- Great Malvern Council School (Infants' Department), from January 26th to January 29th.
- West Malvern C. of E. School, from January 27th to February 3rd.
- Malvern Link Council School, from February 1st to February 5th.
- North Malvern C. of E. School (Infants' Department), February 1st to February 5th. The above all on account of Influenzal Colds.
- Malvern Link Parochial School, from June 25th to July 9th, on account of Measles.
- Malvern Link Council School (Infants' Department) had a certificate for decreased attendance for the week ending March 18th, owing to Mumps.

# D .- Housing.

Mr. Whitwham, your Housing Officer, has furnished me with the following particulars as required in the schedule:—

# I.—Inspection of Dwelling-Houses during the Year.

- (1) (a) Total of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ... ... ... 285
  - (b) Number of inspections made for the purpose ... 1,402
- (2) (a) Number of dwelling-houses (included under subhead (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 ... 122
  - (b) Number of inspections made for the purpose... 950

1	(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation
119	(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation
CE OF	II.—Remedy of Defects during the Year without Servi
	FORMAL NOTICES.
46	Number of defective dwelling-houses rendered fit in con- sequence of informal action by the Local Authority or their Officers
₹.	III.—Action under Statutory Powers during the Year
	(a) Proceedings under Sections 17, 18 and 23 of the Ho Act, 1930.
0	(1) Number of dwelling-houses in respect of which notices were served requiring repairs
- 0	(2) Number of dwelling-houses which were rendered fit after service of formal notices:-  (a) By Owners
0	(b) By Local Authorities in default of Owners
	(b) Proceedings under Public Health Acts.
0	(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied
	(2) Number of dwelling-houses in which defects remedied after service of formal notices:—
0	(a) By Owners
0	(b) By Local Authority in default of Owners
using	(c) Proceedings under Section 19 and 21 of the Ho Act, 1930.
12	(1) Number of dwelling-houses in respect of which Demolition Orders were made
12	(2) Number of dwelling-houses demolished in pursuance of Demolition Orders

1930.	(d) Proceedings under Section 20 of the Housing Act,
0	(1) Number of separate tenements or underground rooms in respect of which Closing Orders determined, the tenement or room having been rendered fit
0	(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit
	IV.—Housing Act, 1930. Overcrowding.
16	(a) (1) Number of dwellings overcrowded at the end of the year
17	(2) Number of families dwelling therein
120	(3) Number of persons dwelling therein
3	(b) Number of new cases of overcrowding reported during the year
21	(c) (1) Number of cases of overcrowding relieved during the year
154	(2) Number of persons concerned in such cases
0	(d) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for abatement of overcrowding
0	(e) Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report

# E.-Inspection and Supervision of Food.

#### (a) MILK SUPPLY.

The 27 dairy farms in the District have been inspected during the year by myself and your Inspector. The average number of cows in the farms, I would put at about 15, so a considerable amount of milk is brought into the District.

Conditions in the dairying trade have improved very much since I became your Medical Officer of Health thirty years ago.

Accredited Milk is produced at nine out of the total number of twenty-seven farms in the District.

A certain number of the sheds are old, like other structures in Malvern, and the owners are not sufficiently well off to modernise them.

# (b) MEAT AND OTHER FOODS.

The 13 Private Slaughterhouses have been visited by myself and your Inspectors throughout the year. As mentioned in previous Reports thorough meat inspection under existing conditions is impossible.

More animals are killed in the Worcester Abattoir and conveyed here as cold meat, but still occasionally one comes on a bruise on the flank on a half-side caused by a driver's stick. However, to-day most of the living animals are conveyed to their ultimate destination by motor transport.

Details of the amount of meat condemned is given in the Report of your Chief Inspector which follows.

# (c) Adulteration.

The Police are the Authority under these Acts.

- (d) Chemical and Bacteriological Examination of Food.

  The County Laboratory at Worcester is available.
- (e) Nutrition.—Dissemination of Knowledge.
  The lectures given at the Infant Welfare Centre certainly help.

# (f) Shell-Fish (Molluscan).

It is superfluous perhaps to state that in the district there are no shell-fish beds.

# F .- Prevalence of and control over Infectious and other Diseases.

As stated above Influenza was the main cause of school closure during the year. There was no epidemic of notifiable Infectious Disease; nor did I learn of any extensive outbreak of non-notifiable Diseases, as these would have been reported by the Head-teachers.

26 cases of Pneumonia were notified, labelled chiefly as Influenzal, and 15 deaths were registered.

# NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR, 1937.

#### SMALL-POX.

No case of this disease was notified.

#### SCARLET FEVER.

Four cases were notified and were treated in your Hospital. Two were notified in July and two in August.

#### DIPHTHERIA.

Six cases were notified and four were treated in your Hospital. The monthly incidence was—August, 1; October, 2; November, 1; December, 2.

Of the six, three were from an Institution, and three others from various private institutions, therefore the town actually was free from Diphtheria.

#### ENTERIC FEVER.

No case of Typhoid or Para Typhoid Fever was notified during the year.

#### PUERPERAL FEVER.

No case was notified.

