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Sanitary Laws of Scotland and Principles of Public Health

BEING A MANUAL FOR COUNTY AND BURGH COUNCILLORS, LEGAL OFFICIALS, MEDICAL OFFICERS OF HEALTH, SANITARY INSPECTORS AND ALL INTERESTED IN PUBLIC HEALTH

BY

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PREFACE

In publishing this Pocket Handbook I have endeavoured to bring together the Sanitary Acts applicable to Scotland, many of which also apply to the United Kingdom. Some of the Acts are printed *in extenso*, others *almost* entire, while from certain Acts only Sections relative to Sanitation have been taken.

A number of the Sections in the various Acts have been the subject of judicial interpretation both in Scotland and England, and accordingly I have thought it useful in the interests of those who are called upon to advise on Sanitary Law to record the decisions on such Sections, and these will be found in the last Appendix (H).

I am hopeful that the Appendixes will be found of considerable value to all who undertake the duties pertaining to health administration. Some of them are more or less technical, and are specially designed for the benefit of those holding public health appointments, and those preparing for such positions.

All the Acts essential for those qualifying as Medical Officers of Health and Sanitary Inspectors are given.

I have to acknowledge my indebtedness to the admirable treatise on the Public Health (Scotland) Act of 1897 by Messrs Patten Macdougall and A. Murray, in so far as it has facilitated cross references in footnotes to that and several other Acts. I have also made quotations from their handbook, which I trust have all been acknowledged. Their work is indispensable to all interested in the public health administration of Scotland.

I have further to tender my thanks to Mr A. J. Louttit Laing, M.A., LL.B., advocate, who kindly undertook the task of preparing the Appendix containing the Court decisions, and who has prepared the index so far as it relates to the Sanitary Laws.

I am only too well aware that many topics of importance in public health have not been referred to. Within the compass of a pocket handbook, such an exhaustive treatment being impossible, I considered it better to deal more or less fully with those subjects I have included.

W. J. B.

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ABBREVIATIONS

Board . . .	Local Government Board.
B.A. . . .	Board of Agriculture.
B.L. . . .	Bye-laws.
B.P.A. . . .	Burgh Police Act, 1892 (unless otherwise stated).
B.S.D. & W.S.A. .	Burgh Sewerage, Drainage, and Water Supply Act.
C.C. . . .	County Council.
C.D.A.A. . .	Contagious Diseases Animals Act.
C.L. . . .	Common Lodging.
C.L.H. . . .	Common Lodging House.
C.M.O.H. . .	County Medical Officer of Health.
C.P. . . .	Cattle Plague.
C.S.I. . . .	County Sanitary Inspector.
C., Y.F., and P. .	Cholera, Yellow Fever, and Plague.
D.C. . . .	District Committee.
D. Com. . .	District Committee.
D.A.A. . . .	Diseases of Animals Act.
F. & D.A. . .	Food and Drugs Acts.
F. & M.D. . .	Foot and Mouth Disease.
F. & W.A. . .	Factory and Workshops Act.
H.W.Cl.A. . .	Housing of the Working Classes Act.
I.	Inspector of L.G.B. and B.A.
I.D.(N.)A. . .	Infectious Diseases Notification Act.
L.A. . . .	Local Authority.
L.Cl.A. . . .	Lands Clauses Act.
L.G. . . .	Local Government.
L.G.A. . . .	Local Government Act.
M.O.H. . . .	Medical Officer of Health.
M.P. . . .	Medical Practitioner.
M.S. . . .	Merchant Shipping.
P.H. . . .	Public Health.
P.H.A. . . .	Public Health Act, 1897 (unless otherwise stated).
P.P. . . .	Pleuro Pneumonia.
P.W.L.C. . .	Public Works Loan Commissioners.
R.P. . . .	River Pollution.
R.P.A. . . .	Rivers Pollution Act.
S.D.D. . . .	Special Drainage District.

S.I.	Sanitary Inspector.
S.J.C.	Standing Joint Committee.
S.S.D.	Special Scavenging District.
S.W.S.D.	Special Water Supply District.
V.	*Vide.*
V.-C.	Vice-Chancellor.
V.I.	Veterinary Inspector.
V.S.	Veterinary Surgeon.

IN DIGEST OF CASES

Scottish

Adam	Adam's Justiciary Cases.
C.C.C.	County Council Cases.
Couper	Couper's Justiciary Cases.
F.	Court of Session Cases (Fifth Series), Fraser.
H.L.	House of Lords Cases (reported in Court of Session Cases).
J.C.	Justiciary Cases (reported in Court of Session Cases).
M.	Court of Session Cases (Third Series), Macpherson.
P.L.M.	Poor Law Magazine.
R.	Court of Session Cases (Fourth Series), Rettie.
S.L.R.	Scottish Law Reporter.
S.L. Rev.	Scottish Law Review.
S.L.T.	Scots Law Times.
A.C.	Appeal Cases, House of Lords.
White	White's Justiciary Cases.

English

Ch.	Chancery.
J.P.	Justice of the Peace.
K.B.	King's Bench.
L.J.Ch.	Law Journal, Chancery.
L.J.K.B.	Law Journal, King's Bench.
L.J.M.C.	Law Journal, Magistrates' Cases.
L.J.Q.B.	Law Journal, Queen's Bench.
L.T.R.	Law Times Reports.
Q.B.	Queen's Bench.
Q.B.D.	Queen's Bench Division.
T.L.R.	Times Law Reports.

NOTE.—*The clarendon figures in square brackets at the end of Sections or Sub-sections denote that in the Digest will be found a decision or decisions bearing upon such Sections or Sub-sections.*

PUBLIC HEALTH (SCOTLAND) ACT, 1897

(60 & 61 VICT. c. 38)

(*As amended by B.D.S. and W. Supply Act*, 1901)

PRELIMINARY

Short Title

1. This Act may be cited as the Public Health (Scotland) Act, 1897.

Extent and Commencement of Act

2. This Act shall extend to Scotland only, and shall come into operation on the first day of January after the passing thereof.

Definitions

3. In this Act the following words and expressions have the meanings hereinafter assigned to them, unless such meaning is inconsistent with the context:

The word "Board" means the Local Government Board[1] for Scotland:

The word "secretary" includes assistant secretary:

The expressions "medical officer of health"[2] and "medical officer" mean a legally qualified medical practitioner appointed by the local authority[3] under the Burgh Police (Scotland) Act, 1892 (55 & 56 Vict. c. 55),[4] or under the Acts[5] repealed by this Act or under this Act:[6]

[1] *v.* § 4, L.G.A., 1894, p. 163. [2] *v.* § 15, *post*. [3] *v.* § 12, *post*.
[4] *v.* § 77, B.P.A., 1892, p. 122. [5] *v.* § 196 and Sch. I., *post*.
[6] *v.* § 52, L.G.A., 1889, p. 159, indicating that a C.M.O.H. or a C.S.I. has no powers under this Act unless the C.C. and any D.C. as L.A. under the P.H. Acts make their services regularly available in the district of the D.Com.

Wherever in this Act the expression "legally qualified medical practitioner" is used, it shall mean a registered medical practitioner qualified, as the case may be:

The expression "sanitary inspector"[1] means a sanitary inspector appointed by the local authority[2] under the Burgh Police (Scotland) Act, 1892,[3] or under the Acts repealed by this Act or under this Act:

The expressions "veterinary surgeon" and "qualified veterinary surgeon" mean a member of the Royal College of Veterinary Surgeons:

The word "clerk" includes acting clerk:

The word "parish" means a parish quoad civilia exclusive of any burgh situated or partly situated therein:

The word "burgh"[4] includes not only royal burgh, parliamentary burgh, burgh incorporated by Act of Parliament, but also any police burgh[5] within the meaning of the Burgh Police (Scotland) Act, 1892: [1]

The word "county" means a county exclusive of any burgh, and does not include a county of a city: [1]

The word "district"[6] means the district of any local authority under this Act: [2]

The expression "district committee"[7] means a district committee under the Local Government (Scotland) Act, 1889, and, subject to the provisions of section seventy-eight, sub-section three, of that Act, as amended by section nineteen, sub-section seven, of the Local Government (Scotland) Act, 1894 (57 & 58 Vict. c. 58), in the case of a county not divided into districts includes a county council:

The word "magistrate"[8] means a magistrate or judge having police jurisdiction under the Burgh Police (Scotland) Act, 1892, or under any general or local Police Act:

The word "decree" or "decern" includes any warrant, sentence, judgment, order, or interlocutor:

The word "premises" includes lands, buildings, vehicles, tents, vans, structures of any kind, streams, lakes, seashore, drains, ditches, or places open, covered, or inclosed, whether built on or not, and whether public or private, and whether natural or artificial, and whether maintained or not under statutory authority, and any

1 *v.* § 15, *post.* 2 *v.* § 12, *post.* 3 *v.* § 75, B.P.A., p. 122.
4 Compare with definition in L.G.A., 1889, § 105, p. 162, and L.G.A., 1894, § 54, p. 166. 5 *v.* § 4 (25), B.P.A., 1892, p. 119.
6 This term has a wider meaning than that in L.G.A., 1889, § 77, p. 161.
7 *v.* § 17, L.G.A., 1889, p. 158, and § 19 (7), L.G.A., 1894.
8 *v.* § 38, B.P.A., 1892, p. 120.

ship, lying in any sea, river, harbour, or other water, or ex adverso of any place within the limits of the local authority:

The word "land" in this Act and in the Acts incorporated herewith as after-mentioned, shall include water and any right or servitude to or over land or water:

The word "ship" includes any sailing or steam ship, vessel, or boat not belonging to Her Majesty or any foreign Government:

The word "street" includes any highway and any public bridge, and any road, lane, footway, square, court,[1] or passage, whether a thoroughfare or not, and whether or not there are houses in such street:

The word "house" means a dwelling-house, and includes schools, also factories and other buildings in which persons are employed:

The word "factory"[2] includes workshop and workplace:

The word "ashpit" means any receptacle for the deposit of ashes or refuse matter:

The expression "knacker" means a person whose business it is to kill any horse, ass, mule, or cattle, not killed for the purpose of the flesh being used as butcher's meat; and the expression "knacker's yard" means any building or place used for the purpose of such business:

The expression "slaughterer of cattle or horses" means a person whose business it is to kill any description of cattle or horses, asses or mules, for the purpose of the flesh being used as butcher's meat; and the expression "slaughter-house" means any building or place used for the purpose of such business:

The word "owner"[3] means the person for the time entitled to receive, or who would, if the same were let, be entitled to receive, the rents of the premises, and includes a trustee, factor, tutor, or curator, and in case of public or municipal property applies to the persons to whom the management thereof is entrusted:

The word "occupier"[4] means in the case of a building or part of a building the person in occupation or having the charge, management, or control thereof, either on his own account or as the agent of another person, and

[1] For definition, *v.* § 4 (10), B.P.A., 1892, p. 118.
[2] Compare with § 149, F. and W.A., 1901, p. 170, where the words "factory" and "workshop" are differentiated as to meaning.
[3] Compare with § 4, B.P.A., 1892, p. 119.
[4] This differs from definition in B.P.A., § 4, 1892, p. 119.

in the case of a ship means the master or other person in charge thereof:

The word "company" includes commissioners:

The expression "author of a nuisance" means the person through whose act or default the nuisance[1] is caused, exists, or is continued, whether he be the owner or occupier or both:

The expression "common lodging-house"[2] means a house or part thereof where lodgers are housed at an amount not exceeding fourpence per night, or such other sum as shall be fixed under the provisions of this Act, for each person, whether the same be payable nightly or weekly, or for any period not longer than a fortnight, and shall include any place where emigrants are lodged and all boarding-houses for seamen, irrespective of the rate charged for lodging or boarding:

The expression "keeper of a common lodging-house" includes any person having or acting in the care and management of a common lodging-house:

The word "cattle" means bulls, cows, oxen, heifers, and calves, and includes sheep, goats, and swine:

The word "dairy" includes any farm, farmhouse, cow-shed, milk store, milk shop, or other place from which milk is supplied, or in which milk is kept for purposes of sale:

The word "dairyman" includes any cow-keeper, purveyor of milk, or occupier of a dairy:

The word "burial" includes cremation:

The expressions "day" and "daytime" mean between nine o'clock in the morning and six o'clock in the evening.

Incorporation of Acts

4. (1) The Lands Clauses Acts, except the provisions thereof relating to the purchase and taking of land otherwise than by agreement, are incorporated with this Act, and for the special purposes[3] hereinafter mentioned the provisions thereof for the purchase and taking of land otherwise than by agreement are incorporated with this Act, but shall only be put in force in manner hereinafter set forth.

(2) Section six and sections seventy to seventy-eight of the Railway Clauses Consolidation (Scotland) Act, 1845 (8 & 9 Vict. c. 33), are incorporated with this Act, and in

[1] *v.* § 16, *post.*

[2] This term differs from "Houses let in Lodgings" in § 72, *post.*

[3] *v.* §§ 144 and 145, *post.*

the said sections for the purpose of such incorporation "the company" shall mean the local authority; "the railway" or "the railway and works" shall mean any works constructed under the powers of this Act; "the construction of the railway" shall mean and include the construction of any works under this Act, or the acquisition of rights and powers to make sewers or to use any sewer; and "lands taken or used for the purposes of the railway" shall mean and include lands, buildings, engines, materials, or apparatus purchased, taken on lease, or used for the purposes of this Act.

(3) The expression in this Act "in terms of the Lands Clauses Acts," or any similar expression, shall, unless the context otherwise requires, mean in terms of the Lands Clauses Acts (except the provisions thereof relating to the purchase and taking of land otherwise than by agreement), and of the Railways Clauses Consolidation (Scotland) Act, 1845, as incorporated in this Act.

PART I

AUTHORITIES FOR EXECUTION OF ACT

Central Authority

Local Government Board to be Central Authority

5. The Local Government Board for Scotland[1] (in this Act referred to as the Board) shall be the central authority for the execution of this Act. In addition to the powers conferred on or transferred to it by the Local Government (Scotland) Act, 1894 (57 & 58 Vict. c. 58), the Board shall have the powers hereinafter mentioned.

Powers of Board to inquire into Sanitary Conditions of District

6. It shall be lawful for the Board, upon written application by a parish council, or ten ratepayers, or upon the report of any of the inspecting officers of the Board,[2] to inquire into the sanitary condition of any district or part of

[1] *v.* § 4, L.G.A., 1894, p. 163.

[2] In a Note to this section given by Messrs Patten Macdougall and Murray in their Handbook of Public Health, the following paragraph occurs:—"The four general superintendents of poor and visiting officers of the Board under the Poor Law Acts, are also inspecting officers under the Public Health Acts, the country being divided into four districts, and allocated to them for the purposes of inspection." A medical inspector has lately been added to assist the Board.

a district, and for this purpose the Board are hereby empowered to make inquiries,[1] and require answers or returns to be made to the Board upon any question or matter connected with or relating to the purposes of this Act, and also by a summons, signed by one of their number or by the secretary, to require the attendance of all such persons as they may think fit to call before them upon any such question or matter, and to administer oaths to and examine upon oath all such persons, and to require and enforce the production upon oath of all books, contracts, agreements, accounts, and writings, or copies thereof respectively, in anywise relating to any such question or matter.

Power to Board to authorise Special Inquiries

7. It shall be lawful for the Board, whenever it may seem fitting to them, to authorise and empower for a limited time one of the members thereof to conduct any special inquiry in any part of Scotland, and to report thereon to the Board; and such member so authorised and empowered shall be entitled to summon and examine on oath witnesses and havers, and to exercise all such other of the powers by this Act given to the Board as may be necessary for conducting such inquiry, and such member shall be reimbursed by the Board of all expenses necessarily incurred by him in conducting such inquiry, and such expenses shall be deemed part of the expenses attending the execution of this Act, and be defrayed in the same manner as the general expenses of the Board are now defrayed.

Power to Board to Appoint Commissioners for conducting Special Inquiries

8. It shall be lawful for the Board, whenever it may seem fitting to them, to appoint some person or persons, not being a member or members of the Board, to act as a commissioner or commissioners for the purpose of conducting any special inquiry for a limited period, and to report thereon; and the Board shall delegate to every person so appointed for the purpose of conducting such inquiry such of the powers of the Board as they may deem necessary or expedient for summoning or examining on oath witnesses and havers, and otherwise conducting such inquiry; and it shall not be necessary to notify the appointment of any such commissioner otherwise than by intimating the same by letter under the hand of the secretary or of any member of the Board to

[1] *v.* § 39 (2), L.G.A., 1894.

the sheriff of the county within which the inquiry in question is to be made; and every such commissioner shall be reimbursed by the Board for all expenses necessarily incurred by him in conducting such inquiry, and shall also receive such reasonable remuneration for his time and trouble as may have been agreed upon between him and the said Board, and approved of by the Treasury.

Power to Board to allow Expenses of Witnesses, etc.

9. It shall be lawful for the Board, in any case where they see fit, to order and allow such expenses of witnesses, and such expenses of or concerning the production of any books, contracts, agreements, accounts, or writings, or copies thereof, to or before the said Board, or member thereof, or commissioner or commissioners, as such Board may deem reasonable; and such expenses so ordered and allowed shall be deemed part of the expenses attending the execution of this Act, and be defrayed in the same manner as the general expenses of the Board are now defrayed.

Penalties on Persons giving False Evidence or Refusing to obey Summons of Board

10. If any person, upon any examination on oath under the authority of this Act, shall wilfully give false evidence, he shall be deemed guilty of perjury, and shall be liable to the pains and penalties thereof; and in case any person shall wilfully refuse to attend in obedience to any summons of the Board, or member or commissioner authorised or appointed by the Board as aforesaid, or to give evidence, or shall wilfully refuse to produce any books, contracts, agreements, accounts, and writings, or copies of the same, which may be required to be produced before the Board, or member thereof, or commissioner or commissioners, or shall wilfully neglect or disobey any of the orders of the Board or member or commissioner, or be guilty of any contempt of the Board or member or commissioner, such person being thereof lawfully convicted, shall forfeit and pay for the first offence any sum not exceeding five pounds, and for the second and every subsequent offence any sum not exceeding twenty pounds nor less than five pounds.

Power to Board to Appoint Clerks, etc.

11. The Board are hereby empowered from time to time to appoint all such officers and clerks as they shall deem necessary, and from time to time, at the discretion of the Board, to remove such officers and clerks, or any of them,

and to appoint others in their stead; provided that the amount of the salaries of such officers and clerks shall from time to time be regulated by the Treasury.

Local Authorities

Local Authorities to Execute Act

12. The following shall respectively be the local authority to execute this Act within the districts hereunder stated:

(1) In burghs[1] subject to the provisions of the Burgh Police (Scotland) Act, 1892, the town council or burgh commissioners:

(2) In other burghs,[2] the town council or board of police, as the case may be:

(3) In districts where the county is divided into districts under the Local Government (Scotland) Act, 1889 (52 & 53 Vict. c. 50), and, subject to the provisions of section seventeen of that Act, as amended by this Act, the district committee:

(4) In counties where the county is not so divided,[3] the county council, subject to the provisions of section seventy-eight, sub-section three, of the Local Government (Scotland) Act, 1889, as amended by section nineteen, sub-section seven, of the Local Government (Scotland) Act, 1894 (57 & 58 Vict. c. 58).

Provided always that wherever, except in regard to a burgh, the expression "local authority" is in this Act used with reference to rating, borrowing, or acquiring or holding land,[4] it shall mean the county council,[5] but

[1] *v.* § 3, *ante*. "There are only five burghs in Scotland which are not subject to the provisions of the Burgh Police Act, namely, Edinburgh, Glasgow, Aberdeen, Dundee, and Greenock; accordingly, all the burghs in Scotland save these five will come under sub-section 1. These five burghs have each local Acts for police and sanitary purposes, and they have power to adopt the provisions of the Burgh Police Act." (Note by Messrs Patten Macdougall and A. Murray, of L.G.B., under section 12 of P.H.A., in their Handbook.)

[2] *I.e.*, those mentioned in preceding note—Edinburgh, Glasgow, etc.

[3] "There are eight counties which have not been divided into districts—viz., Caithness, Clackmannan, Elgin, Kinross, Nairn, Peebles, Selkirk, and Sutherland. These counties come under sub-section 4 of this section, and the county council, as constituted for public health purposes by § 78 (3) of the L.G.A., 1889, is the L.A. The representatives from the burghs are precluded from acting or voting in the county council when engaged in the administration of this Act," *v.* § 138, *post*. (Handbook of Public Health, Messrs J. Patten Macdougall and A. Murray.)

[4] *v.* § 133 to § 145, *post*.

[5] "The county council, in exercising its powers as to rating, borrowing, and acquiring land, acts without the addition of the representatives from parish councils who, in counties not divided into districts, are associated

this proviso shall not be construed to extend or diminish the exemption from stamp duties contained in section one hundred and sixty-eight of this Act. [1]

Where District in more than one County

13. Where any parish or burgh shall be situated in more than one county, the Board shall, on application being made to them by any person having interest, determine in which one of such counties such parish or burgh shall be held to be situated for the purposes of this Act, whose decision shall be final; and the jurisdiction and powers of magistrates, justices, and sheriffs, and the powers of their officers under this Act, shall be regulated accordingly, and the Board may from time to time recall or vary such determination.

Local Authorities to be Bodies Corporate; Committees may be Appointed

14. The local authorities shall respectively be bodies corporate designated by such names as they may usually bear or adopt, with power to sue and be sued in such names, and to hold lands for the purposes of this Act; and the local authority, subject, in the case where the local authority is a district committee, to the provisions of sub-section two of section seventeen of the Local Government (Scotland) Act, 1889,[1] may appoint any committee or committees[2] of their own body to receive and issue notices, to take proceedings,[3] and in all or certain specified respects to execute this Act, whereof two shall be a quorum, unless a larger quorum be specified in their appointment; and such local authority or their committee, thereto duly authorised, may by a writing under the hand of the clerk empower any officer or person to serve notices, make complaints, and take proceedings on their behalf; and all acts done or proceedings taken by or against such committee or officer or person shall be as valid as if they were done by or taken in the name of all the members of the local authority; and the local authority shall have power to commence or carry on all proceedings commenced, or which might have been commenced, before the commencement of this Act, by the local authority under any of the Acts hereby repealed, and shall be vested with

with the elected councillors as the L.A. in administering the other provisions of the Public Health Acts. The burgh representatives will not act" (*v.* § 138, *infra*, and Handbook, P.H., note, p. 15).

[1] *v.* L.G.A., 1889, p. 158.

[2] *v.* § 54, B.P.A., 1892, p. 121, and § 44 (9), L.G.A., 1894, p. 165.

[3] The L.A. may appoint any one to take proceedings. In cases of retail bakehouses, it is the M.O.H. (*v.* § 102, F. & W. Act, 1901, p. 175).

all property or pecuniary claims vested in and be liable to perform all pecuniary and other obligations undertaken or incurred by or devolving on such last-mentioned local authority.

Local Authority to Appoint Medical and other Officers

15. The local authority shall appoint a medical officer or medical officers, who shall be called medical officer or medical officers of health, and a sanitary inspector or inspectors, the latter of whom shall be also inspector or inspectors of common lodging-houses, and the local authority shall, subject to the approval of the Board, regulate the duties of such medical officer and sanitary inspectors and their relations to each other, whether appointed before or subsequent to the commencement of this Act, and this, notwithstanding anything contained in sections seventy-five, seventy-six, and seventy-seven of the Burgh Police (Scotland) Act, 1892 (55 & 56 Vict. c. 55); and the local authority may, and if required by the Board shall, appoint convenient places for their offices, and shall allow to every such medical officer and sanitary inspector and every other officer or clerk appointed by them on account of his employment a proper salary or remuneration; and the names and addresses and salaries of the said medical officers and sanitary inspectors shall be reported by the local authority to the Board immediately on such persons being appointed and such salaries fixed; and the said medical officers and sanitary inspectors, and the local authority and their clerk, and the registrars of births, deaths, and marriages shall be bound to make such returns and special reports to the Board in such form and at such times as the Board shall require. The medical officer may, when authorised by the local authority, exercise any of the powers with which the sanitary inspector is invested by this Act.

No person shall be appointed as the medical officer of any burgh, or of any district, other than a burgh, unless he possesses the qualifications set forth in section fifty-four of the Local Government (Scotland) Act, 1889 (52 & 53 Vict. c. 50).[1]

No medical officer or sanitary inspector appointed by the local authority under this or any of the repealed Acts shall be removable from office, except by or with the sanction of the Board.

The registrar of births, deaths, and marriages in each registration district shall furnish to the local authority such periodical returns of births and deaths as may be required of

[1] *v.* p. 160.

him and approved by the Board, and for each death included in such return and for each return of births he shall be paid by the local authority the sum of twopence, and the local authority shall provide the forms on which such returns are to be made, and shall pay for their transmission by letter post.

The medical officer and sanitary inspector shall, if required by the local authority, respectively name a duly qualified substitute for whom they shall be responsible, and if the local authority shall approve of the nomination, such substitute shall have the same powers and duties as the medical officer or sanitary inspector, as the case may be, during the temporary illness or authorised absence of either of them, and the local authority may from time to time with consent of the Board withdraw their approval of such substitute, and may require the medical officer or sanitary inspector, as the case may be, to name for their approval some other duly qualified substitute.

Nothing contained in this Act shall, save in so far as expressly otherwise provided, prejudice or affect the existing officers and servants of the local authorities under any Act in force at the passing of this Act, and such officers and servants shall without any further appointment be the officers and servants of the local authorities under this Act, with, save as aforesaid, the same tenure of office (if any), and emoluments as heretofore.

PART II

SANITARY PROVISIONS

General Nuisances [1]

Definition of Nuisances

16. For the purposes of this Act,—

[1] In a Note in their Handbook of Public Health, by Messrs J. Patten Macdougall and A. Murray of the L.G.B., they express the opinion that unlike the 1867 Act, where in most cases it was necessary to prove injury to health, "the introduction in this Act of the word 'dangerous' as alternative to 'injurious' will considerably extend the scope of the statutory nuisance, there being many matters which are 'dangerous,' or, in other words, likely to cause injury to health, though it may be impossible to prove that they actually have caused such injury. The new Act, however, goes further, and enables action to be taken without the necessity of proving even danger to health. Any of the matters and circumstances specified will be liable to be dealt with under the statutory powers, if it be a 'nuisance'—that is, a nuisance at common law." This opinion, so far as I am aware, has not been held hitherto by sheriffs before whom nuisances have been brought under this Act.—[W.J.B.]

(1) Any premises[1] or part thereof of such a construction[2] or in such a state[3] as to be a nuisance* or injurious or dangerous to health: [21, 160]

(2) Any street, pool, ditch, gutter, watercourse, sink, cistern, water-closet, earth-closet, privy, urinal, cesspool, drain, dung-pit, or ashpit so foul or in such a state or so situated as to be a nuisance* or injurious or dangerous to health:

(3) Any well or water supply[4] injurious or dangerous to health: [22]

(4) Any stable, byre,[5] or other building in which any animal or animals are kept in such a manner or in such numbers as to be a nuisance* or injurious or dangerous to health:

(5) Any accumulation or deposit, including any deposit of mineral refuse, which is a nuisance* or injurious or dangerous to health, or any deposit of offensive matter, refuse, or offal, or manure (other than farmyard manure or manure from byres or stables, or spent hops from breweries), within fifty yards of any public road whereever situated, or any offensive matter, refuse, or offal, or manure other than aforesaid contained in uncovered trucks or waggons standing or being at any station or siding or elsewhere on a railway or in canal boats so as to be a nuisance* or injurious or dangerous to health: [21, 23, 24, 149]

(6) Any work, manufactory, trade, or business,[6] injurious to the health of the neighbourhood or so conducted as to be injurious or dangerous to health, or any collection of rags or bones injurious or dangerous to health:

(7) Any house or part of a house[7] so overcrowded as to be injurious or dangerous to the health of the inmates: [158]

(8) Any schoolhouse, or any factory which is not a factory subject to the provisions of the Factory and Workshop Acts, 1878 to 1895, or any Act amending the same, with respect to cleanliness, ventilation, or overcrowding, and

(i) is not kept in a cleanly state and free from effluvia arising from any drain, privy, water-closet, earth-closet, urinal, or other nuisance,* or

* *v.* definition, § 16, and Note by Messrs Macdougall and Murray, p. 11.

[1] *v.* § 3, *ante*. [2] *v.* § 20 (3) (*a*), *post*.

[3] If filthy, action can be taken under § 40, *post*.

[4] Wells with water unfit for dietetic use may be shut up, whether they are public or private, but if closure of the latter is objected to, an order from the sheriff to close is required.

[5] *v.* § 34, Contagious Diseases (Animals) Act, 1878, as amended by § 9 of 1886 Act; and under the Dairy Cow and Milks Order, 1885, made in terms thereof, pp. 213, 217, 218, etc. [6] *v.* § 36, *post*, giving additional powers.

[7] *v.* definition, § 3, *ante*.

(ii) is not ventilated in such a manner as to render harmless so far as practicable any gases, vapours, dust, or other impurities generated in the course of the work carried on therein that are a nuisance * or injurious or dangerous to health, or

(iii) is so overcrowded while work is carried on as to be injurious or dangerous to the health of those therein employed:

(9) Any fireplace or furnace situated within the limits of any burgh or special scavenging district which does not so far as practicable consume the smoke arising from the combustible matter used therein, for working engines by steam, or in any mill, factory, dye-house, brewery, bakehouse, or gaswork, or in any manufacturing or trade process whatsoever: [159]

(10) Any chimney (not being the chimney of a private dwelling-house) sending forth smoke in such quantity as to be a nuisance * or injurious or dangerous to health; and

(11) Any churchyard, cemetery, or place of sepulture[1] so situated or so crowded or otherwise so conducted as to be offensive or injurious or dangerous to health; [25]

shall be deemed to be nuisances * liable to be dealt with summarily in manner provided by this Act.[2] Provided that—

* *v.* definition, § 16, and Note by Messrs Macdougall and Murray, p. 11.

[1] *v.* § 22, *post*; also § 146 (2), the latter giving powers for procedure under § 4, Burial Grounds (Scotland) Act, 1855, p. 287.

[2] *v.* §§ 20-26 and 154-157, *post*. The following valuable summary of procedure under this section is given by Messrs Macdougall and Murray in a Note at page 37 of their Handbook of Public Health:—"The history of an ordinary case may be thus summarised. As soon as information of the existence of a nuisance is received, the S.I. or other officer authorised by the L.A. —§ 19—forthwith sends intimation to the author of it. If the nuisance is not removed, the next step is to serve on the author a notice requiring him to remove it, and to execute such works and do such things as may be necessary for that purpose—sec. 20. Under the 1867 Act this was not a statutory requirement, although it was the usual practice. It is now imperative, and appears to be an indispensable step in the proceedings. If the L.A. think it desirable (but not otherwise) the notice may specify the works to be executed. A formal certificate of the service of the notice should in each case be prepared and attested by a witness—sec. 159. If the nuisance is not removed within the time specified in the notice, or, if removed, is likely to recur, the L.A. apply to the sheriff by summary petition—secs. 21 and 22. Any person may be appointed by the L.A. to conduct the proceedings on their behalf—secs. 14 and 152; but prosecutions are usually at the instance of the S.I. or the clerk under the instructions of the L.A. The proceedings must be directed against the author of the nuisance, or, when the author cannot be found, against the owner or occupier of the premises. Where the nuisance arises from any want or defect of a structural character, or where the premises are unoccupied, the owner is the person liable—sec. 20 (3) (*a*). Where the person causing the nuisance cannot be found, and the nuisance is not due to the fault of the owner or occupier, the L.A. may themselves remove it,

(*a*) a penalty shall not be imposed as hereinafter provided on any person in respect of any accumulation or deposit necessary for the effectual carrying on of any business, trade, or manufacture, if it be proved to the satisfaction of the court that the accumulation or deposit has not been kept longer than is necessary for the purposes of the business, trade, or manufacture, and that the best available means have been taken for preventing injury or danger thereby to the public health; and

(*b*) in considering whether any dwelling-house or part thereof which is also used as a factory, or whether any factory, used also as a dwelling-house, is a nuisance by reason of overcrowding, the court shall have regard to the circumstances of such other use.

and do what is necessary to prevent its recurrence—sec. 20 (3) (*b*). Where doubt exists as to who is the author, several persons may be included in the petition, and the sheriff will decide. When the nuisance comes under any of the heads 1, 2, 3, 4, 5, or 7 of sec. 16, the proceedings may be either before the sheriff or before any magistrate or justice; but the Board invariably recommend that all prosecutions should be before the sheriff. When the nuisance is under any of the heads 6, 8, 9, 10 or 11 of sec. 16, the proceedings must be before the sheriff—sec. 22. In cases under heads 6 and 8, a medical certificate or a representation by a parish council, or a requisition by ten ratepayers (not merely inhabitants, as under the 1867 Act), is indispensable—sec. 22. In all cases where a question of health arises, a medical certificate is advisable. The sheriff will, in the first place, order the petition to be served on the author of the nuisance, and will appoint a day for answers to be lodged, or for hearing parties—sec. 154. The sheriff on considering the answers, or on hearing parties, or if the respondent fail to appear, may at once decern—sec. 154. Or he may remit to a man of skill to report, and may decern on the report; or, if either party desire it, he may allow a proof—sec. 154. No written pleadings are allowed, and in cases under heads 9, 10 and 11 of sec. 16 the sheriff must take notes of the evidence as in civil proofs—sec. 155. If he finds the allegations proved, he will order the removal of the nuisance, specifying in his interlocutor the operations which he deems necessary for that purpose, which need not be restricted to any special remedy prayed for in the petition—secs. 22 and 23. If he considers that the nuisance is likely to recur, he will also grant interdict—secs. 22 and 23. Should structural works be necessary, he may direct these to be carried out under the direction of any person he may appoint, and may require the L.A. to furnish him with an estimate of the cost—sec. 25. If it appear to the sheriff that the nuisance arose from the wilful fault or culpable negligence of either the owner or occupier, he may impose a fine not exceeding five pounds—sec. 22. If the respondent should fail to implement the decree, or should he infringe the interdict, he becomes liable in penalties—sec. 24; and the L.A. may apply for a warrant to have the nuisance removed at his expense—sec. 26. Where the sheriff is satisfied that the author of the nuisance is not known or cannot be found, he has power to ordain the L.A. themselves to execute the necessary works—sec. 26. The judgment of the sheriff is final—sec. 157—save in cases under sub-secs. 9, 10, and 11 of sec. 16, when certified in terms of sec. 156."

Duty of Local Authority to Inspect District for Detection of Nuisances

17. It shall be the duty of every local authority to cause to be made from time to time inspection of their district, with a view to ascertain what nuisances * exist calling for removal under the powers of this Act, and to enforce the provisions of this Act in order to remove the same, and otherwise to put in force the powers vested in them relating to public health, so as to secure the proper sanitary condition of all premises [1] within their district.[2]

Power of Entry to Local Authority or their Officers

18. If the local authority, or medical officer, or sanitary inspector have reasonable grounds for believing that nuisance * exists in any premises, such local authority, or medical officer, or sanitary inspector may demand admission for themselves, the chief constable or superintendent of police, or any other person or persons whom the local authority may desire to enter and inspect such premises, and, if necessary, to open up the ground of such premises, or for any or all of them, to inspect the same at any hour between nine in the morning and six in the evening, or at any hour when the operations suspected to cause the nuisance * are believed to be in progress or are usually carried on; and may cause the ground or surface to be opened, and the drains to be tested, or such other work to be done as may be necessary for an effectual examination of the said premises: Provided always, that if no nuisance* be found to exist, the local authority shall restore the premises at their own expense, and if admission be refused, the local authority, or medical officer, or sanitary inspector may apply to the sheriff, or to any magistrate or justice of the peace having jurisdiction in the place, stating on oath such belief; and such sheriff, magistrate, or justice may, after intimation to the owner [3] and occupier,[3] or person in charge of the premises, by order in writing, require the occupier or person having the custody of such premises to admit the local authority and others aforesaid; and if such occupier or person refuse or fail to obey such order, he shall, on conviction of such offence, be liable to a penalty not exceeding five pounds; and on being satisfied of such failure or refusal, the sheriff, magistrate, or justice may grant warrant to such

* *v.* Note to General Nuisances, *ante*. [1] *v.* § 3, *ante*.
[2] Also *v.* § 7, H. W. Cl. Act, 1885 (a section not repealed); also § 32, H. W. Cl. Act, 1890. [3] *v.* definitions of both, § 3, *ante*.

local authority, officers, or person or persons for immediate forcible entry into the premises; and if no such occupier or person can be discovered, or if no person is found on the premises to give or refuse admission, the local authority or their officers may enter the premises without any order or warrant, and forcibly if need be.

Provided that if no nuisance * be found to exist, the local authority shall restore the premises at their own expense.

Any order made by a sheriff, magistrate, or justice, for the admission of the local authority or their officers or other persons under this section shall continue in force until the nuisance * has been removed, or the work for which the entry was necessary has been done. [155]

Information of Nuisances to Local Authority

19. Information of any nuisance * under this Act in the district of any local authority may be given to such local authority by any person, and it shall be the duty of every officer of such authority, and of any constable or officer of police of the county or burgh, in accordance with the regulations of the authority having control over him, to give that information, and it shall be the duty of the said authority to make the said regulations. The local authority shall give such directions to their officers as will secure the existence of the nuisance being immediately brought to the knowledge of any person who may be required to remove it, and such officer shall do so by an intimation [1] as hereinafter provided.

Notice Requiring Removal of Nuisance

20. (1) On the receipt of any information respecting the existence of a nuisance * liable to be dealt with summarily under this Act, the local authority shall, if satisfied of the existence of a nuisance,* serve a notice [2] on the author of the nuisance,[3] or, if such author cannot be found, on the occupier or owner of the premises on which the nuisance * arises or continues, requiring him to remove the same within the time specified in the notice, and to execute such works and do such things as may be necessary for that purpose, and if the

* *v.* Note to General Nuisances, *ante*.

1 *v.* § 159, *post*.

2 Notice as distinct from "intimation" must be issued by the authority of the L.A., or by a committee of their number authorised to do so. As to service of such notice, *v.* § 159, *post*.

3 In the case of a graveyard, under § 16 (11), notice is served on the collector of the churchyard or other dues; or on such person as the sheriff shall seem meet, *v.* § 22, *post*.

local authority think it desirable (but not otherwise) specifying any works to be executed.

(2) The local authority may also by the same or another notice served on such occupier, owner, or person, require him to do what is necessary for preventing the recurrence of the nuisance,* and, if they think it desirable, may specify any works to be executed for that purpose, and may serve that notice, notwithstanding that the nuisance may for the time have been removed, if the local authority consider that it is likely to recur on the same premises.

(3) Provided that—

(*a*) where the nuisance arises from any want or defect of a structural character, or where the premises are unoccupied, the notice shall be served on the owner ;[1]

(*b*) where the person causing the nuisance cannot be found, and it is clear that the nuisance does not arise or continue by the act or default or sufferance of the occupier or owner of the premises, the local authority may themselves remove the same, and may do what is necessary to prevent the recurrence thereof. [160]

On Non-compliance with Notice, Local Authority to Proceed Summarily

21. If the person on whom a notice to remove a nuisance has been served as aforesaid makes default in complying with any of the requisitions thereof within the time specified, and if the nuisance, although removed since the service of the notice, is, in the opinion of the local authority, likely to recur on the same premises, the local authority shall proceed by summary petition as hereinafter provided.[2]

Proceedings by Local Authority when Nuisances are ascertained to exist

22. In any case where the existence of a nuisance is ascertained to their satisfaction by the local authority, or where the nuisance in the opinion of the local authority did exist, and, although the same may have been since removed or discontinued, is in their opinion likely to recur or to be repeated, they may apply to the sheriff or to any magistrate or justice, by summary petition in manner hereinafter directed,[3] and if it appear to his satisfaction that the nuisance exists, or, if removed or discontinued, that it is likely to recur or to be repeated, he shall decern for the removal or

* *v.* Note to General Nuisances, *ante*.
[1] *v.* § 150, *post*.
[2] *v.* §§ 22 and 154, *post*.
[3] *v.* §§ 154-157, *post*.

remedy or discontinuance or interdict of the nuisance as hereinafter mentioned,[1] provided that if it appear to the sheriff or magistrate or justice that the nuisance arose from the wilful fault or culpable negligence either of the owner or occupier of the premises, and that a notice in respect thereof had previously been served on such author, the sheriff or magistrate or justice may, in addition to making a decree as aforesaid, impose a fine not exceeding five pounds on such owner or occupier; provided that in the cases under sub-sections (6) and (8) in section sixteen of this Act such application shall be made only on medical certificate, or on a representation by a parish council, or on a requisition in writing under the hands of any ten ratepayers of the district of the local authority, and that in these cases and the cases under sub-sections (9) and (10) in said section, it shall be made only to the sheriff; and farther, that in the cases under sub-section (11) in section sixteen it shall not be necessary to cite any person as the author of the nuisance, but such application shall be proceeded with by the sheriff (to whom alone it shall be made) after such intimation to the collector of the churchyard or other dues, or to such other person as to the sheriff shall seem meet; and such person or persons as shall appear after such intimation shall, if the sheriff think proper, be allowed to be heard and to object to such application in the same manner as if he or they were the author of the alleged nuisance within the meaning of this Act. [21-25]

Form of Interlocutor

23. It shall not be necessary to restrict such decree to any special remedy prayed for in the petition, but, as the case shall require, the author of the nuisance or owner or occupier of the premises may be ordained to execute such works or to do or to abstain or cease from doing such acts or things as are necessary to remove the nuisance complained of, in such manner and within such time as shall be specified; and if the sheriff, magistrate, or justice, is of opinion that such or the like nuisance is likely to recur, he may further grant interdict against the recurrence of it, or do otherwise, as the case may in his judgment require; and if the nuisance proved to exist be such as to render a house or building unfit for human habitation or use,[2] he may prohibit such habitation or use until in his judgment it is rendered fit therefor, and on the sheriff, magistrate, or justice being

[1] *v.* § 23, *post*.
[2] *v.* H. W. Cl. Act, p. 168, also § 76, *post*, as to Powers of Sheriff.

satisfied that it has been rendered fit for that purpose he may declare the house or building habitable, and from the date thereof such house or building may be let or occupied, or the sheriff, magistrate, or justice may do otherwise as the case may in his judgment require.

Penalty for Contravention of Decree and of Interdict

24. If the said decree be not complied with in good and sufficient manner, and within the time appointed, the author of the nuisance, or the owner or occupier, as the case may be, shall be liable, in the case of nuisances under sub-sections (1), (2), (3), (4), (5), (7), (10), and (11) in section sixteen of this Act, to a penalty of not more than ten shillings per day during his failure so to comply; and if the said interdict be knowingly infringed by the act or authority of the owner or occupier, such owner or occupier shall be liable for every such offence to a penalty not exceeding twenty shillings per day during such infringement; and in the case of nuisances under sub-sections (6), (8), and (9) in the said section, the party not complying with or infringing such decree shall be liable to a penalty not exceeding five pounds for the first offence, and not exceeding ten pounds for the second, and for each subsequent conviction a sum not exceeding double the amount of the penalty in the last preceding conviction, but no penalty shall exceed two hundred pounds: Provided always, in the case of a nuisance under the said sub-section (9), that if it appears to the sheriff that the best means then known to be available for mitigating the nuisance, or the injurious effects thereof, have not been adopted, he may suspend his final determination upon condition that the author of the nuisance shall undertake to adopt within a definite time such means as he shall judge to be practicable, and order to be carried into effect, for mitigating or preventing such injurious effects.