#### PUERPERAL PYREXIA.

One case was notified. This was a mild case and made a good recovery.

#### PNEUMONIA.

26 cases were notified and 15 deaths were registered. Nearly all were notified in the early months of the year when Influenza was epidemic in the District. The monthly incidence was as follows:— January, 8; February, 8; March, 6; May, 2; November, 1; December, 1.

#### ERYSIPELAS.

Seven cases were notified as follows:—January, 2; April, 1; June, 1; October, 1; December, 2. The incidence is rather unusual. There was no death from Erysipelas.

#### Acute Poliomyelitis.

One case was notified. This case was treated at the Malvern Hospital first as an in-patient and then attended for massage. When he left the district there was still weakness in both legs.

#### OPHTHALMIA NEONATORUM.

Three cases were notified. All recovered without any impairment to sight.

#### PREVENTION OF BLINDNESS.

No action has been taken under Section 66 of the Public Health Act, 1925.

#### Tuberculosis.

No action has been taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or under Section 62 of the Public Health Act, 1925.

10 cases of Pulmonary Tuberculosis and 12 of Non-Pulmonary Tuberculosis were notified during the year.

Four cases received Sanatorium treatment during the year.

The new cases are set out in age groups below:

Age			w Cases			Dea	ths.	
Periods	Pulmo	nary	Non-Pul	monary	Pulm	onary	Non-Pul	monary
0	-	-	1	-	-	-	1	-
1	-	-	1	-	-	-	-	-
5	-		2	1	-	-	-	-
15	1	2	1	2	-	-	-	1
25	1	1	-	1	1	1	-	-
35	-	1	-	1	2	2	-	-
45	-	1		-	-	1	-	-
55	-	2	2	-	-	-	1	-
65 & Upwards	-	-	-	-	-	-	-	_
	-	_	_	_	_	_	_	-
	2	7	7	5	3	4	2	1

The Meteorological Report by your Surveyor, Mr. W. Osborne Thorp, and the statistics taken under his supervision, will be found on the last page of this Report.

I remain, Ladies and Gentleman,

Your obedient servant,

C. R. P. MITCHELL.

SANITARY INSPECTOR'S OFFICE,

PUBLIC HEALTH DEPARTMENT,

THE COUNCIL HOUSE,

MALVERN,

May, 1938.

# To the Chairman and Members of the Malvern Urban District Council.

Ladies and Gentlemen,

I have the honour to present to you my sixth Annual Report as your Sanitary Inspector and Housing Officer, dealing with work undertaken during the year 1937.

The completion of the sewerage scheme in the Guarlford and Sherrards Green districts brought into being a much needed amenity to these parts of the added area, inasmuch that sanitary and housing administration occupied the attention of the department during the greater part of the year under review. By the end of the year the majority of cesspools and drainage discharging into ditches were abolished, and new drains from houses were laid or existing drains reconstructed and connected to the sewer. The houses scheduled as unfit were dealt with relative to the sewerage scheme, being carried out, with the resultant achievement of improved standards.

In accordance with the requirements of the Ministry of Health and the Home Office, tables giving full particulars of the inspections made, together with notes thereon, will be found in the report.

The total number of inspections and visits was 2,887; full details are shewn in the appended list.

# Summary of Visits and Inspections.

Miscellaneous			2 51
Smoke Observations			56
Rat Infectation	***		23
Special Visits, Advisory Interviews, e Visits re Infectious Disease		***	243
,, Public Conveniences	***	***	13
,, Public House Convenie	nces		6
,, Fish Friers' Premises			5
,, Food Shops			7
,, Dairies, Cowsheds and	Milksho	ps	94
,, Stables and Piggeries			5
" Butchers' Shops			37
" Slaughterhouses			194
,, Restaurant Kitchens	***		3
,, Shops			9
,, Bakehouses		1	54
,, Outworkers' Premises			11
,, Workshops			63
,, Factories	565		42
,, Common Lodging Hou			12
Inspections of Dwelling-houses re Ove	ercrowd	nor	270
Re-Inspections		***	347 603
House to House Inspections Works in Progress	***	***	122
Houses Inspected, Housing Act			16
Re-Inspections			194
Works in Progress			258
Houses Inspected, Public Health Ac	ts		147

# Total 2,887

# Complaints.

The Register shows that 61 complaints were received during the year under review, these having reference to the following matters:—

Blocked and Defective Drainage		. 5
Defective Closet Accommodation		2
Insanitary Conditions of D. W.		
Insanitary Conditions of Dwelling-houses		14
Smells from Public Sewers		7
Smells from Drains		6
Accumulations of Offensive Metter		3
No Watter	***	
Non-collection of House Refuse		3
Verminous Premises		
Miscellaneous		
Miscellaneous		6

Where a nuisance or defect was found to exist, steps were taken to remove the cause of the complaint by drawing the attention thereto of persons responsible, by letter or interview, a procedure which has generally been effective.