Order when Structural Works are Required

25. When it shall appear to the sheriff, magistrate, or justice that the execution of structural works is required for the removal or remedy of a nuisance, he may appoint such works to be carried out under the direction and subject to the approval of any person he may appoint; and he may, before making his order, require the local authority, within a time to be specified by him, to furnish him with an estimate of the cost of the required works.

Local Authority to do Works on Owner's or Occupier's Default, or if Person causing Nuisance cannot be Found

26. In case of non-compliance with or infringement of any decree aforesaid, the sheriff, magistrate, or justice may, on application by the local authority, grant warrant to such person or persons as he may deem right to enter the premises to which such decree relates, and remove or remedy the nuisance thereby condemned or interdicted, and do whatever may be necessary in execution of such decree; or if in the original application it appears to his satisfaction that the author of the nuisance is not known or cannot be found, then such decree may at once ordain the local authority to execute the works thereby directed; and all expenses incurred by the local authority in executing the works may be recovered from the author of the nuisance and failing him from the owner of the premises.[1] [161]

Articles Removed to be Sold

27. Any matter or thing removed by the local authority in pursuance of this Act may be sold by public roup, after not less than five days' notice by printed handbills posted in the locality, except in cases where delay would be prejudicial to health, or in which the matter or thing is not of the value of two pounds or upwards, in which cases the sheriff, magistrate, or justice may, by writing under his hand, order the immediate removal, sale, or destruction of the matter or thing, and the proceeds of the sale shall be retained by the local authority, and applied *pro tanto* in payment of all expenses incurred under this Act with reference to such nuisance; and the surplus, if any, shall be paid, on demand, by the local authority, to the owner of such matter or thing; and the balance of such expenses shall be defrayed, if such proceeds are insufficient for that purpose, by the author of the nuisance or the owner of the premises.

Foul Ditches, etc., may be Replaced by Sewers

28. Whenever any watercourse, ditch, gutter, or drain along the side of any street,[2] or between or parallel to rows of dwelling-houses, shall be used or partly used for the conveyance of any water, sewage, or other liquid or matter from any premises,[2] and cannot in the opinion of the local

[1] It has been held that "the author of a nuisance is not liable for the expense of removing it, unless he has had an opportunity of removing it himself." (Macdougall and Murray, in Note to this section in Handbook of Public Health, p. 51.)

[2] *v.* § 3, *ante*, for definition.

authority be rendered free from foulness or offensive smell without the laying down of a sewer or of some other structure, such local authority shall and they are hereby required to lay down such sewer or other structure within the limits of their district, or, subject to the approval of the Board, where necessary for the purpose of outfall or distribution of sewage, without their district, and to keep the same in good and serviceable repair; and they may enter any premises for such purposes, and use such part thereof as shall be necessary, and for such use shall pay such damages as may be assessed by the sheriff on a summary application, and to such party as the sheriff may direct: Provided always, that no damage shall be payable to any person who has caused or contributed to cause such watercourse, ditch, gutter, or drain to become foul or offensive, unless such person shall satisfy the sheriff that he had justifiable excuse for so doing; and such local authority are hereby authorised and empowered to assess the owners of all the premises (according to the yearly value thereof) from which then or at any time thereafter any material other than pure water flows, falls, or is carried into the said sewer or other structure, for payment of all expenses incurred in making and maintaining the same, and that either in one sum or in instalments, as they shall think just and reasonable, and after fourteen days' notice at the least left with the said owners, if resident within the district, and if not so resident with the occupiers of the said premises, to levy and collect the sum so assessed, with the same remedies in case of default in payment thereof as are hereinafter provided with reference to the public health general assessment leviable under this Act.[1] [162]

Local Authority may Erect Public Water-closets, etc.

29. The local authority may erect such public ashpits, water-closets, privies, and urinals, and in such situations as they may think fit, and may defray the expense thereof, and of keeping the same in repair and in good order, and shall cause such privies to be cleansed daily; and the local authority may also, by written notice to the owner or occupier of any schoolhouse, or of any factory[2] or building in which persons are employed in any manufacture, trade, or business, require them or either of them, within a time specified, to construct a sufficient number of water-closets or privies for the separate use of each sex; and any person failing to comply with such

[1] *v.* §§ 135, 136, *post.*

[2] *v.* also Powers Given to Factory Inspector, under § 9, "Factory and Workshop Act, 1901," p. 172.

notice shall be liable for each offence in a penalty not exceeding twenty pounds.

Penalty for Injuring Closet, etc., so as to cause Nuisance

30. If a person causes any drain, water-closet, earth-closet, privy, urinal, or ashpit to be a nuisance or injurious or dangerous to health, by wilfully destroying or damaging the same or any water-supply, apparatus, pipe, or work connected therewith, or by otherwise wilfully stopping up, or wilfully interfering with, or improperly using the same, or any such water-supply, apparatus, pipe, or work, he shall be liable to a penalty not exceeding five pounds.

Water-closets, etc., used in Common

31. The following provisions shall have effect with respect to any water-closet, earth-closet, privy, or similar convenience used in common by the occupiers of two or more separate dwelling-houses, or by other persons:—

(1) If any person injures or improperly fouls any such convenience, or anything used in connection therewith, he shall for each offence be liable to a penalty not exceeding ten shillings;

(2) If any such water-closet, earth-closet, privy, or similar convenience, or the approaches thereto, or the walls, floors, seats, or fittings thereof, is or are, in the opinion of the local authority or of their sanitary inspector or medical officer, in such a state as to be a nuisance or annoyance to any of the persons using, or entitled to use, the same for want of the proper cleansing thereof, such of the persons having the use thereof in common as may be in default, or in the absence of proof satisfactory to the court as to which of the persons having the use thereof in common is in default,[1] each of those persons shall be liable to a penalty not exceeding ten shillings, and to a penalty not exceeding five shillings for every day during which the offence continues after a conviction for the offence.

Offensive Trades

Prohibition or Regulation of certain Offensive Businesses, and Bye-Laws as to Offensive Businesses

32. (1) If any person after the commencement of this Act establishes, without the sanction of the local authority, the

[1] For procedure if nuisance arises in cases of joint use, *v.* § 161, *post*.

following businesses, or any of them; that is to say, the business of blood boiler, bone boiler, manure manufacturer, soap boiler, tallow melter, knacker,[1] tanner, tripe boiler, gut or tripe cleaner, skinner or hide factor, slaughterer of cattle or horses,[1] or any other business which the local authority may declare, by order[2] confirmed by the Board and published in the Edinburgh Gazette, to be an offensive business, he shall be liable to a fine not exceeding fifty pounds in respect of the establishment thereof, and any person carrying on the same after a conviction for the establishment thereof shall be liable to a penalty not exceeding twenty-five pounds for every day during which he so carries on the same. [4]

(2) The local authority shall give their sanction by order, but, at least fourteen days before making any such order, shall make public the application for it, by advertisement in one or more local newspapers, or by the posting of handbills in the locality, setting forth the time and place at which they will be willing to hear all persons objecting to the order, and they shall consider any objections made at that time and place, and shall grant or withhold their sanction as they think expedient, and where the local authority grants or withholds such sanction, any person aggrieved may appeal to the Board, whose decision shall be final, but, in the case of a district other than a burgh, the appeal to the Board shall only arise after the county council has given its determination on the matter, and a local authority may appeal to the Board against the determination of the county council. [4]

(3) The local authority may make bye-laws[3] for regulating the conduct of any businesses within the meaning of this section, and of section thirty-seven of this Act, which are for the time being lawfully carried on in their district, and the structure of the premises in which any such business is being carried on, in order to prevent or diminish the noxious or injurious effect thereof, and the mode in which the said application is to be made. [4, 5]

(4) Any such bye-law may, in addition to any pecuniary penalty[4] imposed by such bye-law, empower a sheriff by summary order to deprive any person, either temporarily or permanently, of the right of carrying on any business to which such bye-law relates, as a punishment for breaking

[1] *v.* § 3, as to definition.

[2] *v.* § 39 (2), L.G. (Scot.) Act, 1894.

[3] As to publication, confirmation, etc., *v.* §§ 183 to 187, *post*. For model bye-laws suggested by L.G.B., *v.* p. 44 to p. 56 in their "Instructions forms, etc."

[4] For penalties, *v.* § 184, *post*.

the same, and any person disobeying such order shall be liable to a penalty not exceeding twenty-five pounds for every day during which such disobedience continues; and the decision of the sheriff under this sub-section shall be appealable to the Lord Ordinary on the Bills in manner provided by section one hundred and fifty-six of this Act.

(5) There shall be charged for an order of the local authority under this section, such fee not exceeding forty shillings as the local authority may fix.

(6) For the purposes of this section a business shall be deemed to be established after the commencement of this Act, not only if it is established newly, but also if it is removed from any one set of premises[1] to any other premises, or if it is renewed on the same set of premises after having been discontinued for a period of twelve months or upwards, or if any premises on which it is for the time being carried on are enlarged without the sanction of the local authority; but a business shall not be deemed to be established anew on any premises by reason only that the ownership or occupancy of such premises is wholly or partially changed, or that the building in which it is established having been wholly or partially pulled down or burnt down has been reconstructed without any extension of its area. [3]

Licensing of Slaughter-Houses

33. (1) A person carrying on the business of a slaughterer of cattle or horses, or knacker,[2] shall not use any premises as a slaughter-house or knacker's yard without a licence[3] from the local authority, and if he does he shall for each offence be liable to a penalty not exceeding five pounds, and the fact that cattle or horses have been taken into unlicensed premises shall be *primâ facie* evidence that an offence under this section has been committed. [6]

(2) A licence under this section shall expire on such day in every year as the local authority fix, and when a licence is first granted shall expire on the day so fixed which secondly occurs after the grant of the licence, and a fee not exceeding five shillings may be charged for the licence or any renewal thereof.

(3) Not less than twenty-one days before a new licence for any premises is granted under this section, notice of the intention to apply for it shall be advertised as provided in sub-section two of the immediately preceding section by

[1] For definition, *v.* § 3, *ante*. [2] *v.* § 3, *ante*, for definitions.

[3] Compare with B.P. Act, § 282 [amended by 1903 Act (Schedule)], where the "*person*" is licensed as well as the premises, p. 146.

the local authority of the district in which the premises are situate, and any person interested may show cause against the grant or renewal of the licence.

(4) An objection shall not be entertained to the renewal of a licence under this section, unless seven days previous notice[1] of the objection has been served on the applicant, save that, on an objection being made of which notice has not been given, the local authority may, if they think it just so to do, direct notice[1] thereof to be served on the applicant, and adjourn the question of the renewal to a future day, and require the attendance of the applicant on that day, and then hear the case, and consider the objection, as if the said notice had been duly given.

(5) For the purposes of this section a licence shall be deemed to be renewed where a further licence is granted in immediate succession to a prior licence for the same premises.

(6) The local authority[2] shall have right to enter any slaughter-house or knacker's yard at any hour by day, or at any hour when business is in progress or is usually carried on therein, for the purpose of examining whether there is any contravention therein of this Act or of any bye-law[3] made thereunder.

(7) Where any person carrying on the business of a slaughterer of cattle or horses or knacker at the passing of this Act is refused by the local authority a licence for the premises where such business is carried on, or where any person has been refused a renewal of any licence, such person may appeal to the Board against such refusal, and the decision of the Board shall be final, but in the case of a district other than a burgh the appeal to the Board shall only arise after the county council has given its determination on the matter, and a local authority may appeal to the Board against the determination of the county council. [7, 26]

Local Authorities may provide a Slaughter-House

34. The local authority of any district other than a burgh may provide, establish, improve, or extend and maintain within or without their district, and two or more such local authorities may combine to so provide, establish, improve, or extend and maintain fit shambles or slaughter-houses for the purpose of slaughtering cattle, and for that purpose may

[1] Regarding service of notice, *v.* § 159, *post.*

[2] *Note* the L.A., not their officers. The latter may be refused entry unless specially provided with power from L.A. to enter on their behalf.

[3] For Model Bye-Laws, *v.* pp. 32-36 of Board's "Instructions forms, etc."

borrow such sums of money as they shall find necessary on the security of the public health general assessment,[1] and of the rates to be taken and levied for the use of such shambles or slaughter-houses and ground on which the same are erected, or on any one or more thereof, and the provisions of section one hundred and forty-one of this Act shall, with the necessary modifications, apply to such borrowing.

Local Authorities may make Bye-Laws as to Pigstyes

35. The local authority may make bye-laws[2] regulating the construction of pigstyes, the places in which they may be erected, and the mode of cleansing them at proper intervals so as to prevent them from becoming a nuisance[3] or dangerous to public health.

Duty of Local Authority to complain to Sheriff, etc., of Nuisance arising from Offensive Trade

36.[4] (1) Where it appears to the local authority upon a certificate by their medical officer, or from a representation by a parish council, or on a requisition in writing under the hands of any ten ratepayers within the district that any trade, business, process, or manufacture carried on in any manufactory, building, or premises,[5] and causing effluvia is a nuisance or injurious or dangerous to the health of any of the inhabitants of the district, such authority may, if they think proper, and, if required by the Board shall, apply to the sheriff by summary petition, and if it appears to such sheriff that any trade, business, process, or manufacture carried on in such manufactory, building, or premises is causing a nuisance,[6] or any effluvia which is a nuisance or injurious or dangerous to the health of any of the inhabitants within the district, then, unless it is shown that the best practicable means have been used for removing the nuisance, or preventing or counteracting the effluvia, the author of the nuisance, and failing him the occupier, and failing him the owner of the premises, shall be liable to a penalty not exceeding fifty pounds.[7]

(2) Provided that the court may suspend its final deter-

[1] *v.* § 135, *post.*
[2] *v.* Model B.-L. of L.G.B., p. 25 of their "Instructions forms, etc."
[3] *v.* § 16 (4), and quotation of Note by Macdougall and Murray on General Nuisances (Handbook Pub. Health).
[4] *v.* also § 16 (6), *ante.* [5] For definition, *v.* § 3, *ante.*
[6] *v.* quotation of Note to General Nuisances, beginning of Part II., *ante.*
[7] For recovery of penalties, *v.* § 154, *post.*

mination on condition that the person so offending undertakes to adopt, within a reasonable time, such means as the court may deem practicable, and may order to be carried into effect, for removing the nuisance, or mitigating or preventing the injurious or dangerous effects of the effluvia.

(3) The local authority may, if they think fit, on such certificate as is in this section mentioned, cause proceedings to be taken in the Court of Session against any person in respect of the matters alleged in such certificate.

(4) The local authority may take proceedings under this section in respect of a manufactory, building, or premises situate without their district,[1] so, however, that the summary proceedings shall be had before a sheriff having jurisdiction in the district where the manufactory, building, or premises are situate.

Provision as to Nuisance created by Local Authority in dealing with Refuse

37.[2] (1) The removal of house refuse and street refuse by a local authority when collected or deposited by that authority, or by any contractor or other person authorised by such local authority, shall be deemed to be a business[3] carried on by that authority, or by such contractor or other person, within the meaning of this Act, and a complaint or proceedings in relation to any such business may be made or taken by the county council of the district, other than a burgh, where such business is carried on, or, in the case of any district, by any person authorised by the Board in like manner as if such county council or such person were a local authority.

(2) Any premises used by a local authority, or by any contractor or other person authorised by such local authority, for the treatment or disposal of any street refuse or house refuse, as distinct from the removal thereof, which are a nuisance or injurious or dangerous to health, shall be a nuisance liable to be dealt with summarily under this Act,[4] and for the purpose of the application thereto of the provisions of this Act relating to such nuisances the county council, in the case of a district other than a burgh, and any person authorised as aforesaid by the Board shall be deemed to be a local authority.

[1] *v.* also § 149, *post*.
[2] *v.* also § 146, *post*.
[3] *v.* § 36, *ante*, under which it may be dealt with if a nuisance.
[4] *i.e.*, under § 16, *ante*.

Scavenging and Cleansing

Appeal against Resolution of District Committee as to formation of Special Scavenging, etc., Districts

38. With respect to the formation of special districts for scavenging and other purposes under section forty-four of the Local Government (Scotland) Act, 1894,[1] the following provision shall have effect; (that is to say),

It shall be competent for any person interested to appeal to the sheriff against any resolution of a district committee or county council, as the case may be, under sub-section two of the recited section, and all the provisions of sub-section one of section one hundred and twenty-two of this Act in regard to an appeal to the sheriff against a resolution of a local authority shall, with the necessary modifications, apply to an appeal against a resolution of a district committee or county council as aforesaid. Provided that in cases to which sub-section three of the said section forty-four of the Local Government (Scotland) Act, 1894 (57 & 58 Vict. c. 58), applies an appeal to the sheriff shall not be competent unless the resolution has been disposed of by the county council in terms of that sub-section.

Where the boundaries of any burgh are extended so as to include the whole or part of any such special district, then the town council or burgh commissioners shall, as regards the whole of such special district, supersede the district committee or county council as the case may be in the administration of the Burgh Police (Scotland) Act, 1892 (55 & 56 Vict. c. 55), and other powers in regard to cleansing and scavenging upon such terms as shall be agreed between the town council or burgh commissioners and the district committee or county council, as the case may be, or, failing agreement, upon such terms as shall be fixed by the sheriff, whose decision shall be final.

Scavenging of Highways, etc., within Special Districts

39. Where a special scavenging district has been or may hereafter be formed under the provisions of the Local Government (Scotland) Act, 1894, the district committee of the district or the county council where the county is not divided into districts, in which such special scavenging district is or may be situated shall, in their discretion, have

[1] *v.* p. 163.

power to cleanse and scavenge the highways and the footpaths under their management and control within such special scavenging district, or to pay or contribute out of the assessments raised under the Road and Bridges (Scotland) Act, 1878 (41 & 42 Vict. c. 51), for a proportion of the cost of cleansing and scavenging such highways and footpaths.

Where within such special district any private street or footway, or part thereof, is not levelled, macadamised, paved, channelled, and made good, to the satisfaction of the district committee (or, where the county is not divided into districts, the county council), such authority may, by notice addressed to the respective owners of the premises fronting, adjoining, or abutting on such street or footway, or parts thereof, as may require to be levelled, macadamised, paved, channelled, and made good, order them to do all such works or any of them, and that within a time to be specified in such notice.

If such order is not complied with, the said authority may, if they think fit, execute the works mentioned therein, and may recover in a summary manner the expenses incurred by them in so doing from the owners in default according and in proportion to the frontage and valuation of their respective premises or, in the case of dispute, in such proportion as may be settled by the sheriff.

Provided that it shall be competent to appeal to the sheriff against any such order, and all the provisions of section one hundred and twenty-two of this Act in regard to an appeal to the sheriff against a resolution of a local authority shall, with the necessary modifications, apply to an appeal against such order. [8, 27]

Houses in Filthy state to be Purified

40.[1] Where it appears to any local authority that any house[2] or part thereof, or any article of bedding or clothing therein, is in such a filthy or unwholesome condition that the health of any person is affected or endangered thereby, or that the whitewashing, cleansing, or purifying of any house or part thereof, or any article of bedding or clothing therein, would tend to prevent or check infectious disease, the local authority shall give notice[3] in writing to the owner[2] or occupier[2] of such house or part thereof to whitewash, cleanse, or purify the same, or any such article, as the case may require.

[1] Note there is no power of forcible entry. [2] *v.* definition, § 3, *ante*.
[3] *v.* § 159, *post*. Served on owner in the case of whitewashing, but on occupier in case of filthy clothing or bedding.

If the person to whom notice is so given fails to comply therewith within the time therein specified, he shall be liable to a penalty not exceeding ten shillings for every day during which he continues to make default; and the local authority may, if they think fit, cause such house or part thereof to be whitewashed, cleansed, or purified, and may recover in a summary manner the expenses incurred by them is so doing from the person in default.

Provision for obtaining Order for cleansing Offensive Ditches lying near to or forming Boundaries of Districts

41.[1] Where any watercourse or open ditch lying near to or forming the boundary between the district of any local authority and any adjoining district is foul and offensive, so as injuriously or dangerously[2] to affect the district of such local authority, any sheriff having jurisdiction in such adjoining district may, on the application of such local authority, summon the local authority of such adjoining district to appear to show cause why an order should not be made for cleansing such watercourse or open ditch, and for executing such permanent or other structural works as may appear to such sheriff to be necessary; and such sheriff, after hearing the parties, or *ex parte* in case of the default of any of them to appear, may make such order with reference to the execution of the works, and the persons by whom the same shall be executed, and by whom and in what proportions the costs of such works shall be paid, and also as to the amount thereof, and the time and mode of payment, as to such sheriff may seem reasonable. [150]

Periodical Removal of Manure from Mews and other Premises

42. Notice may be given by any local authority (by public announcement in the district or otherwise) for the periodical removal of manure or other refuse matter from mews, stables, or other premises, except cattle courts, in any special scavenging district, and where any such notice has been given any person to whom the manure or other refuse matter belongs who fails so to remove the same, or permits a further accumulation, and does not continue such periodical removal at such intervals as the local authority direct, shall be liable without further notice to a penalty not exceeding

1 This section gives additional powers to §§ 16 (2) and 28, *ante*.

2 "It does not appear to be necessary to aver or prove injury to health." (Handbook of Public Health, by Messrs J. Patten Macdougall and A. Murray, of the L.G.B., p. 26.)

twenty shillings for each day during which such manure or other refuse matter is permitted to accumulate, and where in any scavenging district it appears to the sanitary inspector that any accumulation of manure, dung, soil, or filth, or other offensive or noxious matters ought to be removed, he shall give notice[1] to the person to whom the same belongs, or to the occupier of the premises whereon it exists, to remove the same; and if such notice is not complied with within forty-eight hours from the service thereof, the manure, dung, soil, filth, or matter referred to shall be vested in and be sold and disposed of[2] by the local authority, and the proceeds thereof shall be applied in payment of the expenses incurred by them in the execution of this section; and the surplus (if any) shall be paid on demand to the owner of the matter removed, and the expenses of removal by the local authority of any such accumulation, if and so far as they are not covered by the sale thereof may be recovered by the local authority in a summary manner from the person to whom the accumulation belonged, whom failing, from the occupier or owner of the premises.