# Summary of Sanitary Improvements carried out. Drainage and Sanitary Fittings.

Number of Houses and Premises Re-drained .	32
	22
Drains or Gullies Unstopped or Cleansed	2
	1,340
Length in Yards of Heavy Cast-iron Drains La	id 203
	76
	9
Intercepting Traps Fixed	23
	4
New Gully Traps Fixed	2
Gully Curbs Provided or Repaired	13
New Soil Pipes and Ventilating Shafts Provide	
Soil Pipes and Ventilating Shafts Repaired .	4
	704
Smoke Tests Applied	219
Air Tests Applied	4
	22
W.C.s Unstopped, Cleansed or Repaired	13
	14
New Flushing Cisterns fitted W.C.s	11
Joints between W.C.s and Flush Pipes Repaire	
Now Usingle Descided	9
Lavatory Posine Prodict	4
Dat Date	10
New Impervious Sinks Provided Sinks Repaired or Refixed	4
Sinks Penaired or Peters!	12
and the state of t	19
New Waste Pipes Fixed	20
Waste Pipes Trapped, Repaired or Unstopped .	6
W.C. Apartments Cleaned	1
Cocenacia Abatishad	6
Cesspools Abolished	10
Miscellaneous.	
New Roofs	2
Roofs Repaired	. 27
Eaves Guttering Renewed, Cleansed or Repaire	d 13
Rainwater Pipes Provided, Repaired or Unstoppe	d 8
Damp Walls Remedied	. 79
Walls Repointed or Repaired	. 90
Ventilation under Floor Provided	. 1
Yards Paved	. 15
Paving of Yards Repaired	-
Floors of Rooms Relaid	. 19
Floors of Rooms Repaired	. 52
Rooms Cleansed, Distempered or Repapered	. 91

New Windows Provided	244		14
Windows Repaired and/or made to oper	1		34
New Sash Cords Provided			75
Window Sills Repaired or Provided			1
Doors Provided or Repaired			3
Staircases Repaired			4
Workrooms (including Bakehouses) Cle	ansed	and	
Repaired			8
Water Service Pipes Repaired			2
Houses Provided with Water Supply fro			
Main			8
Movable Sanitary Dustbins Provided			64
Accumulations of Refuse Removed			1
Accumulations of Manure Removed			3
New Ranges and Stoves Provided		1	2
Stoves and Ranges Repaired			15
Food Stores Provided			1
Washing Coppers Repaired			10
Verminous Rooms dealt with			2

### Housing.

The Housing Consolidated Regulations, 1925 and 1932, require the Local Authority to make provision for a thorough Inspection to be carried out, from time to time, of the dwelling-houses in their District. The chief object of the inspections is to ascertain the state of the houses in relation to the following matters:—

- The arrangement for preventing the contamination of the water supply.
- (2) Closet accommodation.
- (3) Drainage.
- (4) The condition of the house in regard to light, the free circulation of air, dampness and cleanliness.
- (5) The paving, drainage and sanitary condition of any yard or outhouses belonging to or occupied with the house.
- (6) The arrangements for the storage of refuse.
- (7) The existence of any room which by virtue of subsection (1) of Section 18 of the Housing Act, 1925, be a house unfit for human habitation. (This section refers to basement dwellings.)
- (8) Any defects which tend to render the house unft for human habitation.

Proper records have to be made containing information as to the state of the house, the action taken to secure the remedy of any defects, and the result of such action.

The making of systematic house-to-house surveys is a work of considerable importance. It results in many houses being prevented from becoming unfit for human habitation, and enables Local Authorities to enforce a reasonable standard of fitness.

122 houses situated in Lower Quest Hills, Malvern Link; Yates Hay Road, Malvern Link; Spencers Walk, Malvern Link; Link Top, Malvern; and Lower Chase Road, Malvern, were inspected and recorded under the Regulations, during the year 1937.

As a result of the inspections made during 1937, the following summary of unsatisfactory conditions has been compiled:—

Uncleanly Conditio	ns					3
Dampness						33
State of Repair						73
Drainage						19
Closet Accommoda						17
Paving or Sanitar	y Con	dition	of any	Yard	or	
Outbuilding						5
Any defect in other	er matt	ers wh	nich ma	ay tend	to	
render the I	Dwellin:	g-house	e dang	rerous	or	
injurious to th	e Inha	bitants				19
Means for the disp	osal of	Hous	e Refus	se		82

# Houses Unfit for Human Habitation.

INDIVIDUAL HOUSES.

Representations were made in respect of fourteen individual houses, found to be unfit for human habitation and not capable of being rendered fit at a reasonable expense.

Undertakings by owners to carry out works in order that Demolition Orders should not be made were accepted in respect of the following properties:—

> Nos. 1, 2, 3, 4, Halls Cottages, off Peachfield Road, Malvern Wells.

Demolition Orders were made in respect of the following houses:—

Lashford Cottage, Guarlford Road, Malvern.
Jessamin Cottage, Guarlford Road, Malvern.
Three Cottages near Old Elm, Guarlford Road, Malvern.
Yew Tree Cottage, Guarlford Road, Malvern.
Vine Cottage, Guarlford Road, Malvern.
Honeysuckle Cottage, Guarlford Road, Malvern.
Ivy Cottage, Guarlford Road, Malvern.
16, 17 and 18, Mill Farm Cottages, Poolbrook, Malvern.