Unsound Food

Inspection and Destruction of Unsound Meat, etc.

43. (1) Any medical officer or sanitary inspector or any veterinary surgeon[3] approved for the purposes of this section by the local authority may at all reasonable times enter any premises within the district of the local authority, or search any cart or vehicle, or any barrow, basket, sack, bag, or parcel, in order to inspect and examine and may inspect and examine—

(*a*) any animal, alive or dead, intended for the food of man which is exposed for sale, or deposited in any place or is in course of transmission for the purpose of sale, or of preparation for sale; and

(*b*) any article, whether solid or liquid, intended for the food of man, and sold or exposed for sale, or deposited in any place or in course of transmission for the purpose of sale, or of preparation for sale,

the proof that the same was not exposed or deposited or in course of transmission for any such purpose, or was not intended for the food of man, resting with the person charged; and if any such animal or article appears to such medical officer or sanitary inspector or veterinary surgeon to

[1] *v.* § 159, *post.* [2] *v.* § 27, *post.* [3] *v.* definition, § 3, *ante.*

be diseased, or unsound, or unfit for the food of man, he may seize and carry away the same himself or by an assistant, in order to have the same dealt with summarily by a sheriff, magistrate, or justice.

Provided that in the case of any proceeding under this section with regard to a living animal the medical officer or sanitary inspector, unless he is himself a qualified veterinary surgeon, shall be accompanied by a veterinary surgeon approved as aforesaid.

The police force[1] of each police area shall have power to search carts or vehicles, or barrows, baskets, sacks, bags, or parcels, and to assist generally in executing and enforcing this section.

(2) If it appears to a sheriff, magistrate, or justice, that any animal or article which has been seized or is liable to be seized under this section is diseased, or unsound, or unfit for the food of man, he shall condemn the same, and order it to be destroyed or so disposed of as to prevent it from being exposed for sale or used for the food of man; and the person to whom the same belongs or did belong at the time of sale or exposure for sale, or deposit or transmission for the purpose of sale, or of preparation for sale, or in whose possession or on whose premises the same was found, shall be liable to a penalty not exceeding fifty pounds for every animal or article, or if the article consists of fruit, vegetables, corn, bread, or flour, for every parcel thereof so condemned, unless he proves that he and the person acting on his behalf (if any) did not know, and could not with reasonable care have known, that it was in such a condition, or where the proceedings are before a sheriff, at the discretion of the court, if it finds that he has knowingly and wilfully committed the offence, he shall be liable without the infliction of a penalty, to imprisonment for a term of not more than three months with or without hard labour, and also to pay all expenses caused by the seizure, detention, or disposal thereof. [10, 151]

Provided that if such person proves that the animal or part thereof condemned as aforesaid was within a reasonable time prior to the seizure thereof examined upon the premises where the animal was slaughtered and passed by a veterinary surgeon approved as aforesaid called in for the purpose, and who shall have granted a certificate of passing as nearly as may be as in the next sub-section provided, or by a veterinary surgeon in terms of that sub-section, he shall be exempt from penalty or imprisonment under this section for such offence.

[1] *v.* § 169, *post.*

(3) Each local authority, or two or more local authorities in combination, may, if they think fit, appoint a place or places within its district or their districts, and fix a time or times at which a veterinary surgeon approved as aforesaid shall attend for the purpose of examining any animal alive or dead which may there be submitted to him, and passing or condemning the same, and such veterinary surgeon shall, on receipt of a fee to be fixed by the local authority or authorities and paid by the owner, examine and pass or condemn in whole or in part any animal or carcase so submitted to him; and if he shall pass the same he shall grant a certificate of passing which shall set forth the name of the owner, the date and hour of examination, and such particulars regarding the animal or carcase as the local authority or authorities may prescribe for the purpose of aiding in the subsequent identification of the same; and if he shall condemn the animal or carcase, or part thereof, the animal or carcase or part so condemned shall be retained and be forthwith destroyed by the local authority or authorities or so disposed of as to prevent it from being exposed for sale or used for the food of man, and the owner shall be entitled to the net price realised from the residual product of the carcase or part so condemned, if any, after deducting the expenses of condemnation and destruction. Provided that no carcase shall be submitted for examination, either under this or the immediately preceding sub-section, unless as a whole carcase, including the thoracic and abdominal viscera, in such manner that the examiner shall be readily able to satisfy himself that the organs are those of the carcase under inspection.

(4) Where it is shown that any animal or article liable to be seized under this section and found in the possession of any person was purchased by him or consigned to him from another person for the food of man, and when so purchased or consigned was in such a condition as to be liable to be seized and condemned under this section, the person who so sold or consigned the same shall be liable to be brought to trial in the district in which such animal or article was seized, and on conviction shall be liable to the penalty and imprisonment above mentioned, unless he proves that, at the time he sold or consigned the said animal or article, he and the person acting on his behalf, if any, did not know, and could not with reasonable care have known, that it was in such a condition.

(5) A copy of any certificate granted by a veterinary surgeon, under sub-sections two or three of this section, shall forthwith be sent by him to the chief constable of the

jurisdiction in which the examination of the animal or carcase took place, and the certificate itself shall be sent by the person selling the animal or carcase forthwith after the sale, and not more than seven days from the date of the certificate, to the chief constable of the jurisdiction in which the sale of the animal or carcase took place, and if any veterinary surgeon or person shall contravene this enactment he shall be liable to a penalty not exceeding twenty pounds.

(6) Where a person convicted of an offence under this section has been within twelve months previously convicted of an offence under this section, the sheriff, magistrate, or justice may, if he thinks fit, and finds that the offender knowingly and wilfully committed both such offences, order that a notice of the facts be affixed, in such form and manner and for such period not exceeding twenty-one days as the sheriff, magistrate, or justice may order, to any premises occupied by that person, and that the person do pay the costs of such affixing, and if any person obstructs the affixing of such notice, or removes, defaces, or conceals the notice while affixed during the said period, he shall for each offence be liable to a penalty not exceeding five pounds.

(7) If the occupier of a licensed slaughter-house is convicted of an offence under this section the sheriff, magistrate, or justice convicting him may cancel the licence for such slaughter-house.

(8) If any person obstructs a medical officer, sanitary inspector, or veterinary surgeon as aforesaid in the performance of his duty under this section he shall, where the proceedings are before a sheriff, and where the sheriff is satisfied that the obstruction was with intent to prevent the discovery of an offence under this section, or that the accused has within twelve months previously been convicted of such obstruction, be liable to imprisonment for any term not exceeding one month in lieu of any penalty authorised by this Act for such obstruction.

(9) A sheriff, magistrate, or justice, may act in adjudicating on an offender under this section whether he has or has not acted in ordering the animal or article to be destroyed or disposed of. **[9, 10, 151]**

PART III

GENERAL PREVENTION AND MITIGATION OF DISEASE

Infectious Diseases—Notification

Notification of Infectious Disease

44. From and after the commencement of this Act the provisions of the Infectious Disease (Notification) Act, 1889 (52 & 53 Vict. c. 72),[1] shall extend to and take effect in every district in Scotland, whether it has or has not been adopted before the said commencement.

Infectious Diseases—Prevention

Power to Inspect Premises where Infectious Disease supposed to Exist

45. The medical officer may, at reasonable times, in the daytime,[2] enter and inspect any house[2] or premises[2] in the district[2] in which he has reason to believe that any infectious disease exists, or has recently existed, and the medical officer may examine any person found on such premises with a view to ascertaining whether such person is suffering, or has recently suffered, from any infectious disease, and in the event of admission, inspection, or examination being refused, the sheriff, or magistrate, or justice may, on reasonable cause shown, grant warrant authorising such entry, inspection, and examination, and on such warrant being obtained and exhibited, any person refusing to admit the medical officer to such house or premises, or obstructing him in making the inspection or examination aforesaid, shall be liable to a penalty not exceeding forty shillings for every such offence.

Provision of Means for Disinfecting Bedding, etc.

46. (1) Every local authority may, and when required by the Board shall, provide, either within or without their district, proper premises with all necessary apparatus and attendance for the destruction and for the disinfection, and carriages or vessels for the removal,[3] of articles (whether bedding, clothing, or other) which have become infected by

[1] *v.* p. 256. [2] *v.* § 3, *ante*.

[3] *v.* § 56 (2), providing that transmission of bedding, clothing, or other articles for purposes of disinfection may be allowed.

any infectious disease, and shall cause any such articles brought for destruction or disinfection to be destroyed, or to be disinfected and returned, and may remove, and may destroy, or disinfect and return, such articles free of charge.

(2) Any local authorities may execute their duty under this section by combining for the purposes thereof, or by contracting for the use by one of the contracting authorities of any premises, or of any apparatus or appliances, provided for the purpose of this section by another of such contracting authorities, and may so combine or contract upon such terms as may be agreed upon.

Cleansing and Disinfecting of Premises, etc.[1]

47. (1) Where it appears to the local authority, upon the certificate of the medical officer or any other legally qualified medical practitioner,[2] that the cleansing and disinfecting of any house,[2] or part thereof, and of any articles therein likely to retain infection, or the destruction of such articles, would tend to prevent or check any infectious disease, the local authority may serve notice[3] on the occupier,[2] or where the house or part thereof is unoccupied on the owner,[2] of such house or part thereof that the same and any such articles therein will be cleansed and disinfected, or (as regards the articles) destroyed, by the local authority, unless the person so notified informs the local authority, within a time to be specified in the notice from the receipt of the said notice, that he will cleanse and disinfect the house or part thereof and any such articles, or destroy such articles, to the satisfaction of the medical officer or of any other legally qualified medical practitioner, as testified by certificate by him, within a time fixed in the notice.

(2) If either—

(*a*) within the time specified as aforesaid from the receipt of the notice, the person on whom the notice is served does not inform the local authority as aforesaid; or

(*b*) having so informed the local authority, he fails to have the house or part thereof and any such articles disinfected, or such articles destroyed, as aforesaid within the time fixed in the notice; or

(*c*) the occupier or owner, as the case may be, without such notice gives his consent;

the house, or part thereof, and articles, shall be cleansed and disinfected, or such articles destroyed by the officers of, and at the cost of, the local authority.

[1] *v.* also § 40, *ante*, and § 79 (3), *post*.

[2] *v.* § 3 *ante* as to definition.

[3] *v.* § 159, *post*.

(3) For the purpose of carrying into effect this section the local authority may enter by day[1] on any premises.

(4) If the local authority deem it necessary to remove from any house or part thereof, or from any tenement of houses, all or any of the residents not being themselves sick, on account of the existence or recent existence therein of infectious disease, or for the purpose of disinfecting such house or part thereof, or such tenement or part thereof, they may make application to a sheriff, magistrate, or justice, and the sheriff, magistrate, or justice, if satisfied of the necessity of such removal, may grant a warrant authorising the local authority to remove such residents, and imposing such conditions as to time and otherwise as to him may seem fit. Provided always that no such warrant shall be necessary when the removal is carried out with the consent of any such resident or by his parent or guardian. The local authority shall, and they are hereby empowered, to provide temporary shelter or house accommodation,[2] and, if necessary, maintenance with any necessary attendants, free of charge, for such persons while prevented from returning to such house or part thereof or such tenement or part thereof. [11]

(5) When the local authority have disinfected any house, part of a house, or any article, under the provisions of this section, they shall compensate the occupier or owner of such house or part of a house, or the owner of such article, for any unnecessary damage[3] thereby caused to such house, part of a house, or article; and when the authority destroy any article under this section they shall reasonably compensate the owner thereof; and the amount of any such compensation shall be recoverable in a summary manner.

For the purpose of this section the word "house" includes any tent or van or any ship[4] lying in any sea, river, harbour, or other water or *ex adverso* of any place within the limits of the local authority.

Disinfection of Bedding, etc.

48. (1) Any local authority may serve a notice[5] on the owner of any bedding, clothing, or other articles which have been exposed to the infection of any infectious disease, requiring the delivery thereof to an officer of the local authority for removal for the purpose of destruction or disinfection; and if any person fails to comply with such notice he shall be liable to a penalty not exceeding ten pounds.

(2) The bedding, clothing, and articles if so disinfected by

[1] *v.* § 3, *ante*, as to definition. [2] *v.* § 66 (1), *post*. [3] *v.* 164, *post*.
[4] *v.* also §§ 79 (3) and 177, *post*. [5] *v.* § 159, *post*.

the local authority, shall be brought back and delivered to the owner free of charge, and if any of them suffer any unnecessary damage, the authority shall compensate the owner [1] for the same, and the authority shall also reasonably compensate the owner for any articles destroyed; and the amount of compensation shall be recoverable in a summary manner.

Persons engaged in Washing or Mangling Clothes, to furnish List of Owners of Clothes in Certain Cases

49. Whenever it shall be certified to the local authority by the medical officer of health that it is desirable, with a view to prevent the spread of infectious disease, that they should be furnished with a list of the customers of any person or company earning a livelihood or deriving gain by the washing or mangling of clothes, the local authority may require such person or company to furnish to them a full and complete list of the names and addresses of the owners of clothes for whom such person or company washes or mangles, or has washed or mangled, during the past six weeks, and such person or company shall furnish such list accordingly, and the local authority shall pay to him, her, or them, for every such list, the sum of sixpence, and at the rate of sixpence for every twenty-five names contained therein, but no such payment shall exceed three shillings, and every person who shall wilfully or knowingly offend against this enactment shall, for each such offence, be liable to a penalty not exceeding five pounds, and to a daily penalty not exceeding twenty shillings.

Infectious Matter thrown into Ashpits, etc., to be Disinfected

50. (1) If a person knowingly casts, or causes or permits to be cast, into any ashpit,[2] or otherwise exposes any matter or article infected[3] by infectious disease, he shall be liable to a penalty not exceeding five pounds, and, if the offence continues, to a further penalty not exceeding forty shillings for every day during which the offence so continues after the notice hereafter in this section mentioned.

(2) The local authority shall[4] cause their officers to serve notice[5] of the provisions of this section on the occupier[2] of any house, or part of a house, in which they are aware that there is a person suffering from an infectious disease.

1 *v.* § 164, *post.*
2 *v.* definition, § 3, *ante.*
3 *v.* § 56 (1) (*c*), where any article has been knowingly exposed, whether actually infected or not.
4 It is imperative.
5 *v.* § 159, *post.*

Penalty on Letting Houses in which Infected Persons have been Lodging

51. (1) Any person who knowingly lets for hire any house,[1] or part of a house, in which any person has been suffering from any infectious disease, without having such house, or part of a house, and all articles therein liable to retain infection, disinfected to the satisfaction of the medical officer as testified by a certificate[2] signed by him, or (as regards the articles) destroyed, shall be liable to a penalty not exceeding twenty pounds.

(2) For the purposes of this section, the keeper of an inn or hotel shall be deemed to let for hire part of a house to any person admitted as a guest into such inn or hotel.

Penalty on Persons Letting Houses making False Statements as to Infectious Disease

52. Any person letting for hire, or showing for the purpose of letting for hire, any house or part thereof, who, on being questioned by any person negotiating for the hire as to the fact of there being, or within six weeks previously having been, therein any person suffering from any infectious disease, knowingly makes a false answer to such question, shall be liable, at the discretion of the sheriff, magistrate, or justice, to a penalty[3] not exceeding twenty pounds, or, where the proceedings are before a sheriff, to imprisonment with or without hard labour, for a period not exceeding one month.

Penalty on Ceasing to Occupy House without Disinfection or Notice to Owner, or on making False Answer

53. (1) Where a person ceases to occupy any house,[4] or part of a house, in which any person has within six weeks previously been suffering from any infectious disease, and either—

(*a*) fails to have such house, or part of a house, and all articles therein liable to retain infection, disinfected to the satisfaction of the medical officer, as testified by a certificate signed by him, or such articles destroyed; or

(*b*) fails to give to the owner[4] or occupier[4] of such house, or part of a house, notice of the previous existence of such disease; or

(*c*) on being questioned by the owner[4] or occupier[4] of, or

[1] *v.* definition, § 3, *ante*.

[2] Probably a certificate from a legally qualified medical practitioner may be sufficient, as under § 47, *ante*.

[3] For procedure as to recovery, *v.* §§ 153 and 154, *post*.

[4] For definition, *v.* § 3, *ante*.

by any person negotiating for the hire of,[1] such house or part of a house, as to the fact of there having within six weeks previously been therein any person suffering from any infectious disease, knowingly makes a false answer to such question,

he shall be liable to a penalty not exceeding twenty pounds.

(2) The local authority shall cause their officers to serve notice[2] of the provisions of this section on the occupier of any house, or part of a house, in which they are aware that there is a person suffering from an infectious disease.

Removal to Hospital of Infected Persons without Proper Lodging

54. (1) A person suffering from any infectious disease, who is without proper lodging or accommodation, or is so lodged that proper precautions cannot be taken for preventing the spread of the disease,[3] or is lodged in a tent or van, or in a room occupied by others besides those necessarily in attendance on such person, or is on board a ship,[4] may, on a certificate signed by the medical officer or other legally qualified medical practitioner, and with the consent of the superintending body of the hospital to which he is to be removed, be removed by order of a sheriff, magistrate, or justice,[5] on the application[6] and at the cost of the local authority of the district where such person is found, to any hospital in or within a convenient distance of such district, or, in the case of a combination as hereinafter provided, in or within a convenient distance of the combined district, or the sheriff, magistrate, or justice may direct the removal from the room or house occupied by such person of all others not in attendance on him, the local authority providing suitable accommodation[7] for such person or persons; and such person may be detained in such hospital so long as he continues in an infected condition. Provided always that no such order shall be necessary where the removal is carried out with the consent of the patient or his parent or guardian.

(2) The order may be addressed to any constable or officer of the local authority as the sheriff, magistrate, or justice making the same, thinks expedient; and if any person wilfully disobeys or obstructs[8] the execution of such order, he shall be liable to a penalty not exceeding ten pounds. [152, 163]

1 Also *v.* § 52, *ante*.
2 *v.* § 159, *post*.
3 *i.e.*, where patient cannot be properly isolated.
4 *v.* definition, § 3, *ante*.
5 If objection is made.
6 By the L.A., or by small committee delegated by L.A., with powers under § 14, *ante*.
7 *v.* § 66 (1), *post*.
8 *v.* also § 163, *post*.

Detention of Infected Persons without Proper Lodging in Hospital

55. (1) A sheriff, magistrate, or justice, on being satisfied on the application of the local authority that a person suffering from any infectious disease is in a hospital, and would not on leaving the hospital be provided with lodging or accommodation in which proper precautions could be taken to prevent the spreading of the disease by such person, may direct such person to be detained in the hospital at the cost of the local authority during the time limited by the sheriff, magistrate, or justice, who may enlarge the time as often as appears to him necessary for preventing the spread of the disease.

(2) The direction may be carried into execution by any officer of any local authority, or by any police constable, or any officer of the hospital.

Penalty on Exposure of Infected Persons and Things

56. (1) If any person—

(*a*) while suffering from any infectious disease wilfully exposes himself without proper precautions against spreading the said disease in any street,[1] public place, shop, inn, hotel, church, or any place used in common by persons other than members of the family or household to which such infected person belongs; or

(*b*) being in charge of any person so suffering, so exposes such sufferer; or

(*c*) knowingly gives, lends, sells, pawns, transmits, removes, or exposes,[2] or permits to be washed or exposed in any wash-house or washing green which is used in common by persons other than the family or household to which the infected person belongs, without previous disinfection, to the satisfaction of the medical officer or of some legally qualified medical practitioner as certified by him in writing, any bedding, clothing, or other articles which have been exposed to infection from any such disease; or

(*d*) wakes or permits to be waked in any house, room, or place over which he has control the body of any person who has died of any infectious disease;

he shall be liable to a penalty not exceeding five pounds.

(2) Provided that proceedings under this section shall not be taken against persons transmitting with proper precautions any bedding, clothing, or other articles for the purpose of having the same disinfected. [164]

[1] For definition, *v.* § 3, *ante*

[2] *v.* also § 50, *ante*.

Penalty on Sending Child to School, so as to Spread Infection[1]

57. Every parent or person having care or charge of a child who is or has been suffering from infectious disease, or who resides in a house where such disease exists or has existed within a period of three months, who shall knowingly or negligently permit such child to attend school without procuring and producing to the teacher or other person in charge of such school a certificate from the medical officer,[2] which he shall grant free of charge, or from some legally qualified medical practitioner, that such child has become free from disease and infection, and that the house and everything therein exposed to infection has been disinfected to the satisfaction of such medical officer or medical practitioner, shall be liable to a penalty not exceeding forty shillings.

Provided that if a person is not required to send notice in the first instance but only in default of some other person, he shall not be liable to any penalty, if he satisfies the court that he had reasonable cause to suppose that the notice had been duly sent.

Any teacher or person in charge of any school, who shall knowingly permit any child to attend such school in contravention of the provisions of this section, shall be liable to a penalty not exceeding forty shillings.

Prohibitions on Infected Person carrying on Business

58. No person suffering from an infectious disease, or who is living in an infected house, shall milk[3] any animal, or pick fruit, or shall engage in any occupation connected with food, or carry on any trade or business[4] in such a

1 Manifestly it is not the M.O.H. but the medical attendant who should discharge this portion of the requirements of the section, as he is the person most intimately acquainted with the case, and the only medical man who can conscientiously certify cases not notifiable. His fee for doing so might well be paid by the School Board interested in the return of pupils because of the grant, or by the parents or guardians in not losing schooling of their children. After three months it is to be noted that no certificate is necessary. Again a certificate of satisfactory disinfection of the house and everything exposed therein to infection can best and most conveniently be granted by the M.O.H. if the person who has disinfected acts as his agent or lay assistant, as is the case in districts of some local authorities. *N.B.*—To prevent probable spread it is often advisable for a M.O.H. to either exclude scholars from a locality or partly or wholly close a school when Articles of Scotch Code, p. 289, should have consideration.

2 *v.* definition, § 3 *ante*.