The following Dwelling-houses were demolished:-

1, 2 and 3, Hope Cottages, Pound Bank Road, Malvern. 1 and 2, Lamb Cottages, Lower Road, West Malvern. Hillcot, Victoria Road, Malvern Link.

Three Cottages near Old Elm, Guarlford Road, Malvern.
16, 17 and 18, Mill Farm Cottages, Poolbrook, Malvern.
Ivy Rock Cottage, Spring Cottage, and Laburnum Cottage, Happy Valley, Malvern.

The last-mentioned being three cottages constituting Clearance Area No. 2, 1935.

Housing (Rural Workers) Acts, 1926-1931.

These enactments are administered by the County Council in co-operation with the Councils of the County districts. The provisions of the Acts are brought to the notice of owners of property suitable for reconditioning and improvement. In many cases much time has been spent in consultation with owners and builders, and in the preparation of schemes for reconstruction work. It seems, however, there is a reluctance on the part of owners to make application for financial assistance on account of the restrictions which are imposed affecting the future letting of the houses, and from experience in this district it is clearly indicated the scope of the Act is limited to the "Tied Cottage." During the year under review a scheme was accepted in respect of a terrace of four houses falling under this category, known as Hall's Cottages, and situated off Peachfield Road, Malvern Wells. The work was carried out in a most efficient manner and completed by the end of the year. Apart from general structural repairs, including the insertion of damp-proof courses in all existing walls, the scheme provided additional accommodation to each cottage in the form of bedroom, scullery, larder, proper drainage, separate W.C. apartment, sink, water supply, coal store, and proper paving to footpaths and yard.

# Overcrowding in Dwelling-Houses.

The number of families found to be overcrowded as a result of the Survey carried out during 1936 was 37. This figure was, however, reduced to 16 by the end of 1937, 3 of these being cases discovered during the year by revisitation, which is carried out at half-yearly intervals, to dwelling-houses found at the time of the initial survey to be occupied to capacity, and indication of possible overcrowding is shewn on the record cards due to the increase in ages of children.

The first day of June, 1937, was the appointed day by which rent books must contain a summary of certain provisions of the Housing Act, 1936, and a statement of the "Permitted Number" of persons who may sleep in the house.

Despite the wide publicity given to this requirement, the number of requests from property owners and agents for information as to the permitted number of persons in relation to dwellinghouses in their control has been relatively poor.

These particulars, together with other information, are now being forwarded in all instances where application has not been made, though owing to the limited clerical staff of the Department full attention cannot be given to the work.

#### Common Lodging House.

12 inspections were made at the Common Lodging House, which is situated in Belmont Road. It was not found necessary to report any breach of the Byelaws, and it has been perfectly free from Infectious Disease.

#### Drainage and Sanitation.

During the year under review 32 houses were entirely redrained, and the drainage systems of 25 houses were partially reconstructed.

For the purpose of keeping records in connection with houses and premises redrained, plans drawn to scale are prepared, together with a report shewing full particulars of the work carried out.

#### Infectious Disease.

The total number of patients sent to your Isolation Hospital during the year was 13, and the following is a summary of the cases admitted:—

#### From this District:

Scarlet Feve	er				4
Observation	Scarlet Fev	er			3
Diphtheria					4
Observation	Diphtheria		***		2
					-
			-	Γotal	13

9 of these cases were admitted as paying patients in accordance with the scale of charges made.

The usual steps have been taken for preventing the spread of Infectious Disease, and investigations were made under the direction of your Medical Officer, and disinfection of the homes and clothing of infected persons have been carried out.

#### Disinfection and Disinfestation.

The number of houses fumigated is 44; 43 loads of bedding, clothing, etc., were removed to your Hospital for disinfection;

and 8 lots of bedding, etc., have been destroyed.

The extermination of bed bugs from 10 dwelling-houses was undertaken by the staff of the Department during the year. This work is carried out by an employee of the Council under the direction of one of your Inspectors. The use of Insecticide Solutions is the chief method employed, though in certain cases fumigation by Sulphurdioxide has been efficacious. Bedding and articles of clothing are removed to the Isolation Hospital and treated in the steam disinfector.

Revisits at frequent intervals are made to premises dealt with, and the occupiers are earnestly requested to communicate with the Department in the event of re-appearance of vermin.

#### Factory and Workshops' Act, 1901.

The provisions of the Factory and Workshops' Act, 1901, which your Council has to administer, chiefly relate to the following matters:—

- (1) (a) Cleanliness.
  - (b) Air Space.
  - (c) Ventilation.
  - (d) Drainage.
  - (e) Provision of Sanitary Conveniences for both sexes.
- (2) The provisions of means of escape in case of fire in Factories and Workshops in which more than 40 people are employed.
- (3) Sanitary Regulations for Bakehouses.
- (4) Homework.