3 *v.* Art. 9, Dairies, Cow-sheds, and Milk-shops Order of 1885, p. 217.

4 *v.* § 16 (6), *ante*.

manner as to be likely to spread such disease, and any person who knowing himself to be suffering from any infectious disease contravenes this section shall be liable to a penalty not exceeding ten pounds.

Prohibition on Conveyance, etc., of Infected Person in Public Conveyance

59. It shall not be lawful for any owner or person in charge of a public conveyance or ship[1] knowingly to convey therein, or for any other person knowingly to place therein, a person suffering from any infectious disease, or for a person suffering from any such disease to enter any public conveyance or ship, and any person contravening any of the foregoing provisions shall be liable to a penalty not exceeding ten pounds,[2] and if any person so suffering is conveyed in any public conveyance or ship, the owner or person in charge thereof, as soon as it comes to his knowledge, shall give notice to the local authority, and shall cause such conveyance or ship to be disinfected, and if he fails so to do he shall be liable to a fine not exceeding five pounds, and such owner or person in charge shall be entitled to recover in a summary manner from the person so conveyed by him, or from the person causing that person to be so conveyed, a sum sufficient to cover any loss and expense incurred by him in connection with such disinfection. It shall be the duty of the local authority, when so requested by such owner or person in charge, to provide for the disinfection of the same, and they may do so free of charge. But nothing contained in this section shall prevent the removal by railway train or by ship of persons suffering from infectious disease, if they are conveyed within an ambulance-waggon,[3] or other proper vehicle provided or approved by the local authority. [164]

Inspection of Dairies, and power to Prohibit Supply of Milk

60. (1) If the medical officer of any district[4] has evidence that any person in the district[4] is suffering from an infectious disease attributable to milk supplied within the district[4] from any dairy[4] situate within the district,[4] or that the milk from any such dairy is likely to cause any such disease to any person residing in the district,[4] such medical officer shall visit such dairy,[4] and the medical officer shall examine the

[1] *v.* definition, § 3, *ante.*
[2] The L.A. can only sue if offence has been within their own district.
[3] *v.* § 67, *post.*
[4] *v.* definition, § 3, *ante.*

dairy and every person engaged in the service thereof or resident upon the premises or who may be resident in any premises where any person employed in such dairy[1] may reside, and if accompanied by a veterinary surgeon[1] approved as aforesaid shall examine the animals therein, and the medical officer shall forthwith report the results of his examination accompanied by the report of the veterinary surgeon, if any, to the local authority or any committee of the local authority appointed under section fourteen to deal with such matters.

(2) If the medical officer of any district[1] has evidence that any person in the district[1] is suffering from any infectious disease attributable to milk from any dairy[1] without the district, or that the milk from any such dairy is likely to cause any such disease to any person residing in the district, such medical officer shall forthwith intimate the same to the local authority of the district in which such dairy is situate, and such other local authority shall be bound, forthwith, by its medical officer to examine the dairy and the persons aforesaid, and by a veterinary surgeon approved as aforesaid, to examine the animals therein, previous notice of the time of such examination having been given to the local authority of the first-mentioned district,[2] in order that the medical officer or any veterinary surgeon approved as aforesaid may, if they so desire, be present at the examinations referred to, and the medical officer of the second-mentioned local authority[3] shall forthwith report the results of his examination, accompanied by the report of the veterinary surgeon, if any, to that local authority or any committee of that local authority[3] appointed under section fourteen of this Act to deal with such matters.

(3) The local authority of the district in which the dairy is situated, or any committee appointed for the purpose, shall meet forthwith and consider the reports together with any other evidence that may be submitted by parties concerned, and shall either make an order requiring the dairyman[4] not to supply any milk from the dairy until the order has been withdrawn by the local authority, or resolve that no such order is necessary.

(4) Where proceedings are taken or any order is made under this section by the local authority of a district other than a burgh, it shall not be competent to appeal against the said proceedings or against said order to the county council.

(5) The local authority may, if the dairy is within the district, require the dairyman not to supply milk either

[1] *v.* definition, § 3, *ante*.
[2] *i.e.* district infected.
[3] *i.e.* the L.A. in whose district the dairy is situated.
[4] *v.* definition, § 3, *ante*.

within or without the district, and shall give notice of the fact to the local authority of any district within which they believe milk to be supplied from such dairy.

(6) Any such order shall be forthwith withdrawn on the local authority, or their medical officer on their behalf, being satisfied that the milk from the dairy is no longer likely to cause infectious disease.

(7) It shall be open to any local authority or dairyman aggrieved by any such resolution or order, or withdrawal of order, to appeal in a summary manner to a sheriff having jurisdiction in the district in which the dairy is situated, and the sheriff may either make an order requiring the dairyman to cease from supplying milk, or may vary or rescind any order which has been made by the local authority, and he may at any time withdraw any order made under this section. Pending the disposal of any such appeal the order shall remain in force.

(8) If any person refuses to permit the medical officer or veterinary surgeon of either local authority to make examination as above provided, or, after any order has been made under this section, supplies milk in contravention of the order, he shall be liable to a penalty not exceeding ten pounds, and, it the offence continues, to a further penalty not exceeding five pounds for every day during which the offence continues.

(9) Provided that—

(*a*) proceedings in respect of the offence shall be taken before a sheriff having jurisdiction in the place where the dairy is situate; and

(*b*) a dairyman shall not be liable to an action for breach of contract if the breach be due to an order under this section.

(10) Nothing in or done under this section shall interfere with the operation or effect of the Contagious Diseases (Animals) Acts, 1878 to 1886,[1] or of any order,[2] licence, or act of the Privy Council or the Board thereunder, or of any regulation, licence, or act of a local authority, made, granted, or done under any such order of the Privy Council or the Board, or exempt any dairy, building, or thing, or any person from the provisions of any general Act relating to dairies, milk, or animals. [12]

[1] *v.* p. 234 for Amending Acts.

[2] *v.* Order of Privy Council, 1885, p. 216, which remains in force.

Dairyman to Supply Information and to Produce List of Customers and Invoices

61. Whenever it shall be certified to the local authority, by the medical officer[1] or other legally qualified medical practitioner,[1] that the outbreak or spread of infectious disease within the district is, in the opinion of such medical officer or medical practitioner, attributable to milk supplied by any dairyman,[1] whether wholesale or retail, or to milk supplied by one or other of several such dairymen, whether wholesale or retail,—

(1) The local authority may require such dairyman, whether within or without the district, to furnish to them within a time to be fixed by them, being not less than twenty-four hours, a full and complete list of the names and addresses of all his customers within the district so far as known to him, and such dairyman shall furnish such list accordingly, and the local authority shall pay to him for every such list at the rate of sixpence for every twenty-five names contained therein; and every person who shall wilfully or knowingly offend against this enactment shall for each such offence be liable to a penalty not exceeding five pounds, and to a daily penalty not exceeding forty shillings;

(2) The local authority may require such dairyman to furnish to them, within a time to be fixed by them, a full and complete list of the names and addresses of the farmers, dairymen, or other parties from whom, during a period to be specified, the milk, or any part of the milk which they sell or distribute, was obtained, and, if required, to produce and exhibit to the medical officer, or to any person deputed by him, all invoices, pass-books, accounts, or contracts, connected with the consignment or purchase of milk during such period, and such dairymen or others shall furnish such lists and produce and exhibit such invoices, pass-books, accounts, or contracts, accordingly; and every person who shall wilfully or knowingly offend against this enactment shall for every such offence be liable to a penalty not exceeding five pounds, and to a daily penalty not exceeding forty shillings;

(3) In any case where the person liable to any penalty under this section is not resident within the district, such penalty may be sued for at the instance of the procurator fiscal before the sheriff of the county in which such person is either domiciled or carries on business.

[1] *v.* definition, § 3, *ante*.

Prohibition of Retention of Dead Body in Certain Cases

62. (1) A person shall not without the sanction in writing of the medical officer,[1] or of a legally qualified medical practitioner,[1] retain unburied for more than forty-eight hours elsewhere than in a room not used at the time as a dwelling-place, sleeping-place, or workroom, the body of any person who has died of any infectious disease.

(2) If a person acts in contravention of this section he shall be liable to a penalty not exceeding five pounds.

Body of Person Dying of Infectious Disease in Hospital, etc., to be Removed only for Burial

63. (1) If a person dies in a hospital or place of temporary accommodation for the sick from any infectious disease, and the medical officer, or any legally qualified medical practitioner, certifies that in his opinion it is desirable, in order to prevent the risk of communicating such disease or of spreading infection, that the body be not removed from such hospital or place except for the purpose of being forthwith buried, it shall not be lawful for any person to remove the body except for that purpose; and the body when taken out of such hospital or place shall be forthwith taken direct to the place of burial and there buried.

(2) If any person wilfully offends against this section he shall be liable to a penalty not exceeding ten pounds.

(3) Nothing in this section shall prevent the removal of a dead body from a hospital to a mortuary, and such mortuary shall, for the purposes of this section, be deemed part of such hospital.

Disinfection of Public Conveyances if Used for Carrying Corpses

64. If—

(*a*) a person hires or uses a public conveyance, or a conveyance that is let for hire, other than a hearse, for conveying the body of a person who has died from any infectious disease, without previously notifying to the owner or driver of the conveyance that such person died from such disease; [2] or

(*b*) the owner or driver, immediately on its coming to his knowledge that such conveyance is being or has been used for conveying such body, does not take all reasonable precautions to prevent the spread of infection, or

[1] *v.* definition, § 3, *ante.* [2] *v.* also § 69 (3), *post*

does not forthwith give intimation to the local authority and provide for the disinfection of the conveyance to the satisfaction of the local authority,[1]

such person or such owner or driver shall be liable to a penalty not exceeding five pounds, and, if the offence continues, to a further penalty not exceeding forty shillings for every day during which the offence continues.

Bye-Laws as to Public Conveyances

65. The local authority may make bye-laws[2] for securing the cleanliness and sanitary condition of public conveyances plying within its district, and for preventing overcrowding in such conveyances.

Hospitals and Ambulances[3]

Power of Local Authority to Provide Hospitals

66. (1) Any local authority may, and if required by the Board shall, provide,[4] furnish,[4] and maintain for the use of

[1] *v.* also § 69 (3), *post*. [2] *v.* §§ 183-187, *post*.

[3] When the L.G. Act, 1889, transferred hospitals from parochial boards to county councils, the question arose as to whether a hospital originally erected to accommodate a *parish* could be legally used for the extended area of a "*district*." This question was decided by the First Division of the Court. The Town Council of Lanark burgh jointly with the Parochial Board of Lanark parish erected a hospital under the old régime, and the district of the Upper Ward of Lanarkshire District Committee claimed right to send to the hospital patients from any part of their "district." The First Division (Inner House) of the Court of Session held that the use of the hospital was limited to those for whom it was erected, and that the "district" had no claim to it except for patients in the landward part of the parish of Lanark. Another question of importance in connection with hospitals is the "respective obligations of parish councils and local authorities" as to treatment of paupers suffering from infectious disease, or of those who have become paupers because of infectious disease, and as regards this matter, Messrs J. Patten Macdougall and A. Murray, of the L.G.B., in a Note to this section, comment thus :—"The following appears to be the view of the question which commends itself most widely: The parish council is responsible for all paupers, and bound to supply them with maintenance as well as with medical treatment when they are suffering from infectious as from any other disease. But the parish council are under no legal obligation to *isolate*, in the public interest, paupers suffering from infectious disease. On the other hand, a pauper suffering from infectious disease is to be regarded by the local authority as in exactly the same position as any other person so suffering. If the case of the pauper is one calling for removal to hospital in terms of sec. 54, it is the duty of the local authority to remove him, and they have no claim against the parish council. The local authority may also exercise in the case of paupers, as in other cases, their power to provide nursing, medicine, and medical attendance for persons suffering from infectious disease, and if they do exercise this power, they cannot recover the cost from the parish council unless that body has come under an obligation to pay." [4] *v.* § 141, *post*.

inhabitants of their district suffering from infectious disease, hospitals, temporary or permanent,[1] and houses of reception[2] for convalescents from infectious diseases, or for persons who have been exposed to infection, and for that purpose may—

(*a*) themselves build such hospitals or houses; or

(*b*) contract for the use of any such hospital or house or part thereof; or

(*c*) enter into any agreement with any person having the management of any such hospital or house or part thereof on payment of such annual or other sum as may be agreed on;

(*d*) any local authority, with the consent of the Board, may also or in place of providing such hospitals or houses as aforesaid, employ nurses to attend the persons suffering from infectious disease in their own houses, and also supply medicines and medical attendance for such sick.

(2) Two or more local authorities may, and if required by the Board shall, combine in providing, furnishing, and maintaining a common hospital or house of reception, or in employing nurses on terms to be agreed on, and failing agreement to be fixed by the Board, whose determination shall be binding.

(3) No contract for the use of any such hospital or house or part thereof shall be entered into without the consent of the Board, and no such hospital or house of reception shall be provided, unless and until the site and plans for the construction thereof have been approved of by the Board.[3] Provided always that such site shall be in or within a convenient distance of the district of the local authority, or, in the case of a combination in terms of this section, in or within a convenient distance of the combined district.

(4) A local authority may with the sanction and subject to regulations made by the Board provide and maintain one or more portable hospitals for the use of their district. [153, 154, 165]

Provision of Conveyance for Infected Persons

67. A local authority may provide and maintain, or may combine with one or more local authorities in providing and maintaining, carriages suitable for the conveyance of persons suffering from any infectious disease, and pay the expense of conveying therein any person so suffering to a hospital or other place of destination.

[1] *v.* § 141, where it is stated that power of borrowing is limited to *permanent* hospitals. As to procedure in borrowing, *v.* § 67, L.G. Act, 1889.

[2] *v.* § 141, *post*.

[3] *v.* Memorandum of L.G.B. upon site, building, etc., p. 292.

Mortuaries, Etc.

Power of Local Authority to provide Mortuaries[1]

68. Every local authority may provide and fit up a proper place or places for the reception of dead bodies before interment (in this Act called a mortuary), and may make bye-laws[2] with respect to the management and charges for the use of the same.

Power of Sheriff, etc., in Certain Cases to order Removal of Dead Body to Mortuary

69. (1) Where either—

(*a*) the body of a person who has died of any infectious disease is retained in a room in which persons live or sleep; or

(*b*) the body of a person who has died of any infectious disease is retained without the sanction in writing of the medical officer or any legally qualified medical practitioner for more than forty-eight hours, elsewhere than in a room not used at the time as a dwelling-place, sleeping-place, or workroom;[3] or

(*c*) any dead body is retained in any house or room or ship under circumstances which, if continued, may endanger the health of the inmates thereof, or of any adjoining or neighbouring house or building; or

(*d*) any dead body found within the district is unclaimed or no sufficient person undertakes to bury it,

a sheriff, magistrate or justice may, on a certificate signed by a medical officer or other legally qualified medical practitioner, direct that the body be removed, at the cost of the local authority, to any available mortuary, and be buried within the time limited by the sheriff, magistrate or justice; and may if it is the body of a person who has died of an infectious disease, or if he considers immediate burial necessary, direct that the body be buried immediately, without removal to the mortuary.

(2) Unless the friends or relations of the deceased undertake to bury, and do bury, the body within the time so limited, it shall be the duty of the local authority to bury such body, and any expense so incurred may be recovered by them in a summary manner from any person legally liable to pay the expenses of such burial. [166]

[1] The following sections should be consulted as to this—namely, 71, 141, 144, and 145, *post*. As to removal of dead bodies to, *v.* § 69 (next section), and § 63 (3), *ante*.

[2] *v.* §§ 183-187, *post*.

[3] *v.* § 62, *ante*.

(3)[1] It shall not be lawful to transport the body of any person who has died of any infectious disease by railway or other public conveyance, not being a conveyance reserved for such purpose, unless and until the medical officer, or other legally qualified medical practitioner, has certified that every precaution necessary for the public safety has been adopted to his satisfaction, and any undertaker or other person who shall without such certificate knowingly remove or assist in removing, and any person who shall procure or endeavour to procure the removal of such dead body without having obtained such certificate shall be liable to the penalty hereinafter mentioned in this section.

(4) If any person obstructs the execution of any direction given by a sheriff, magistrate, or justice, under this section, he shall be liable to a penalty not exceeding five pounds.

Power of Local Authority to Provide Places for Post-mortem Examinations

70. (1) Any local authority may provide and maintain a proper building (otherwise than at a poorhouse) for the reception of dead bodies during the time required to conduct any post-mortem examination ordered by a lawful authority, and may make regulations with respect to the management of such building.

(2) Any such building may be provided in connection with a mortuary, but this enactment shall not authorise the conducting of any post-mortem examination in a mortuary.

Power to Sanitary Authorities to Unite for providing Mortuary

71. Any local authorities may, with the approval of the Board, execute their duty under this Act with respect to mortuaries and buildings for post-mortem examinations by combining for the purpose thereof, or by contracting for the use by one of the contracting authorities of any such mortuary or building provided by another of such contracting authorities, and may so combine or contract upon such terms as may be agreed upon.

Bye-Laws as to Houses Let in Lodgings

Power of Local Authority to make Bye-Laws as to Lodging-Houses

72. (1) Every local authority may, and if required by the

[1] *v.* also § 64, *ante*.

Board shall, make and enforce for the whole or any part of their district such bye-laws[1] as are requisite for the following matters (that is to say):

(*a*) for fixing the number of persons who may occupy a house or part of a house which is let in lodgings or occupied by members of more than one family:

(*b*) for the registration of houses so let or occupied:

(*c*) for the inspection of such houses:

(*d*) for enforcing sufficient privy or water-closet accommodation and other appliances and means of cleanliness in proportion to the number of lodgers or occupiers, drainage for such houses, and for promoting cleanliness and ventilation in such houses, and for the cleansing and ventilation of the common passages and staircases:

(*e*) for the cleansing and limewashing at stated times of the premises:

(*f*) for the giving of notices and the taking of precautions in case of any infectious disease.

(2) This section shall not apply to common lodging-houses within the provisions of this Act relating to common lodging-houses, but shall apply to farmed-out houses, that is to say, to houses of one or two apartments taken on lease by any person, and let or rented to several occupiers for limited periods as furnished apartments, as also to all boarding-houses for seamen and emigrants[2] irrespective of the charge made for the board and lodging therein.

Tents and Vans

Tents and Vans used for Human Habitation

73. (1) A tent, van, shed, or similar structure, used for human habitation, which is in such a state as to be a nuisance or injurious or dangerous to health, or is so overcrowded as to be injurious or dangerous to the health of the inmates, shall be a nuisance liable to be dealt with summarily under this Act.

(2) A local authority may make bye-laws[3] for promoting cleanliness in, and the habitable condition of, tents, vans, sheds, and similar structures, used for human habitation, and for preventing the spread of infectious disease by the persons inhabiting the same, and generally for the prevention of nuisances in connection with the same.

[1] *v.* § 185 as to requirement of advertising, and §§ 183-187 relating to provisions of. For Model Bye-Laws, *v.* p. 20 of Board's "Instructions forms, etc."

[2] *v.* also § 214, Merchant Shipping Act, 1894, p. 272.

[3] *v.* §§ 183-187, *post*, as to provisions for Bye-Laws.

(3) Where the medical officer or sanitary inspector[1] has reasonable cause to believe either—

(*a*) that any tent, van, shed, or similar structure, used for human habitation, is in such a state or so overcrowded as aforesaid, or that there is any contravention therein of any bye-law made under this section; or

(*b*) that there is in any such tent, van, shed, or structure, any person suffering from an infectious disease, or that any infectious disease has recently existed therein,

he may enter at reasonable times in the daytime, such tent, van, shed, or structure, and examine the same and every part thereof, and the medical officer may examine any person found therein, in order to ascertain whether such tent, van, shed, or structure, is in such a state or so overcrowded as aforesaid, or whether there is therein any such contravention, or a person suffering from an infectious disease, and the provisions[2] of this Act with respect to the entry into any premises by an officer of the local authority shall be in force for the purposes of this section.

(4) Nothing in this section shall apply to any tent, van, shed, or structure, erected or used by any portion of Her Majesty's naval or military forces.

Underground Dwellings

Rules as to Underground Dwellings[3]

74. It shall not be lawful to let separately, except as a warehouse or storehouse, or to suffer to be occupied as a dwelling-place, any cellar or any vault or underground room, whether conjoined or not with another apartment not having one of its external sides entirely above the level of the street or ground adjoining the same, and not having a window or other opening in such side, which cellar, vault, or room in every part shall be less in height from the floor to the ceiling than eight feet in the case of houses built prior to the commencement of this Act, or less in height than nine feet in the

[1] His duty does not extend to examination of the persons within tent, etc.

[2] *v.* § 18, *ante*.

[3] This section is somewhat complicated. Is it lawful under it to suffer to be occupied as a dwelling-place an underground room less than eight feet in height from floor to ceiling and without a fire-place or flue and conjoined with another room, the latter having only one of its external sides above the level of the ground adjoining the same, but which latter room is less than eight feet from floor to ceiling, both rooms being without any drain? Again, before an underground room may be occupied, must it be without all of the requirements stipulated, or is the want of one of these conditions sufficient to condemn it as a dwelling?

case of houses built subsequently to the commencement of this Act, or which shall be less than one-third of its height above the level of the street or ground adjoining the same, or otherwise shall not have three feet at least of its height from the floor to the ceiling above the said level, with an open area of two feet six inches wide from the level of the floor of such cellar, vault, or room up to the level of the said street or ground, or which shall not have appurtenant thereto the use of a water-closet or earth-closet or privy and ashpit, or which shall not also have a glazed window made to open to the full extent of the half thereof, the area of which is not less than nine superficial feet clear of the frame, and a fire-place with a chimney or flue, or which cellar, vault, or underground room, being an inner or back vault or cellar let or occupied along with a front vault or room as part of the same letting or occupation, has not a ventilating flue (unless such inner or back vault or cellar shall be part of a house built before the commencement of this Act) or which shall not be well and effectually drained by means of a drain, constructed of a gas-tight pipe or otherwise effectually sealed, the uppermost part of which is one foot at least below the level of the floor of such vault, cellar, or room, after the local authority have given notice to the owners thereof that the letting or occupation of such cellars, vaults, or underground rooms, as dwelling-places is prohibited from that time forth, and it shall be the duty of the local authority to issue such notices from time to time, as soon as is convenient, until such notice has been given with respect to every cellar, vault, or underground room, occupied as a dwelling-house within the district; and it shall not be lawful, after such notice, to let or continue to let, or to occupy or suffer to be occupied, separately as a dwelling-house any such vault, cellar, or underground room.