The following table shows the list of Factories, Workshops and Workplaces on the Register:—

Furnishers	and	Uphols	terers		 5
Ironmonge	rs and	Tinsn	niths		 5
Bakehouses	5		***	***	 22
Dressmake	rs and	Millir	ners	4.07	 8
CD 'II					 5
Builders, et	tc.				 18
Shoemaker	s and	Repair	rers		 13
Garages					 26
Laundries					 5
Restaurant					 3
Various					 24

The number of inspections made of Factories, Workshops and Workplaces are as follows, the table being in accordance with the requirements of the Home Office:—

		Number of	
Premisks (1)	Inspections (2)	Written Notices (3)	Occupiers Prosecuted (4)
Factories (including Factory Laundries) Workshops (including Workshop	66	1	-
Workplaces (other than Outworkers'	93	1	-
premises)	-	_	_
Total	159	2	_

Defects found in Factories, Workshops and Workplaces are as follows:-

	ects	No. of Offences
Remedied	Referred to H.M. Inspector	in respect to which Prosecu- tions were instituted
(3)	(4)	(5)
7		
-	_	
_		_
	1	
-	_	_
8		
_		
15		
	15	15 –

#### Shops Act, 1934.

The provisions of the Shops Act, 1934, which your Council are required to administer, relate to the arrangements for Health and Comfort of Shop Workers; these requirements are set out in Sub-sections (1) and (2) of Section 10 of the Act, and deal with provisions relating to ventilation and temperature in shops, and to sanitary arrangements.

# Summary of Sanitary Improvements carried out.

Additional Sanitary Accommodation	on 1
Flushing Cisterns Repaired	1
Lavatory Basins Fixed	1

# Inspection and Supervision of Food.

#### (a) MILK SUPPLY.

There are now 27 Cowkeepers on the Register, of whom 19 are also Retailers of Milk In addition, there are 16 Retail Purveyors of Milk who are not Cowkeepers.

26 Dairymen are on the Register of Retail Purveyors of Milk whose premises are situated outside the Malvern Area.

During the year 94 inspections were made of dairies and cowsheds; early morning visitation to ascertain conditions at the time of milking again proved satisfactory.

From time to time joint visits were made by your Medical Officer and Inspector. Requests for cleansing and limewashing of cowsheds and the removal of accumulations of manure from foldyards were made in four instances.

Representations are still being made by the Department to milk producers and dairymen whose premises are below the standards laid down in the Milk and Dairies Orders; and it is gratifying to record that progress indicated in last year's report has been maintained. A range of new cowstandings were installed at Newland Grange Dairy, where improvements were also made for cold storage of milk in the dairy; and a new dairy complete with sterilising equipment was constructed at the Malvern Link Dairy, Wedderburn Road, Malvern.

The distribution of milk within the district generally is good, though a few retailers continue to use vehicles which are not properly constructed or adapted for the purpose for which they are being used and are therefore very difficult to keep clean.

Some improvement in the legislation affecting this would be of considerable help in administration.

THE MILK (SPECIAL DESIGNATIONS) ORDER, 1936.

Accredited Milk is now produced at nine farms, and Tuberculin Tested Milk at one farm, under licence by the County Council.

Four Retailers were granted Supplementary Licences under the above Order, two being Accredited, one Tuberculin Tested, and one for Pasteurised Milk.

At the request of the County Council, 45 samples of Tuberculin Tested Milk, 41 of Accredited Milk, and 1 on new milk, were obtained and delivered to the County Analyst for Bacteriological Examination.

(b) MEAT AND OTHER FOODS.

# Slaughterhouses.

There are 13 private slaughterhouses in the District. These are situated in widely different parts, and it is difficult to carry out efficient routine inspection. The attempt made during 1936 to introduce systematic meat inspection at the time of slaughter was continued; it has been found, however, on account of the reasons stated in the previous paragraph, this most important work cannot be carried out with real satisfaction.

# Butchers' Shops.

The Butchers' Shops in the District, to which some 37 visits were made, were found to be in a clean and satisfactory condition. Modern refrigerating equipment is practically universal throughout the District.

# Slaughter of Animals' Act, 1933.

Under the provisions of this Act 21 Licences were re-issued to slaughtermen and 6 new Licences were granted.

The operation of the Act, which relates to the stunning of all animals, including sheep, by means of mechanically operated instruments, prior to slaughter in a slaughterhouse, was not new to Malvern, as this was enforced under the Council's Byelaws relating to Slaughterhouses.

## Unsound Food.

The following articles of diseased or unsound food have been condemned and destroyed as being unfit for human consumption:

Meat ... ... ... 2cwts. 2lbs.
Tinned Foods ... ... 1 6lb. tin of Corned Beef

#### Summary of Diseased Meat.

Carcases and organs affected with Tuberculosis:-

		BE	EF.		
Heads and	Tongu	ies		 	3
Lungs				 	1
Hearts				 	1
Livers				 	1
Mesenterie	S			 	1
Miscellane	ous par	rt Car	cases	 	14 lbs.
		Po	PRK.		
Carcases a	nd Org	gans		 	1
Heads				 	1
Lungs			***	 	1
Hearts				 	1
Livers				 	1

MISCELLANEOUS UNSOUND MEAT AND FOODS.