Penalty on Letting Underground Dwellings[1]

75. Every person who lets separately, or who knowingly suffers to be occupied for hire, or permits to be occupied as a dwelling, any vault, cellar, or underground room, contrary to the provisions of this Act, shall be liable to a penalty not exceeding twenty shillings for every day during which such vault, cellar, or room, is so occupied after conviction of the first offence.

[1] *v.* § 163, *post*.

Cases in which Two Convictions have occurred within Three Months

76. Where two convictions against the provisions of this Act relating to the overcrowding[1] of any house, or the occupation of any cellar, vault, or underground room, as a separate dwelling-place, shall have taken place within the period of three months, whether the person so convicted was or was not the same, it shall be lawful for the sheriff[2] to direct the closing of such premises for such time as he may deem necessary, and, in the case of cellars occupied as aforesaid, to empower the local authority to permanently close the same in such manner as they may deem fit.

VACCINATION

Cost of Vaccination

77. The local authority may defray the cost of vaccinating or re-vaccinating such persons as to them may seem expedient.

PART IV

PREVENTION OF EPIDEMIC DISEASES

General Power of Board to make Regulations

78. The Board may from time to time make, alter, and revoke such regulations as to the said Board may seem fit, with a view to the treatment of persons affected with any epidemic, endemic, or infectious disease, and preventing the spread of such diseases, as well on the seas, rivers, and waters of Scotland, and on the high seas within three miles of the coast thereof, as on land; and may declare by what authority[3] or authorities such regulations shall be enforced and executed.

Power of Board to make Regulations for Certain Purposes[4]

79. Whenever any part of Scotland appears to be threatened with or is affected by any formidable epidemic, endemic, or infectious disease, the Board may make and from time to time alter and revoke regulations for all or any of the following purposes (namely):

[1] *v.* § 16 (7), *ante.* [2] *v.* § 74, *ante.*
[3] *v.* §§ 81, 83, 85, *post.* Also §§ 169 and 172-176, *post.*
[4] *v.* also § 324 of the Merchant Shipping Act, 1894, p. 273.

(1) For the speedy interment of the dead ;[1]
(2) For house-to-house visitation ;[2]
(3) For the provision of medical aid, dispensing of medicine, and accommodation, for the promotion of cleansing, ventilation, and disinfection, and for guarding against the spread of disease ;[3]
(4) For any such matters or things as may to them appear advisable for preventing or mitigating such disease ;

and may by order declare all or any of the regulations so made to be in force within the whole or any part or parts of the district of any local authority, and to apply to any ships,[4] whether in ports or on inland waters or on arms or parts of the sea within the jurisdiction of the Admiralty, for the period in such order mentioned ; and may by any subsequent order abridge or extend such period.

The Board may with the consent of the Treasury, employ such additional clerks as may be necessary during such period, and the remuneration of such clerks, and the office expenses incurred under this Part of this Act by the Board, shall be defrayed out of money to be provided by Parliament.

Publication of Regulations and Orders

80. All regulations and orders made by the Board in pursuance of this Part of this Act shall be published in the Edinburgh Gazette, and such publication shall be conclusive evidence thereof for all purposes.

Local Authority to see to Execution of Regulations

81. The local authority of any district within which or part of which regulations so issued by the Board are declared to be in force, shall superintend and see to the execution thereof,[5] and shall appoint and pay such medical or other officers or persons, and do and provide all such acts, matters, and things as may be necessary for mitigating any such disease, or for superintending or aiding in the execution of such regulations, or for executing the same, as the case may require.

Power of Entry[6]

82. The local authority and their officers shall have power of entry on any premises for the purpose of executing or

[1] *v.* also §§ 62 and 69, *ante*.
[2] *v.* § 82, *post*.
[3] *v.* § 66 (1) (*d*), *ante*, and § 179, *post* ; also, § 180, *post*.
[4] *v.* definition, § 3, *ante* ; also, *v.* §§ 88 and 178, *post*, and § 324, Merchant Shipping Act, 1894, p. 273.
[5] *v.* § 78, *ante*, and § 85, *post*.
[6] *v.* §§ 18, 45, and 47 (3), *ante* ; *v.* also § 87, *post*.

superintending the execution of any regulations so issued by the Board as aforesaid.

Board may combine Local Authorities[1]

83. The Board may, if they think fit, by order authorise or require any two or more local authorities to act together for the purposes of this Part of this Act, and may prescribe the mode of such joint action, and of defraying the costs thereof.

When Regulation in Force, Overcrowded Houses to come under Common Lodging-Houses Provisions

84. When any such regulation so issued by the Board is in force in any place, on the certificate of a medical officer, or of two duly qualified medical practitioners, or on the report of a sanitary inspector, or other sufficient evidence, that any house, or part of a house, is so overcrowded as to be dangerous to health,[2] the local authority shall have power to regulate the same according to the provisions of this Act in reference to common lodging-houses.[3]

Enforcement of Regulations by Government Officers, etc.

85. (1) Regulations of the Board made in pursuance of this Part of this Act may provide for such regulations being enforced and executed by[4] the officers of Customs and the officers and men employed in the Coastguard as well as by other authorities and officers, and without prejudice to the generality of the powers conferred by this Part of this Act may provide for—

(*a*) the signals to be hoisted by vessels having any case of epidemic, endemic, or infectious disease on board; and

(*b*) the questions to be answered by masters, pilots, and other persons on board any vessel as to cases of such disease on board during the voyage or on the arrival of the vessel; and

(*c*) the detention of vessels and of persons on board vessels; and

(*d*) the duties to be performed in cases of such disease by masters, pilots, and other persons on board vessels.

(2) Provided that the regulations shall be subject to the consent—

(*a*) so far as they apply to the officers of Customs, of the Commissioners of Her Majesty's Customs; and

[1] *v.* also §§ 172-176, *post*.
[2] May be dealt with under § 16 (7), *ante*.
[3] *v.* §§ 89-100, *post*.
[4] *v.* § 78, *ante*.

(*b*) so far as they apply to officers or men employed in the Coastguard, of the Admiralty; and
(*c*) so far as they apply to signals, of the Board of Trade.

Regulations to be Uniform

86. In the making of the regulations referred to in this Part of this Act regard shall be had to the expediency of uniform regulations throughout the whole of the United Kingdom.[1]

Penalties[2]

87. If any person wilfully neglects or refuses to obey or carry out, or obstructs the execution of, any regulation made under this Part of this Act, he shall be liable to a penalty not exceeding one hundred pounds, and in the case of a continuing offence to a further penalty not exceeding fifty pounds for every day during which the offence continues; and any such penalty shall be recoverable with expenses at the instance of the Lord Advocate on behalf of the Board, or by any local authority with the consent of the Board, in any competent Court.

Transfer of Power under 39 & 40 Vict. c. 36, § 234

88. The powers exerciseable by Her Majesty in Council or any two of the Lords of Her Majesty's Privy Council under section two hundred and thirty-four of the Customs Consolidation Act, 1876, shall be exerciseable by the Board,[3] provided that any Orders of the Board shall apply to ships coming to any port in Scotland; and the penalties under that section may be sued for, prosecuted, and recovered with expenses at the instance of the Lord Advocate on behalf of the Board, or of any local authority with consent of the Board, by proceedings in any competent Court.

PART V

REGULATION OF COMMON LODGING-HOUSES

Common Lodging-Houses to be Registered

89. The local authority shall cause a register to be kept, in which shall be entered the names and residences of the

1 But *v.* also § 79, *ante*, *re* power of Board. 2 *v.* §§ 146 and 163, *post*.
3 *v.* § 234, Customs Consolidation Act, 1876, as amended, p. 272.

keepers[1] of all common lodging-houses[1] within the district of the local authority, and the situation of every such house, and the number of lodgers authorised according to this Act to be kept therein, and in each apartment thereof; provided that the keeper of every common lodging-house shall apply to the local authority at or previous to the fifteenth day of May in every year for a renewal of such registration; and the local authority may refuse to register any house which they do not consider suitable for the purposes of a common lodging-house, and as the keeper of a common lodging-house any person who does not produce to the local authority a certificate of character in such form as the local authority shall direct, but notwithstanding such certificate the local authority may, if they see fit, make further inquiry, and may thereafter refuse to register, if they are satisfied that the person applying is not qualified to be the keeper of a common lodging-house; and the local authority may from time to time, with the approval of the Board, raise or diminish the sum payable per night, according to which, as in this Act mentioned, it is ascertained whether a house or part thereof is a common lodging-house, but so as not to exceed sixpence per night.

No lodger to be received in Common Lodging-House till it has been Inspected and Registered

90. It shall not be lawful to keep or use as a common lodging-house[1] any house, or to receive or retain any lodgers therein, unless such house shall have been inspected for that purpose by the inspector[2] of common lodging-houses for the district, and approved[3] by the local authority, and shall have been and be registered as by this Act provided: and if any person shall contravene this enactment he shall be guilty[4] of an offence under this Act, and if, in the opinion of the local authority, any common lodging-house on the register, or the keeper thereof, shall cease to be suitable for the purpose, the local authority may present a petition to the sheriff[5] for authority to remove such house from the register either permanently or until there is a change of circumstances, and the sheriff, if he thinks fit, may grant warrant accordingly.

Evidence of Register

91. A copy of an entry made in a register kept under this Act, purporting to be certified by the person having the

[1] *v.* definition, § 3, *ante.* [2] *i.e.*, S.I., *v.* § 15, *ante.*
[3] *v.* requirements prefixed to Model Bye-Laws of L.G.B., p. 15 of their "Instructions forms, etc."
[4] *v.* § 163, *post.* [5] *v.* § 154, *post.*

charge of such register to be a true copy, shall be received in all courts and on all occasions whatsoever as evidence, and shall be *primâ facie* proof of all things therein registered, without the production of the register, or of any document, act, or thing, on which the entry is founded, or proof of the signature; and every person applying at a reasonable time shall be furnished by the person having such charge with a certified copy of any such entry for payment of twopence.

Power to Local Authority to make Bye-Laws

92. The local authority may from time to time make bye-laws[1] respecting common lodging-houses within its jurisdiction for the keeping and well ordering of such houses, and for the separation of the sexes therein, and for fixing the number of lodgers which may be received in each such house, and in each room therein, and for enforcing sufficient privy or water-closet accommodation and other appliances and means of cleanliness in proportion to the number of lodgers and occupiers, as also proper drainage and ashpits for such houses, and for promoting the cleanliness and ventilation of such houses, and with respect to the inspection thereof, and the conditions and restrictions under which such inspection may be made.

Copy of Bye-Laws to be Furnished Gratis to Keepers

93. A copy of all such bye-laws made by the local authority in pursuance of this Act, when confirmed[2] as hereinafter provided and printed, shall be furnished gratis to every keeper of a common lodging-house, and such keeper shall be bound to keep a copy thereof hung up in some conspicuous place in each room in which lodgers are received.

Power to Local Authority to require Additional Supply of Water

94. Where it appears to the local authority that a common lodging-house is without a proper supply of water[3] or without sufficient privy or water-closet[4] accommodation for the use of the lodgers, and that such a supply of water can be furnished thereto at a reasonable rate, the local authority

[1] *v.* §§ 183-187, *post*, for provisions as to. Under § 3, *ante*, Seamen's Boarding-Houses come under definition of C.L. Houses, and therefore the Bye-Laws for Houses Let in Lodgings as well as Bye-Laws for C.L.H., besides the provision in § 214 of the Merchant Shipping Act, 1894, p. 272, apply to them.

[2] *v.* §§ 185 and 186, *post*.

[3] *v.* § 125, *post*.

[4] L.A. have no power to enforce such accommodation.

may, by notice in writing, require the owner or keeper of the common lodging-house, within a time specified therein, to obtain such supply, and to execute all works necessary for those purposes; and if such notice be not complied with accordingly, the local authority may remove the common lodging-house from the register until it be complied with. It shall be competent to any person interested to appeal to the sheriff against any resolution of the local authority removing a common lodging-house from the register under this section; but in the case of a district other than a burgh the appeal to the sheriff shall only arise after the county council has disposed of any appeal which may have been brought before them.

Power to Local Authority to order Reports from Keepers

95. The keeper of a common lodging-house shall from time to time if required by any order of the local authority served on such keeper, report to the local authority, or to such person or persons as the said local authority shall direct, every person who resorted to such house during the preceding day or night, and for that purpose schedules shall be furnished by the local authority to the persons so ordered to report, which schedules they shall fill up with the information required, and transmit to the local authority.

Local Authority may Remove Sick Persons to Hospitals, etc.

96. When a person in a common lodging-house is ill of any infectious disease, the local authority may, without further warrant than this Act, cause such person to be removed to a hospital or infirmary, with the consent of the authorities thereof, where different from the local authority, and on the certificate of the medical officer, or of any legally qualified medical practitioner, that the disease is infectious and that the patient may be safely removed, but if removal be considered dangerous to life by such officer or medical practitioner and is so certified, no lodger shall be admitted to such lodging-house until it is certified free from infection; and the local authority may, so far as they think requisite for preventing the spread of disease, cause any clothes or bedding used by such person to be disinfected or destroyed,[1] and may pay to the owners of the clothes and bedding so disinfected or destroyed reasonable compensation[2] for the injury or destruction thereof.

[1] *v.* § 47, *ante.* [2] *v.* § 164, *post.*

As to Giving Notice of Fever, etc., Occurring

97. The keeper of a common lodging-house shall, when a person in such house is ill of any infectious disease, give immediate notice thereof either to the medical officer or to the inspector[1] of common lodging-houses, who shall forthwith inform the medical officer, and if he is satisfied that the person is suffering from an infectious disease, he shall cause the patient to be removed without delay,[2] and shall cause the premises to be disinfected.[3]

Provided always, that if the medical officer considers the patient not fit to be removed with safety, until it is certified by him that the premises are free from infection the house shall not be used as a common lodging-house, except such part thereof[4] as may be certified by the medical officer to be free from infection, and the local authority may make provision for the temporary shelter or house accommodation, and, if necessary, maintenance at a rate not exceeding the same payment per night as usually paid by persons frequenting said lodging-house while such persons are prevented from returning to such common lodging-house.[5]

Inspection

98. The keeper of a common lodging-house shall, at all times when required by any officer of the local authority, give him free access to such house and every part thereof. [167]

Cleansing

99. The keeper of a common lodging-house shall thoroughly cleanse all the rooms, passages, stairs, floors, windows, doors, walls, ceilings, water-closets, earth-closets, privies, ashpits, cesspools, and drains thereof, to the satisfaction of the inspector, and so often as shall be required by or in accordance with any regulation or bye-law of the local authority, and shall well and sufficiently, and to the like satisfaction, lime-wash the walls and ceilings thereof in the first week of each of the months of April and October in every year, and at such other times as the local authority may by special order appoint or direct.

Conviction for Third Offence, etc., to Disqualify Persons from Keeping Common Lodging-Houses

100. Where a keeper of a common lodging-house is con-

[1] *i.e.*, the S.I. [2] No warrant necessary.
[3] *v.* §§ 47, 48, 96; *v.* also §§ 96 and 164 as to compensation.
[4] In previous § 96, if removal is certified dangerous "*no lodger shall be admitted to such lodging-house* until *it is certified free from infection.*"
[5] *v.* §§ 47 (4) and 54, *ante.* No warrant is necessary *if consent given.*

victed of a third or any subsequent offence under this Act, it may be adjudged as the punishment or part of the punishment for such offence that he shall not, at any time within five years, or any shorter period after such conviction, keep or have or act in the care or management of a common lodging-house.

PART VI

SEWERS, DRAINS, AND WATER SUPPLY

Sewers and Drains

Sewers to be Vested in Local Authority, etc.

101. All sewers existing within a district and not being private property, or not being and continuing under the management of persons appointed by the Crown or by or in pursuance of any Act of Parliament or provisional order, together with all manways, lampholes, ventilating shafts, cesspools, surface gratings and their connections, sluices, and all appliances pertaining thereto, shall be vested in the local authority. Provided always, that nothing in this Act contained shall affect the rights of any person or persons to the property or management of any sewers in virtue of any existing local or general police statute. [Repealed for burghs by B.S.D. and W.S.A.,* 1901, p. 155.]

Power to Purchase Sewers

102. The local authority may, in terms of sections one hundred and forty-four and one hundred and forty-five of this Act, acquire the rights and powers vested in any person to make sewers or to use any sewer, with or without the buildings and other things thereto pertaining. Provided that they shall make compensation[1] for the rights so acquired, and shall also make compensation to the proprietors and occupiers of any lands and heritages which may be damaged by reason of the exercise of the powers hereby conferred, in terms of this Act.

Power to make Sewers. Sewers to be Cleansed

103. The local authority shall have power to construct within their district, and also when necessary for the purpose of outfall or distribution or disposal or treatment of sewage,[2] without their district, such sewers as they may think necessary

* *v.* abbreviations.

[1] *v.* § 145 (11), and § 164 *post.* [2] *v.* §§ 144 and 145, *post.*

for keeping their district properly cleansed and drained, and may carry such sewers through, across, or under any public or other road, or any street or place, or under any cellar or vault which may be under the foot pavement or carriageway of any street or road, and after reasonable notice in writing (if upon the report of a surveyor it should appear to be necessary), into, through, or under any lands whatsoever, and from time to time to enlarge, lessen, alter, arch over or otherwise improve, or to close up or destroy, all sewers vested in them, provided no nuisance is created by such operations; and if any person is thereby deprived of the lawful use of any sewer, the local authority shall provide another sufficiently effectual for his use. The local authority shall cause their sewers to be so constructed, maintained, kept, and cleansed as not to be a nuisance, and for the purpose of cleansing and emptying them may construct and place, either above or under ground, such reservoirs, sluices, engines, or other works as may be necessary, and may, subject to the provisions of the Rivers Pollution Prevention Acts, cause such sewers to communicate with and be emptied into such places as may be fit and necessary either within their district, or if necessary for the purpose of outfall or distribution or disposal or treatment of sewage, without their district, and to cause the sewage and refuse therefrom to be collected for sale or for any purpose whatsoever, but so as not to create a nuisance. [13, 14, 156, 157, 168]

Notice to be given before commencing Sewage Works without District

104. A local authority shall, three months at least before commencing under the provisions of this Act the construction of any sewer or other work for sewage purposes without their district, give notice of the intended work by advertisement in one or more newspapers circulating in the district, or by the posting of handbills throughout the district where the work is to be made. Such notice shall describe the nature of the intended work, and shall state the intended termini thereof, and the names of the parishes and the public roads and streets and other lands (if any) through, across, under, or on which the work is to be made, and shall name a place where a plan of the intended work is open for inspection at all reasonable hours; and a copy of such notice shall be served[1] on the owners[2] or reputed owners, tenants or reputed tenants, and occupiers[2] of the said lands, and on the local authority and county council where such district is situate.

[1] *v.* § 159, *post*. [2] *v.* definition, § 3, *ante*.

In Case of Objection, Work not to be commenced without Sanction of Board

105. If any such owner, tenant, or occupier, or any such local authority or county council, or any other owner, tenant, or occupier who would be affected by the intended work, objects to such work and serves notice in writing of such objection on the local authority at any time within the said three months, the intended work shall not be commenced without the sanction of the Board after such inquiry as hereinafter mentioned, unless such objection is withdrawn.

Inspector to hold Inquiry and Report to Board

106. The Board may, on application of the local authority desirous of constructing said work, appoint an inspector[1] to make inquiry on the spot into the propriety of the intended work and into the objections thereto, and to report to the Board on the matters with respect to which such inquiry was directed, and on receiving the report of such inspector the Board may make an order disallowing or allowing, with such modifications (if any) as they may deem necessary, the intended work.

Protection for Railways, Canals, etc.

107. Where any sewer shall pass under or across, or in any way affect any railway or canal, or any bridge, tunnel, or other work in connection therewith, the following provisions for the protection of such railway or canal, or bridge, tunnel, or other work, shall apply and have effect :—

(1) The whole works connected with such sewer, so far as affecting any railway or canal, or bridge, tunnel, or other work, shall be executed and thereafter maintained under the superintendence and to the reasonable satisfaction of the engineer of the railway or canal company, and according to plans and specifications to be previously submitted to such engineer and approved by him in writing. Provided that if such engineer shall not have expressed his approval or disapproval of such plans and specifications within fourteen days after the same shall have been submitted to him, he shall be deemed to have approved thereof ;

(2) Such works, and any alteration which it may at any time be necessary to make in such works, may be executed either by the local authority or by the railway or canal company at the option of the engineer of the railway or canal company ;

[1] *v.* § 8, *ante* ; also § 39 (2), L.G. Act, 1894.

(3) In the event of the local authority and the engineer of the railway or canal company differing in opinion in regard to any works affecting the railway, or canal, or bridge, tunnel, or other work, or as to the mode of carrying out such works, or otherwise in relation thereto, such difference shall, on the application of the local authority, or of the railway or canal company, be referred to an engineer to be appointed by the sheriff, and shall be decided by the sheriff upon the report of such engineer, and such decision shall be final. [18]

Powers of Utilising Sewage

108. The local authority may from time to time, for the purpose of utilising sewage, agree with any person as to the supply of such sewage or the distribution or disposal or treatment thereof over land, and as to the works to be made for the purpose of such supply or distribution or disposal, or treatment, and as to the parties to execute the same and to bear the costs thereof, and as to the sums of money, if any, to be paid for that supply; provided that no contract shall be made for the supply of sewage for a period exceeding five years, unless with the authority of the Board, and not for any period exceeding twenty-five years; and the local authority may, in terms of the provisions of sections one hundred and forty-four and one hundred and forty-five of this Act, contract for, purchase, or take on lease any lands, buildings, engines, materials, or apparatus for the purpose of receiving, storing, disinfecting, distributing, or disposing of or treating sewage.