Parasitic Diseases:

Bovine Livers	 	 	1
Sheep's Livers	 	 	7

#### Extension of Urban Boundaries.

To ascertain the sanitary circumstances of the Districts taken over as a result of the extension of the Urban boundaries in April, 1932, the Survey involving house-to-house visitation was continued, and during the year reports were made to the Public Health Committee on the conditions prevailing in various parts of the added area.

The sewerage scheme in the Guarlford and Sherrards Green districts was completed during the year, and the majority of houses, drainage from which discharged into cesspits and ditches, were either redrained or existing drains amended and connected to the sewer.

The work undertaken last year in dealing with unfit houses situated in this part of the district was continued, and the worst of the houses scheduled were demolished.

# Rats and Mice (Destruction) Act, 1919.

The number of cases of alleged infestation received during the year was 75. The most serious of these concerned the persistent infestation by rats in food shops situated in the lower part of Worcester Road, Malvern Link. It was later found that the premises were being undermined by rat workings which could be traced to an old brick culvert passing beneath the foundations of the shops. These facts were reported to the Health Committee, and on the recommendation of the Surveyor it was agreed that the culvert should be replaced by a piped conduit as soon as circumstances would permit the work to be undertaken.

Complaints are systematically dealt with, and re-visits made where necessary to ensure that steps have been taken to prevent further infestation. Throughout the year packets of a preparation of Red Squill in the form of biscuits may be obtained upon application to the Department.

The unsatisfactory manner in which household refuse is kept pending collection, and as mentioned in last year's report, poultry-keeping adjacent to dwellings, together with the storage of garden produce such as apples and potatoes in sheds or outbuildings not proof against rats, are the chief causes of complaint. Much could be done by the householder to prevent infestation if these matters were given proper care and thought.

A local campaign was again carried out during the week fixed as National Rat Week by the Ministry of Agriculture and Fisheries, when every endeavour was made to make known the provisions of the Rats and Mice (Destruction) Act, 1919, and the objects of a "national campaign" in the destruction and repression of rats and mice.

Publicity by means of posters, handbills and Press notices formed the initial stages of the operations. Circular letters, leaflets and copies of the Bulletin No. 30, issued by the Ministry, were sent to the occupiers of farms, business premises, and to the principals of the colleges and schools within the District.

The new sound film, "Your Enemy The Rat," kindly lent by the Ministry, was projected at the Malvern Picture House during the week previous to Rat Week.

# Legal Proceedings.

It was not necessary to institute legal proceedings during the year.

#### Conclusion.

I am indebted to Dr. Mitchell for his kind co-operation in all matters, and this I gratefully acknowledge.

My thanks are again due to the Staff for their keen interest and loyal support in the work of the Department. I have pleasure in recording the success of Mr. R. E. Williams in obtaining the Certificate of the Royal Sanitary Institute as Inspector of Meat and Other Foods.

My thanks are also due to the Chairman and Members of the Public Health Committee for their support and consideration during the year.

> I am, Mr. Chairman, Ladies and Gentlemen, Your obedient servant,

> > HUGH L. WHITWHAM.

#### MALVERN METEOROLOGICAL STATION.

The year 1937 was distinguished by the five consecutive wet months from January to May, the coldness of March, and the six successive dry months, June to November, and also the record dryness of August and the large amount of sunshine, 223½ hours, during that month. The year as a whole, however, was deficient in sunshine, the total of 1,452.5 hours being 60 hours below the average. There was very little snow, Malvern escaping the heavy falls to the North about March 12th and to the South on December 7th, and very little fog was recorded. Rainfall totalled 761 M.M. (29.96 inches), or 1.37 inches below the average.

January had a mean temperature of 41.4 degrees, being 1.2 above the average, the only really cold spell being on the 28th and 29th, there being a fall of snow on the 30th which quickly melted. Rainfall was 22 M.M. above the average, and the sunshine was 9 hours below the average.

February also had a mean temperature well above the average by 3 degrees. Rainfall was unusually heavy for this month, being 60 M.M. above the average, 25 M.M. (one inch) falling on the 7th, but sunshine equalled the average.

March was cold and rather wet and dull. Temperature was 3.6 degrees below the average, with a cold spell between the 5th and 11th. Slight snow showers fell on the 5th, 8th, 9th, 11th, 22nd and 23rd. Thunder occurred on the 11th and 18th. Sunshine was 6 hours below the average.

APRIL was a warm, dull month with rainfall just above the average. Temperature 3.3 degrees above normal, rainfall 3 M.M. above average, and sunshine 43 hours short of the expectation.

May was an average month, temperature being 1.3 degrees above average, with rainfall 7 M.M. above average. Sunshine was 15 hours above the normal. Slight thunderstorms occurred on the 3rd and 25th.

June was a warm, dry month, but deficient in sunshine, temperature being 2.3 degrees above the average, 80 degrees being recorded on the 11th. Rainfall was 17 M.M. less than normal, and sunshine was 28 hours short of the average. A slight thunderstorm occurred on the 10th instant.