Power of Entry

109. In case it shall become necessary to enter, examine, or lay open any lands or premises for the purpose of making plans, surveying, measuring, taking levels, examining works, ascertaining the course of sewers or drains, making or repairing, altering or enlarging sewers or drains, or other purposes ancillary to the powers herein given as to sewers and drains, and the owner or occupier of premises refuses or withholds access and leave to perform the said operations, the local authority may, after written notice[1] to such owner and occupier, apply to the sheriff,[2] who, if no sufficient cause be shown to the contrary, shall grant warrant to the local authority, their officers and others thereby authorised, to enter and do all or any of the works or operations foresaid at all reasonable times in the daytime.

1 *v.* § 159, *post*.

2 *v.* § 154, *post*.

Power to Drain into Sewers of Local Authority

110. Any owner or occupier of premises within the district of a local authority liable for the public health general assessment, or special sewer assessment shall be entitled to cause his drains to empty into the sewers of such local authority on condition of his giving twenty days' previous notice of his intention so to do to the local authority, and of complying with their regulations[1] in respect of the mode in which the communications between such drains and sewers are to be made, and subject to the control of any person who may be appointed by the local authority to superintend the making of such communications. Provided always that the sewage so emptied or discharged into the sewers is not of a nature to cause damage to the structure of the sewer or, by admixture with other sewage therein, to cause a nuisance. [144]

Use of Sewers by Persons beyond District

111. Any owner or occupier of premises beyond the limits of the district of a local authority or within said limits who is not liable for public health general assessment or special sewer assessment may cause any sewer or drain from such premises to communicate with any sewer of the local authority; provided always, that such sewer of the local authority and any works connected therewith are of sufficient capacity and otherwise suitable for receiving such additional drainage; and that upon such terms and conditions as may be agreed upon between such owner or occupier and such local authority, and any dispute which may arise under this section shall be determined summarily by the sheriff. Provided[2] always that the additional sewage so to be emptied or discharged into the sewers is not of a nature to cause damage to the structure of the sewer or, by admixture with other sewage therein, to cause a nuisance. [28, 169]

Penalty for Making Unauthorised Drains[3]

112. Every person, not being authorised by the local authority, who shall make any drain into any sewer vested in the local authority shall be liable in a penalty not exceeding five pounds, and the local authority may close any communication between a drain and sewer made in contravention

[1] *v.* § 188, *post*. Also, "As to the regulations which the L.A. are authorised to make, and which are not bye-laws in the sense of this Act, *v.* §§ 15, 19, 70 (1), and 110." (Handbook of Public Health, p. 253.)

[2] *v.* also § 7 of R.P. Act, 1876, p. 281.

[3] Compare with § 227, B.P. Act, 1892, p. 136.

of this section, and may recover[1] in a summary manner from the person so offending any expenses incurred by them.

Estimates for Work

113. Before entering into any contract for executing any such work as hereinbefore or after mentioned, falling under this part of this Act, or connected with sewage or drainage, if the expense thereof may exceed thirty pounds, the local authority shall procure from a surveyor an estimate of the probable expense of constructing the same in a substantial manner, and of the yearly expense of maintaining the same in repair; and such surveyor shall accompany such estimate with a report as to the most advantageous mode of constructing such work, whether under a contract for constructing the same merely, or a contract for constructing the same and maintaining it in repair during a given term of years. [Repealed for burghs by B.S.D. and W.P.A., 1901, p. 155.]

Not to Build over Sewers, etc.[2]

114. Unless with consent of the local authority, no building shall be erected over any sewer belonging to the local authority, and no vault, arch, or cellar, or subway, or other structure shall be made, and no pipes of any kind shall be laid so as to interfere with any such sewer.

Sewers to be Trapped

115. All sewers and drains, whether public or private, shall be sufficiently trapped and ventilated[3] by the persons to whom they severally belong to the satisfaction of the local authority.

Distilleries, etc., to Deposit Refuse

116. The owners[4] or occupiers[4] of distilleries, manufactories, and other works shall be compelled, where possible, to dig, make, and construct pools or reservoirs within their own ground, or as near their works as possible, for receiving and depositing the refuse of such works so far as offensive or injurious or dangerous to the health of those living in the vicinity thereof, or to use the best practicable means for rendering the same inoffensive or innoxious before discharging it into any river, stream, ditch, sewer, or other channel.[5]

1 *v.* §§ 153 and 154, *post*; *v.* also § 151, *post*, as to any damage.
2 Compare with § 228, B.P.A., 1892.
3 Compare with §§ 229 and 241, B.P.A., 1892, pp. 136, 140.
4 *v.* § 3, *ante*.
5 *v.* also R.P. Acts, 1876 and 1893.

Prohibition against interrupting free Flow of Sewage[1]

117. (1) It shall not be lawful for any person to throw or suffer to be thrown or to pass into any sewer of a local authority, or any drain communicating therewith, any matter or substance by which the free flow of the sewage or surface or storm water may be interfered with, or by which any such sewer or drain may be injured.[2]

(2) Every person offending against this enactment shall be liable to a penalty not exceeding ten pounds, and to a daily penalty not exceeding twenty shillings.

Placing Carcases in Running Water, etc.[3]

118. It shall not be lawful for any person to throw, or suffer to be thrown into any running water, spring, well, lake, pool, reservoir, drain, or ditch, the carcase of any animal or part thereof, and any person offending against this section shall be liable to a penalty not exceeding ten pounds.

Drain Discharging below Low-Water Mark

119. If the local authority shall consider it necessary for public health that any drain should discharge itself below low-water mark, they shall be entitled, with the consent of the Board of Trade and of the Commissioners of Woods and Forests (without prejudice to any question as to the right to the foreshores), to construct the requisite works for that purpose.

As to Drainage of Houses[4]

120. If a house,[5] distillery, manufactory, or other work, within the district of a local authority, is without a drain, or without such drain as is sufficient for effectual drainage, the local authority may, by notice, require the owner of such house, distillery, manufactory, or work, within a reasonable time therein specified, to make a sufficient drain emptying into any sewer which the local authority are entitled to use, and with which the owner is entitled to make a communication, so that such sewer be not more than one hundred yards from the site of the said premises of such owner; but if no such means of drainage are within that distance, then emptying into such covered cesspool or other place, not being under any house, as the local authority may direct; and if the person on whom such notice is served fails to comply with the same, the local authority may, at the expira-

[1] *v.* also § 30, *ante*. [2] *v.* § 151, *post*, as to penalty.
[3] *v.* also § 2, R.P.A., 1876, p. 279.
[4] *v.* also §§ 72 and 92, *ante*, and § 181, *post*. [5] *v.* definition, § 3, *ante*.

tion of the time specified in the notice, do the work required, and the expenses[1] incurred by them in so doing may be recovered from such owner in a summary manner.

Provided that where in the opinion of the local authority greater expense would be incurred in causing the drains of two or more houses to empty into an existent sewer pursuant to this section than in constructing a new sewer and causing such drains to empty therein, the local authority may construct such sewer and require the owners of such houses to cause their drains to empty therein, and may apportion as they deem just the expenses of construction of such sewer among the owners of the several houses, and recover in a summary manner the sums apportioned from such owners, or in case of dispute the matter shall be determined summarily by the sheriff.

Local Authorities may Combine as to Sewerage

121. Two or more local authorities may, with the sanction of the Board, combine together for the purpose of executing or acquiring an interest in or maintaining any works by this Act or any other Act authorised in regard to sewerage or drainage that may be for the benefit of their respective districts; and all moneys which they may agree to contribute for the execution or acquisition or maintenance of such common works shall, in the case of each local authority, be deemed to be expenses incurred by them in the execution, acquisition, or maintenance of works within their district.

Special Drainage Districts[2]

122. (1) Upon requisition to that effect made in writing by a parish council or by not fewer than ten ratepayers within the district of a local authority not being the local authority of a burgh, the local authority shall be bound to meet, after twenty-one days' notice, or, if the local authority itself so resolve, it may meet after twenty-one days' notice, and shall, whether sewers or drains have been already constructed or not, consider the propriety of—

(*a*) forming part of their district into a special drainage district; or

(*b*) enlarging or limiting the boundaries of a special drainage district[3]; or

(*c*) combining a special drainage district with another special drainage district; or

1 *v.* §§ 153 and 154, *post*.
2 *v.* § 5, B.S.D. and W.S.A., 1901, where § 5 does not apply, p. 156.
3 This must not include any area not to derive benefit therefrom.

(*d*) enlarging or limiting the boundaries of both or either of such special drainage districts and combining the same or parts thereof; or

(*e*) determining that any special drainage district shall cease to exist as a special drainage district, or that any such combination shall cease;

and the resolution of the local authority shall determine all questions regarding the payment of any debt which may affect any district or special drainage district, and the right to impose and the obligation to pay any assessment affected by such determination, and shall fix the date at which such determination shall take effect; and such resolution shall be published in one or more newspapers circulating in the district, or by the posting of handbills throughout the district, and a copy of said resolution shall be forthwith transmitted to the Board, and, where the local authority is a district committee, to the county council; and the production of such newspaper or handbill, or a certificate under the hand of the clerk of the local authority (whose signature need not be proved), shall be sufficient evidence of such resolution; and within twenty-one days after the date of the first publication of such resolution it shall be competent for any person interested to appeal against the resolution, whatever its terms may be, to the sheriff, and the sheriff, not being a sheriff-substitute resident within the district, may either approve or disapprove of such resolution, and if he disapproves thereof he may either find that no special drainage district should be formed, or may enlarge or limit the special district as defined by the resolution of the local authority, or may find that a special drainage district should be formed and may define the limits thereof, or may find that such special drainage district or part thereof shall be combined as prayed, or that such combination shall cease, or that such special drainage district or districts shall, as such, cease to exist; and the decision of the sheriff shall be binding, and shall be final, except where it is pronounced by a sheriff-substitute, in which case it may be appealed to the sheriff.

(2) The order of the sheriff shall determine all questions regarding the payment of any debt which may affect any district or special drainage district, and the right to impose, and the obligation to pay, any assessment affected by his determination, and shall fix the date at which such determination shall take effect, and a copy of any order pronounced by the sheriff shall be forthwith published in one or more newspapers circulating in the district, or by the posting

of handbills throughout the district, and transmitted to the Board and to the county council.

(3) Where a district committee is the local authority, notwithstanding the provisions of section seventeen, sub-section two, sub-head (*c*) of the Local Government (Scotland) Act, 1889 (52 and 53 Vict. c. 50),[1] it shall not be competent to appeal to the county council against any resolution of the district committee under this section.

(4) Where a special drainage district has been formed, or may hereafter be formed under the provisions of this Act, the district committee of the district in which such special drainage district is or may be situated, or the county council where a county is not divided into districts, shall in their discretion have power to provide for the drainage of the highways and footpaths under their management and control within such special drainage district, or to pay or contribute out of the assessments raised under the Roads and Bridges (Scotland) Act, 1878 (41 and 42 Vict. c. 51), a proportion of the cost of providing and maintaining sewers sufficient for the drainage of such highways and footpaths.

(5) Nothing contained in this Act shall prejudice the provisions of sub-sections one and two of section eighty-one of the Local Government (Scotland) Act, 1889, as amended by section forty-four of the Local Government (Scotland) Act, 1894 (57 & 58 Vict. c. 58).[2] [29, 30]

Works of Distribution of Sewage to be Deemed a Land Improvement

123. The making of works[3] of distribution and service for the supply of sewage to lands for agricultural purposes shall be deemed an improvement of land authorised by the Improvement of Land Act, 1864 (27 & 28 Vict. c. 114), and the provisions of that Act shall apply accordingly.

Water Supply

Supply of Water for Burghs

124. With respect to burghs subject to the provisions of the Burgh Police (Scotland) Act, 1892 (55 & 56 Vict. c. 55),[4] or having a local Act for police or other purposes, nothing contained in this Act shall prejudice the provisions of any of

[1] *v.* p. 159.
[2] *v.* p. 162 for § 81 (1) and (2) 1889 Act, and for § 44 (9) 1894 Act, p. 165.
[3] *v.* §§ 103 and 108, *ante*.
[4] *v.* §§ 257-269, pp. 144, 146.

the said Acts in regard to the provision of a supply of water for the domestic use of the inhabitants and for sanitary and other purposes. Provided that in the Burgh Police (Scotland) Act, 1892, and in the Lands Clauses Acts, so far as incorporated therewith, or authorised thereby to be put in force the term "land" shall include water and any right or servitude to or over land or water.

Local Authority to require Water to be Supplied to Houses in Certain Cases

125. If any occupied house[1] within the district of any local authority other than the local authority of a burgh is without a proper supply of wholesome water at or reasonably near the same,[2] the local authority shall require the owner to obtain such supply and to do all such works as may be necessary for that purpose, and failing his doing so, within twelve months after due notice,[3] the local authority may themselves obtain such supply and for that purpose may use their powers of acquiring land[4] by agreement or otherwise under this Act; and may, for the purpose of obtaining such supply, enter upon the premises and execute[5] all such works as may be necessary; and the local authority may recover[6] in a summary manner from the owner the whole or a reasonable part of the expenses incurred by them under this section: Provided that where the owners of two or more houses have failed to comply with the requirements of the notice served on them under this section, and the local authority might under this Act execute the necessary works for providing a water supply for each house, the local authority may, if it appears to them desirable and no greater expense would be occasioned thereby, execute works for the joint supply of water to those houses, and apportion the expenses as shall be just, and further provided that if any question shall arise under this section it shall be determined summarily by the sheriff who shall have regard to all the circumstances of the case, and whose decision shall be final. Provided that nothing in this section shall relieve the local authority from the duty of providing their district or any part thereof with a supply of water, where a general scheme for such supply is required, and can be carried out at a reasonable cost.

[1] *v.* § 3, *ante*.
[2] The sheriff will decide; but it may be mentioned that the Board of Supervision held that a distance of 280 yards was not "reasonably near the same," and caused the L.A. to give a supply.
[3] *v.* § 14, *ante*, and § 159, *post*.
[4] §§ 144 and 155, *post*.
[5] *v.* § 126 (4), *post*.
[6] *v.* § 154, *post*.

Supply of Water for Districts other than Burghs

126. With respect to districts other than burghs the following provisions shall have effect :—

(1) The local authority, if they think it expedient[1] so to do, may acquire and provide or arrange[2] for a supply of water for the domestic use of the inhabitants and for sanitary and other purposes,[3] and for that purpose may acquire[4] and conduct water from any lake, river, spring, or stream, may dig wells, make and maintain reservoirs, may purchase, take upon lease, hire, construct, lay down, and maintain such waterworks, pipes, and premises, and do and execute all such works, matters, and things as shall be necessary and proper for the aforesaid purpose, and may themselves furnish a supply of water, or contract or arrange with any other person to furnish the same; and for the purposes aforesaid the local authority shall be held to have all the powers and rights given to and be subject to all the obligations imposed on the promoters of undertakings by the Lands Clauses Acts[5] as amended by this Act: Provided also, that it shall not be lawful for the local authority to provide or supply water within any area which any local authority or any company, established by Act of Parliament or empowered by or authorised by Provisional Order, is authorised to supply with water, unless the local authority shall previously have purchased or acquired the undertaking of such local authority or company.[6]

(2) The local authority, if they have any surplus water after fully supplying what is required for domestic and sanitary purposes, may supply water from such surplus to any public baths and wash-houses, or for trading or manufacturing and all other than domestic purposes, on such terms and conditions as may be agreed on between the local authority and the persons desirous of being so supplied. Provided that when water is thus supplied from such surplus it shall not be lawful for the local authority to charge the persons so supplied both with the portion of the special water assessment applicable to the buildings or premises supplied, and also for the supply of water obtained; but the local authority may either charge the said assessment leviable on such build-

[1] If they do not, and if a water supply is required, they can be proceeded against under § 147, *post*.

[2] Consent of Standing Committee is necessary. For borrowing, *v.* § 140, *post*.

[3] Trade purposes also, if there is more than necessary for domestic and sanitary purposes. [4] *v.* §§ 144 and 145, *post*. [5] *v.* § 4, *ante*.

[6] *v.* § 3 as to definition.

ings or premises, or charge for the supply of water furnished to the same as they shall think fit, and the local authority shall have the same remedies and powers of recovering payment of such water rents or payments as are hereinafter provided with regard to the special water assessment.

(3) The local authority may cause all existing public cisterns, pumps, wells, reservoirs, conduits, aqueducts, and works used for the gratuitous supply of water to the inhabitants to be continued, maintained, and plentifully supplied with water, or may substitute, maintain, and plentifully supply with water other such works equally convenient; and may, if they shall think fit, provide and gratuitously supply water for any public baths or wash-houses[1] established otherwise than for private profit or supported out of any rates.

(4) The local authority shall have the same powers and be subject to the same restrictions for carrying water mains within their district as they have and are subject to for carrying sewers[2] within their district by the law for the time being in force. [31, 32, 170, 171, 172]

Penalty for causing Water to be Corrupted by Gas Washings, etc.

127. Any person engaged in the manufacture of gas, naphtha, vitriol, paraffin, or dye stuffs, or any other deleterious substance, or in any trade in which the refuse produced in any such manufacture is used, who shall at any time cause or suffer to be brought or to flow into any stream, reservoir, aqueduct, well, or pond, or place for water, constructed or used for the supply of water for domestic purposes, or into any pipe or drain communicating therewith, any product, washing, or other substance produced in any such manufacture, or shall wilfully do any act connected with any such manufacture, whereby the water in any such stream, reservoir, aqueduct, well, pond, or place for water shall be fouled, and any person who shall wilfully do or permit to be done any act whereby the water in any stream, reservoir, aqueduct, well, pond, or place constructed or used for the supply of water for drinking or other domestic purposes shall be fouled, shall forfeit for every such offence a sum not exceeding fifty pounds.[3]

[1] *v.* also § 44, L.G.A., 1894, where special districts may be formed, and §§ 309 to 314 of B.P.A., 1892, adopted.

[2] *v.* §§ 103, 107, and 109, *ante*.

[3] Recoverable under §§ 128 and 129, *post*.

Penalties to be Sued for within Six Months

128. Such penalty may be recovered, with expenses, by the person into whose water such product, washing, or other substance shall be conveyed or shall flow, or whose water shall be fouled by any such act as aforesaid, or in default of proceedings by such person, after notice to him from the local authority of their intention to proceed for such penalty, or if there be no such person, by the local authority; but such penalty shall not be recoverable unless it be sued for during the continuance of the offence, or within six months after it shall have ceased.

Daily Penalty during Continuance of Offence

129. In addition to the said penalty (and whether such penalty shall have been recovered or not), the person so offending shall forfeit a sum not exceeding five pounds (to be recovered in the like manner) for each day during which such product, washing, or other substance shall be brought or shall flow as aforesaid, or during which the act by which such water shall be fouled shall continue, after the expiration of twenty-four hours from the time when notice of the offence shall have been served on such person by the local authority, or by the person into whose water such product, washing, or other substance shall be brought or flow, or whose water shall be fouled thereby, and such penalty shall be paid to the local authority or person from whom such notice shall proceed; and all moneys recovered by the local authority under this or the preceding section shall, after payment of any damage caused by the act for which the penalty is imposed, be applied towards defraying the expenses of executing this Act.

Local Authorities may Combine as to Water Supply

130. Two or more local authorities may, with the sanction of the Board, combine together for the purpose of executing or acquiring an interest in or maintaining any works by this Act or any other Act authorised in regard to water supply that may be for the benefit of their respective districts; and all moneys which they may agree to contribute for the execution or acquisition or maintenance of such common works shall, in the case of each local authority, be deemed to be expenses incurred by them in the execution, acquisition, or maintenance of works within their district.

Special Water Supply Districts[1]

131. (1) Upon requisition to that effect made in writing by a parish council or by not fewer than ten ratepayers within the district,[2] the local authority, not being the local authority of a burgh, shall be bound to meet, after twenty-one days' notice, or, if the local authority itself so resolve, it may meet after twenty-one days' notice, and shall, whether water supply has been already provided or not, consider the propriety of—

(*a*) forming part of their district into a special water supply district; or

(*b*) enlarging[3] or limiting the boundaries of a special water supply district; or

(*c*) combining a special water supply district with another special water supply district; or

(*d*) enlarging or limiting the boundaries of both or either of such special water supply districts, and combining the same or parts thereof; or

(*e*) determining that any special water supply district shall cease to exist as a special water supply district, or that any such combination shall cease:[4]

and the resolution of the local authority shall determine all questions regarding the payment of any debt which may affect any district or special water supply district, and the right to impose and the obligation to pay any assessment affected by such determination, and shall fix the date at which such determination shall take effect; and such resolution shall be published in one or more newspapers circulating in the district, or by the posting of handbills throughout the district, and a copy of said resolution shall be forthwith transmitted to the Board, and where the local authority is a district committee to the county council; and the production of such newspaper or handbill, or a certificate under the hand of the clerk of the local authority (whose signature need not be proved), shall be sufficient evidence of such resolution; and within twenty-one days after the date of the first publication of such resolution it shall be competent for any person interested to appeal against the resolution (whatever its terms may be) to the sheriff;[5] and the sheriff, not being a sheriff-substitute resident within the district,[6] may either

[1] *v.* § 5, B.S.D. and W.S.A., 1901, p. 156.

[2] Within the whole district of the L.A.

[3] L.A. are not entitled to include area that will not derive benefit for the sake merely of increasing assessment.

[4] Where P.H.A., 1891, which is not repealed, is in force, limited powers exist. (*v.* § 6 thereof, p. 116.)

[5] Not to the C.C.