July would have been a dry month had it not been for a severe thunderstorm on the 15th instant, when 35 M.M. (1.4 ins.) of rain fell, and the total was 10 M.M. below the average. Temperature was 1.3 degrees above the average and had the highest maximum temperature of 81 degrees on the 3rd, with the lowest maximum temperature of 60 degrees on the following day, a drop of 21 degrees. Sunshine was the poorest for 17 years and 51 hours below the average.

August was very warm and dry. Temperature was 4.2 degrees above the average, four days shewed 80 degrees or over (84 degrees on the 6th), and 22 days with a maximum of 70 degrees or over. Rainfall was only 11 M.M., or 70 M.M. below the average, and the dryest August since records began. No rain fell from the 16th to the 31st. Sunshine was 57 hours above the average and the sunniest August since 1919.

SEPTEMBER was rather warm, the temperature being 1.9 deg. above the normal. Rainfall was 8 M.M. above the average, this being due to a thunderstorm, with heavy rain of 27 M.M. on the 17th and 12 M.M. on the 18th, otherwise the month was dry with sunshine 25 hours above the average.

October was a dull and mild month. Temperature was 1.8 degrees above the average, rainfall 5 M.M. below the expectation. Scarcely any rain was recorded for the first 21 days of the month, practically the whole amount being recorded in the last ten days. Sunshine was poor considering the long dry spell and was 22 hours below normal.

November was cool and dry. There was a good deal of fog and mist during the first five days, with a complete absence of wind for the first eight days—an unusual record. Temperature was 1.5 degrees below the average, and rainfall was slight with 36 M.M.—just half the expectation. Sunshine was 5 hours above normal.

DECEMBER was rather cold with rainfall below the average and sunshine slightly below normal. Cold weather was general throughout the month till just before Christmas, the last nine days of the month being warmer. Temperature was 2.7 degrees below normal, and rainfall 18 M.M. below average, whilst sunshine was 3 hours below.

Barometric Pressure for the year was below the average, due to low readings in January and February; the reading for the latter month was the lowest since records were begun here.

The hottest day of the year was August 6th with 84 degrees, there being six days with a maximum temperature of 80 degrees or over, and forty-nine days had a maximum temperature of 70 degrees or more. Temperature did not rise above freezing point on only two days.

Rain of .04 inches or more fell on 123 days, occurring on 55 days during the daytime and 68 times during the night. Sunshine was recorded on 299 days, 66 days being sunless.

No severe gales were recorded, and November had 13 calm days and July 10 days.

Humidity at 9 a.m. averaged 80 per cent.

There was no heavy fall of snow during the year.

Mist was recorded on 36 mornings, and ground frost during 62 nights.

WIND SUMMARY.

5 Winter Months and 7 Summer Months.

	WINTER.	SUMMER.		WINTER.	SUMMER.
N.N.W.	 6	13	E.N.E	2	5
N.		17	E	0	0
N.N.E.		5	E.S.E	1	4
N.E.		6	S.E	8	5
	_	_		_	_
	30	41		11	14
	_	_		_	-
S.S.E.	 4	5	W.S.W.	' 4	11
1	 4	18	W	19	20
.s.w.	102	15	W.N.W.	11	16
	 	16	N.W	18	26
	_	_		_	-
	32	54		52	73
	_ `	_		-	-

The number of calm days is a record. The few number of days with Easterly winds in the Winter is particularly noteworthy.

Calm days - 58

# Weather Summary of 9 a.m. Records.

Near   Day   Order   Order	Av. Corrected	1	5-21	RATURE.	Awarana	Rainfall	Wettest	No. of Wet Days.	. 18	Humidity	Bright	Earth To	Earth Temperature.
Degrees         Fahr.         11.2         20         17         86         47.2         40.3           42.8         8.0         114.8         0n.18th         23         21         84         67.7         40.2           38.6         10.3         74.7         0n.16th         19         12         80         1064         38.6           49.3         11.5         58.6         0n.20th         13         12         78         110.6         48.2           54.8         15.3         75.3         0n.10th         12         12         77         207.5         54.4           62.1         12.7         70.6         0n.20th         12         12         77         207.5         54.4           62.1         12.7         70.6         0n.15th         12         7         76         187.5         62.1           64.3         17.4         11.1         0n.12th         4         3         74         223.5         63.8           57.9         14.2         62.5         0n.17th         11         8         77         167.9         88.5         11.9           41.5         9.2         36.1         0n.22th         9 <th>Daily Av</th> <th>2</th> <th>Average.</th> <th></th> <th>Daily Variation</th> <th></th> <th>Day M/M</th> <th>o'2 M/M. or over</th> <th></th> <th>of Atmos</th> <th>Sunshine Hours.</th> <th>1ft. depth</th> <th>4ft. depth</th>	Daily Av	2	Average.		Daily Variation		Day M/M	o'2 M/M. or over		of Atmos	Sunshine Hours.	1ft. depth	4ft. depth
41.4       91       931       on 18th on 18th on 18th on 18th on 18th on 18th on 11th on 19th on 16th on 16th on 16th on 16th on 16th on 16th on 19th on 19t	Degrees	1	Fahr.		Fahr.								
42.8     8.0     114.8     on 7th on 16th on 7th on 16th on 7th on 16th on 7th on 16th on	45.6		36.8	41.4	1.6	1.86	11.2 on 18th	20		98	47.3	40.3	43.2
38.6     10.3     74.7     on 16th of 16th of 12     80     106.4     38.6       49.3     11.5     58.6     on 20th of 12     12     78     110.6     48.2       54.8     15.3     75.3     on 10th of 12th of 12     12     77     207.5     54.4       58.6     15.0     31.1     on 19th of 12th	46.8		38.8	45.8	8.0	114.8	25.5 on 7th	23		84	2.19	40.5	42.2
49.3       IITS       58.6       on 20th on 20th on 20th on 13       12       78       110.6       48°z         54.8       I5T       0n 19th on 19th on 19th on 15th on 15th on 15th on 15th on 15th on 15th on 17th on 12th on 17th on 20Th on 20Th on 18th on 20Th on 18th	43.7		33.4	38.6	10.3	74.7	21'1 on 16th	61		000	1.901	38.6	6.04
54.815.375.3on 11th on 12th on 19th of 12121277207.554.458.615.031.1on 19th on 15th on 15th on 15th on 15th on 12th on 12th on 17th on 2071776130.362:157.914.262.5on 17th on 17th on 20798585:551:941.59.236'1on 27th on 22nd on 27th on 18th	92.0		43.5	49.3	5.11	9.85	ro'9 on 20th	13		78	9.011	48.2	45.2
58.6       15.0       31.1       on 19th on 19th on 15th on 15th on 15th on 15th on 12th on 12th on 12th on 17th on	62.4		47.1	54.8	15.3	75.3	19.2 on 11th			77	207.5	54.4	9.05
62:1       12:7       70:6       35:3       15       7       76       13c:3       62:1         64:3       17:4       11:1       0n 15th       4       3       74       223:5       63:8         57:9       14:2       62:5       0n 17th       11       8       77       167:9       58:5         51:7       9:9       75:0       0n 27th       9       85       85:5       51:9         41:5       9:2       36:1       0n 22th       9       7       87       76:8       43:6         38:0       7:6       58:1       157       16       10       86       47:6       38:1         -       -       76:0       -       160       124       -       1452:5*       -         50:0       11:6       inchess)       -       -       -       -       -       50:0	1.99		1.15	58.6	15.0	31.1	ro.2 on r9th	6	9	70	.18	2.09	0.95
64.3       17.4       11.1       574       4       3       74       223.5       63.8         57.9       14.2       62.5       a.6.9       11       8       77       167.9       58.5         51.7       9.9       75.0       on 27th       9       8       85.5       85.5       51.9         41.5       9.2       36.1       on 27th       9       7       8       76.8       43.6         38.0       7.6       58.1       15.7       16       10       86       47.6       38.1         -       -       761.0       -       160       124       -       1452.5*       -         50.0       11.6       inches)       -       -       -       80       -       50.0	4.89		55.7	1,29	12.1	9.04	35'3 on 15th		7	94	130.3	1.29	58.7
57.9       14.2       62.5       a62.9       11       8       77       167.9       58.5         51.7       9.9       75.0       an 27th       9       85       85.5       51.9         41.5       9.2       36.1       an 22nd       9       7       87       76.8       43.6         38.0       7.6       58.1       15.7       16       10       86       47.6       38.1         -       -       761.0       -       160       124       -       1452.5*       -         50.0       11.6       inches)       -       -       80       -       50.0	73.0	.,	9.55	64.3	17.4	1.11	5.4 on 12th	4	3	74	223.2	63.8	8.09
51.7 9.9 75°0 on 27th 9 9 85 85.5 51°9 41°5 9°2 36°1 on 22nd 9 7 87 76°8 43°6 38°0 7°6 58°1 13°7 16 10 86 47°6 38°1  761°0 - 160 124 - 1452°5* - 50°0 11°6 inches) 80 - 50°0	0.59		8.05	57.9	14.5	9.29	26.9 on 17th	1.1	00	77	67	5.85	2.69
41.5 9'2 36'1 11'8 9 7 87 76'8 43'6  38'0 7'6 58'1 13'7 16 10 86 47'6 38'1  761'0 - 160 124 - 1452'5* -  50'0 11'6 inches) 80 - 50'0	1.9S		76.2	21.1	6.6	75.0	20.7 on 27th	6	6	85	in	51.9	54.6
38.0 7.6 58.1 15.7 16 10 86 47.6 38.1    - 761.0 - 160 124 - 1452.5* - 50.0    50.0 11.6 inches) 80 - 50.0	1.95		36.9	41.5	2.6	36.1	11.8 on 22nd	6	. 7	87	8.94	43.6	6.84
761.0 - 160 124 - 1452'S* - 50.0   1.16 inches) 80 - 50.0	41.8		34.2	38.0	9.4	58.T	13.7 on 1st	91	0	98	47.6	38.1	43.0
50.0 11.6 inches) — — 80 — 50.0	1			L	1	0.192	1	160	124		1452.5*	1	-1
	55.8	4	44.5	20.0	9.11	inches)	1	1	T	80	1	20.0	50.3

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M.T. STEVENS LT.