[6] As defined in § 3, *ante*.

approve or disapprove of such resolution; and if he disapproves thereof he may either find that no special water supply district should be formed, or may enlarge or limit the special district as defined by the resolution of the local authority, or may find that a special water supply district should be formed, and may define the limits thereof, or may find that such special water supply district or part thereof shall be combined as prayed, or that such combination shall cease, or that such special water supply district or districts shall, as such, cease to exist; and the decision of the sheriff shall be binding, and shall be final, except where it is pronounced by a sheriff-substitute, in which case it may be appealed to the sheriff. [2, 31, 33-36]

(2) The order of the sheriff shall determine all questions regarding the payment of any debt which may affect any district or special water supply district, and the right to impose and the obligation to pay any assessments affected by his determination, and shall fix the date at which such determination shall take effect; and a copy of said order shall be forthwith published in one or more newspapers circulating in the district, or by the posting of handbills throughout the district, and transmitted to the Board and to the county council.

(3) Notwithstanding the provisions of section seventeen, sub-section two, sub-head (*c*) of the Local Government (Scotland) Act, 1889 (52 & 53 Vict. c. 50)[1] it shall not be competent to appeal to the county council against any resolution of a district committee under this section.

(4) Nothing contained in this Act shall prejudice the provisions of sub-sections one and two of section eighty-one of the last-mentioned Act as amended by section forty-four of the Local Government (Scotland) Act, 1894 (57 & 58 Vict. c. 58).[2]

Incorporation of Waterworks Clauses Acts

132. The following Acts and parts of Acts, so far as the same respectively are applicable for the purposes, and are not inconsistent with the provisions of this Act, are hereby incorporated with this Act:—

The Waterworks Clauses Act, 1847 (10 & 11 Vict. c. 17), except the provisions with respect to the amount of profit to be received by the undertakers when the waterworks are carried on for their benefit, and except the words in section forty-four thereof, "with the consent in writing of the owner or reputed owner of any such house or of the agent of such owner":

[1] *v.* p. 159. [2] *v.* § 44 (9), p. 165, and § 81 (1 and 2) L.G.A., 1889, p. 162.

The Waterworks Clauses Act, 1863:

The provisions of the Railways Clauses Consolidation (Scotland) Act, 1845, with respect to the temporary occupation of lands near the railway during the construction thereof, but such last-mentioned provisions shall apply only in the case of any reservoir, filter, or distributing tank, which the local authority may be authorised to construct, and the works immediately connected therewith, and for the purposes of this Act those provisions shall be read as if such reservoir, filter, or tank, and works, were therein mentioned instead of "the railway," and the boundaries of such reservoir, filter, or tank, and works, instead of "the centre of the railway," and the prescribed limits shall be two hundred yards from such boundaries:

Provided always that—

(*a*) the local authority shall not be obliged to furnish a supply of water to any person for any less sum than five shillings in any one year;

(*b*) no person shall be entitled to demand such supply of water, or to require the local authority to lay down communication pipes, unless some pipe of the local authority shall have been laid within one hundred feet of the house or other premises in respect of which such supply or communication pipes are demanded, or unless the local authority shall become bound by virtue of a requisition and agreement made and executed in the manner and to the extent required by the Waterworks Clauses Act, 1847 (10 & 11 Vict. c. 17), to cause pipes to be laid down within the said distance of one hundred feet of such house or other premises;

(*c*) The water to be supplied by the local authority need not be constantly laid on under pressure.

PART VII

RATING AND BORROWING POWERS

Assessments

Special Sewer Assessment

133. In any burgh, or where any special drainage district has been formed under this Act or any of the Acts hereby repealed, the expense incurred by the local authority for sewerage or drainage within the same or for the purposes

thereof, and the sums necessary for payment of any money borrowed therefor either before or after the passing of this Act, together with the interest thereof, shall be paid out of a special sewer assessment which the local authority shall raise and levy on and within such burgh or special district, in the same manner and with the same remedies and modes of recovery as are hereinafter provided for the public health general assessment.

Provided that where a special drainage district has been formed under the provisions of this Act or any of the Acts hereby repealed or of any Act, and the drainage works therein have been executed and are maintained under the authority of such Act, the lands and premises situated within such special district shall not be liable to assessment for the expense of making sewers and drainage works in other parts of the district of the local authority. [Repealed for burghs by B.S.D. and W.S.A., 1901, p. 155.] [15]

Special Water Assessment

134. In any burgh, or where any special water supply district has been formed under this Act or any of the Acts hereby repealed, the expense incurred by the local authority for water supply within the same or for the purposes thereof, and the sums necessary for payment of any money borrowed therefor either before or after the passing of this Act, together with the interest thereof, shall be paid out of a special water assessment which the local authority shall raise and levy on and within such burgh or special district, in the same manner and with the same remedies and modes of recovery as are hereinafter provided for the public health general assessment.

Provided that where a special water supply district has been formed under the provisions of this Act or any of the Acts hereby repealed or of any Act, and a sufficient supply of water has been obtained and is maintained under the authority of such Act, the lands and premises situated within such special district shall not be liable to assessment for the expense of supplying water to other parts of the district of the local authority. [Repealed for burghs by B.S.D. and W.S.A., 1901, p. 155.] [16, 17]

General Assessments in Districts other than Burghs

135. With respect to districts other than burghs, all charges and expenses incurred by or devolving on the local authority in executing this Act or any of the Acts hereby

repealed, and not recovered as hereinbefore[1] provided, may be defrayed out of an assessment (in this Act referred to as the public health general assessment) to be levied by the local authority[2] upon all lands and heritages within the district or in the case of counties not divided into districts within the county, in the like manner as, but as a separate assessment from, the assessment hereinafter mentioned in this section; that is to say, the said assessment shall be assessed, levied, and recovered in like manner and under like powers as—

The assessment for the maintenance of roads under the provisions of the Roads and Bridges (Scotland) Act, 1878 (41 & 42 Vic. c. 51), or, where there is no such assessment, by an assessment levied in like manner as an assessment might have been levied for the maintenance of roads under that Act. [17]

Nothing contained in this Act shall affect or prejudice the provisions of the Agricultural Rates, Congested Districts and Burgh Land Tax Relief (Scotland) Act, 1896 (59 & 60 Vict. c. 37).

General Assessments in Burghs

136. With respect to burghs subject to the provisions of the Burgh Police (Scotland) Act, 1892, or having a local Act for police purposes—

All charges and expenses[3] incurred by or devolving on the local authority in executing this Act or any of the Acts hereby repealed, and not recovered as hereinbefore[4] provided, may be defrayed out of an assessment (in this Act referred to as the public health general assessment) to be levied by the local authority along with but as a separate assessment from the assessment hereinafter mentioned; that is to say, the said assessment shall be assessed, levied, and recovered in like manner and under the like powers, but without any limit, except as in the immediately succeeding section provided as—

The general improvement rate under the Burgh Police (Scotland) Act, 1892, or, when there is no such rate, by a rate levied in like manner as the general improvement rate under the last-mentioned Act.[5]

[1] *v.* §§ 133 and 134, *ante*. [2] *v.* §§ 17 (2) (*a*) and (4) p. 159, also § 27 (1) L.G.A., 1889, and proviso to § 12, *ante*.
[3] *v.* § 137, *post*, and § 359, B.P.A. [4] *v.* §§ 133 and 134, *ante*.
[5] *v.* § 359, B.P.A., 1892.

Provided also, that where a special drainage district has been formed, under the provisions of any Act, and the drainage works therein have been executed and are maintained under the authority of such Act, the lands and premises situated within such special district shall not be liable to assessment for the expense of making sewers and drainage works in other parts of the district of the local authority. [16, 17]

Limit of Assessment

137. The public health general assessment by this Act authorised, which shall be imposed upon all lands and heritages within the district, including any special drainage or special water supply district, shall not exceed the rate of one shilling in the pound.

The special sewer assessment, and the special water assessment, exclusive of the public health general assessment, shall not in any burgh or special drainage or special water supply district exceed the rate of three shillings in the pound. Provided that if the produce of a rate of three shillings in the pound in any burgh or special drainage or special water supply district shall not be sufficient to meet the expenditure bonâ fide incurred or contemplated within such burgh or special district, it shall be lawful to increase such rate to such extent as may have been approved by the Board; provided also, that it shall not be lawful to impose any rate in respect of the expenditure within any special district upon any premises without such special district. [Repealed for burghs by B.S.D. and W.S.A., 1901, p. 155.]

Burghs not to be Assessed for Public Health Rate in Counties[1]

138. Notwithstanding anything contained in the Local Government (Scotland) Act, 1889 (52 & 53 Vict. c. 50), or in this Act, the ratepayers of a burgh shall not be assessed for any charges or expenses incurred by a county council for the salaries or expenses of the medical officer or sanitary inspector appointed for the county, and no representative of a burgh shall in a district committee or on the county council act or vote in any matter relating to this Act or to public health for which the ratepayers in such burgh are not liable to be assessed.

1 *v.* §§ 52 and 73 (8) L.G.A., 1889, pp. 159, 161.

Borrowing Powers

Power of Borrowing for Sewers

139. It shall be lawful for the local authority to borrow [1] for the purpose of acquiring,[2] making,[3] enlarging, or reconstructing sewers or for the purpose of utilising sewage; and on the security of the special sewer assessments,[4] where such exist, or the public health general assessments,[5] as the case may be, such sums of money, and at such times, as the local authority shall deem necessary for that purpose, and to assign the said special sewer assessments and public health general assessments, as the case may be, in security of the money to be so borrowed; and the bonds to be granted on such borrowing and transferences or assignations and discharges thereof may be in or near to the forms contained in the Second Schedule hereto annexed, and such bonds shall be signed by two members and the clerk of the local authority, and shall constitute a lien over the special sewer assessments and general assessments thereby assigned, and shall entitle the creditors therein to recover the sums thereby due from the local authority out of the first and readiest of the said special and general assessments; but no such member or officer shall be personally liable for the repayment of such money so borrowed, and all such obligations shall be deemed and taken to be granted on the sole security of the assessments assigned; and the money so borrowed shall be repayable either in one sum or by instalments, as may be arranged between the borrower and the lender, but so that the same shall be wholly repaid, together with the accruing interest, within thirty years from the date of the loan, but the amount of such loans, including interest, shall form a charge against the assessments of the years intervening between the date of such loans and the date of full repayment; and the money so borrowed as aforesaid shall be applied for the purposes specified in this section, and for no other purpose whatsoever.

Power of [6] Borrowing for Water Supply

140. It shall be lawful for the local authority to borrow for the purpose of constructing,[7] purchasing,[7] enlarging,[7] or reconstructing,[7] such works as are herein authorised for providing a supply of water for the use of the inhabitants of the

[1] Borrowing can only be effected by Dist. Com. through C.C., with consent of S.J.C. [2] *v.* § 102, *ante*. [3] *v.* § 103, *ante*. [4] *v.* § 133, *ante*.
[5] *v.* § 135, *ante*. [6] Power is given really to C.C. under § 67, L.G.A., 1889.
[7] *v.* § 126, *ante*.

district, or for the purpose of entering into and implementing any contract or arrangement with any person for such supply, and on the security of the special water assessments,[1] where such exist, or of public health general assessments,[2] as the case may be, such sums of money and at such times as the local authority shall deem necessary for that purpose, and to assign the said special water assessments and public health general assessments, as the case may be, in security of the money to be so borrowed; and the bonds to be granted on such borrowing and transferences or assignations and discharges thereof may be in or near to the forms contained in the Second Schedule hereto annexed; and such bonds shall be signed by two members and the clerk of the local authority, and shall constitute a lien over the assessments thereby assigned, and shall entitle the creditors therein to recover the sums thereby due out of the first and readiest of the said assessments; but no such member or clerk shall be personally liable for the repayment of such money so borrowed, and all such obligations shall be deemed and taken to be granted on the sole security of the assessments thereby assigned, and the money so borrowed shall be repayable either in one sum or by instalments, as may be arranged between the borrower and the lender, but so that the same shall be wholly repaid, together with the accruing interest, within thirty years from the date of the loan; but the amount of such loans, including interest, shall form a charge against the assessments of the years intervening between the date of such loans and the date of full repayment; and the money so borrowed as aforesaid shall be applied for the purposes specified in this section and for no other purpose whatsoever.

Power of[3] Borrowing for Hospitals, etc.

141. It shall be lawful for the local authority to borrow[3] for the purpose of providing offices for the use of the local authority, and for providing and furnishing such permanent hospitals,[4] disinfecting premises and apparatus,[5] houses of reception,[6] or mortuaries,[7] as are hereinbefore authorised, and on the security of the public health general assessments,[8] such sums of money and at such times as they shall deem necessary for that purpose, and to assign the said public health general assessments in security of the money to be so borrowed; and the bonds to be granted on such

1 *v.* § 134, *ante.*
2 *v.* § 135, *ante.*
3 This power is only exercised by the C.C.
4 Not for temporary.
5 *v.* § 46, *ante.*
6 *v.* § 66, *ante.*
7 *v.* §§ 68 and 71, *ante.*
8 *v.* §§ 135 and 136, *ante.*

borrowing and transferences or assignations and discharges thereof may be in or near to the forms contained in the Second Schedule hereto annexed; and such bonds shall be signed by two members and the clerk of the local authority, and shall constitute a lien over the assessments thereby assigned, and shall entitle the creditors therein to recover the sums thereby due out of the first and readiest of the said assessments; but no such member or officer shall be personally liable for the repayment of such money so borrowed, and all such obligations shall be deemed and taken to be granted on the sole security of the assessments thereby assigned, and the money so borrowed shall be repayable either in one sum or by instalments, as may be arranged between the borrower and the lender, but so that the same shall be wholly repaid, together with the accruing interest, within thirty years from the date of the loan; but the amount of such loans, including interest, shall form a charge against the assessments of the years intervening between the date of such loans and the date of full repayment; and the money so borrowed as aforesaid shall be applied for the purposes specified in this section and for no other purpose whatsoever.

Power to Public Works Loan Commissioners to Lend to Local Authority for Sanitary Purposes

142. The Public Works Loan Commissioners may, on the recommendation of the Board, make any loan to any local authority[1] in pursuance of any powers of borrowing conferred by this Act[2] or by the Acts hereby repealed, or by the Burgh Police (Scotland) Act, 1892, whether for works already executed or yet to be executed, on the security of any fund or rate applicable to any of the purposes of these Acts, and without requiring any further or other security, such loan to be repaid[3] within a period not exceeding thirty years, and to bear interest at such rate as may, in the judgment of the Treasury, be necessary in order to enable the loan to be made without loss to the Local Loans Fund.

Provided as follows—

(1) That in determining the time when a loan as aforesaid shall be repayable, the Public Works Loan Commis-

[1] Through the C.C. [2] For these, *v.* §§ 34, 139, 140, and 141, *ante*.

[3] "The usual method of repayment of loans obtained from the P.W.L.C. is by equal annual instalments of the principal, together with interest on the balance remaining unpaid, the amount of interest diminishing year by year. They may also be repaid by way of annuity in equal sums of principal and interest combined during the whole period of the loan." (Messrs Macdougall and Murray's Handbook, "Public Health," p. 211.)

sioners shall have regard to the probable duration and continuing utility of the works in respect of which the same is required;

(2) That this Act shall not extend to any loan required for the purpose of defraying expenses incurred in enforcing the performance of or in performing the duty of a defaulting local authority.

143. The accounts of every local authority under this Act shall be made up and audited as part of and in the same manner and subject to the same provisions as the other accounts of such local authority.

PART VIII

ACQUISITION OF LANDS

Power to[1] acquire Lands

144. A local authority[1] may for any of the purposes of Part II., Part III., and Part VI. of this Act[2] in terms of the Lands Clauses Acts, and whether by agreement or otherwise, purchase any lands[3] within or without their district, and may by agreement take on lease, sell or exchange any lands within or without their district; they may also buy up any water-mill, dam, or weir, which interferes with the proper drainage of or supply of water to their district. They may also, with the sanction of the Board, sell or let any surplus land, and shall apply the proceeds in such manner, whether to the reduction of debt or otherwise, as the Board shall direct. [13]

Regulations as to Compulsory Purchase of Land, etc.

145. The following regulations shall be observed with respect to the purchase and taking of land otherwise than by agreement by local authorities for the purposes hereinbefore mentioned:—

(1) The local authority before applying to the Board for an order empowering them to put in force the powers of the Lands Clauses Acts with respect to the purchase and taking of land otherwise than by agreement shall—

[1] The C.C., not D.C.
[2] *v.* §§ 29, 34, 46, 66, 68, 70, 71, 102, 103, 108, 121, 125, 126, and 130, *ante*.
[3] *v.* definition, § 3, *ante*.

publish once at least in each of two consecutive weeks in some newspaper circulated in the district or some part of the district where the land is proposed to be taken, an advertisement describing shortly the purpose for which it is proposed to be taken, naming a place where a plan of the proposed works and of the lands which may be taken and a book of reference to such plan may be seen at all reasonable hours, and stating the quantity of land they require; and shall further

serve a notice in manner hereinafter mentioned on every owner or reputed owner, lessee or reputed lessee, and occupier of such land, defining in each case the particular land intended to be taken, and requiring an answer, stating whether the person so served assents, dissents, or is neuter in respect of taking such land; such notice to be served

by delivery of the same personally to the person on whom it is required to be served, or, if such person is absent abroad, to his agent; or

by leaving the same at the usual or last known place of abode of such person as aforesaid; or

by forwarding the same by post in a registered letter addressed to the usual or last known place of abode of such person.

Every such plan shall be drawn on a scale of not less than four inches to a mile, and the book of reference shall contain the names of the owners and lessees or reputed owners and lessees and of the occupiers of the lands which may be taken:

(2) Upon compliance with the provisions hereinbefore contained with respect to advertisements and notices, the local authority may, if they shall think fit, present a petition to the Board; the petition shall state the land intended to be taken, and the purposes for which it is required, and the names of the owners, lessees, and occupiers of land who have assented, dissented, or are neuter in respect of the taking of such land, or who have returned no answer to the notice; it shall pray that the local authority may, with reference to such land, be allowed to put in force the powers of the Lands Clauses Acts with respect to the purchase and taking of land otherwise than by agreement, and such prayer shall be supported by such evidence as the Board requires:

(3) Upon receipt of such petition, and upon due proof of the proper advertisements having been published and

notices served, the Board shall take such petition into consideration, and may either dismiss the same or direct an inquiry in the district in which the land is situate, or otherwise inquire as to the propriety of assenting to the prayer of such petition; but until such inquiry has been made in the district after such notice as may be directed by the Board, no Order shall be made affecting any land without the consent of the owners, lessees, and occupiers thereof.

Any such inquiry may be held by a person appointed by the Board in the manner and with the powers hereinbefore provided, or if the Secretary for Scotland by any writing under his hand shall so direct, such inquiry shall be held by the sheriff, not being a sheriff-substitute resident within the district:

(4) After the completion of the inquiry as last aforesaid, the Board may, by Provisional Order, empower the local authority to put in force, with reference to the land or any part of the land referred to in such Order, the powers of the Lands Clauses Acts with respect to the purchase and taking of land otherwise than by agreement, and may make such determination as they may think fit in regard to the payment of costs by the local authority either to the Board or any person affected by the Order; provision shall be made by such Order for the incorporation therein of the Lands Clauses Acts[1] and (with the necessary modifications) of sections six and seventy to seventy-eight of the Railways Clauses Consolidation (Scotland) Act, 1845. It shall be the duty of the local authority to serve a copy of any Order so made in the manner and upon the persons in which and upon whom notices in respect of such land are hereinbefore required to be served, together with a statement that the Order will become final and have the effect of an Act of Parliament, unless within two months a memorial shall be presented to the Secretary for Scotland praying that the Order shall not become law without confirmation by Parliament:

(5) If no memorial shall be presented as aforesaid the Order shall become final and have the effect of an Act of Parliament:

(6) If a memorial has been presented to the Secretary for Scotland, it shall be lawful for him, as soon as conveniently may be, to submit such Order to Parliament for confirmation, and any Act passed to confirm such

[1] *v.* § 4, *ante.*

Order shall be deemed to be a Public General Act of Parliament:

(7) Every Bill for confirming any such Order shall, after the Second Reading in the House in which it originates, be referred to a Select Committee, or, if the two Houses of Parliament think fit so to order, to a Joint Committee:

(8) If, before the expiration of seven days after the Second Reading of any such Confirmation Bill in the House in which it originates, a petition is presented against any Order comprised therein, the petitioner shall be allowed to appear and oppose by himself, his agents, and witnesses:

(9) The Committee by a majority may award costs, which shall, unless the Committee otherwise direct, include all costs from the date of the memorial:

(10) All costs, charges, and expenses incurred in relation to any application for, or the grant of, such Order or Provisional Order shall, to such amount as the Board think proper to direct, become a charge upon the public health general assessment,[1] or special sewer assessment,[2] or special water assessment,[3] levied in the district,[4] or special drainage district,[5] or special water supply district,[6] as the case may be, to which such Order or Provisional Order relates:

(11)—(*a*) Any question of disputed compensation under an Order or Provisional Order made under this section shall be referred to the arbitration of a sole arbiter appointed by the parties, or if the parties do not concur in the appointment of a sole arbiter then, on the application of either of them, by the Board, and the remuneration to be paid to the arbiter shall be fixed by the Board. An arbiter appointed under this sub-section shall be deemed to be a sole arbiter within the meaning of the Lands Clauses Acts, and the provisions of those Acts with respect to an arbitration shall apply accordingly; and the arbiter shall, notwithstanding anything in the said Acts, determine the amount of the expenses in the arbitration, and such determination shall be final; and

(*b*) In construing for the purposes of this section any Acts incorporated with, or put in force under, this section, this Act, together with any Order or Provisional Order under this section, shall be deemed to be the special Act: [**11, 12, 13**]

(12) At any inquiry or arbitration held under this section,

[1] *v.* §§ 135 and 136, *ante*. [2] *v.* § 133, *ante*. [3] *v.* § 134, *ante*.
[4] *v.* definition, § 3, *ante*. [5] *v.* § 122, *ante*. [6] *v.* § 131, *ante*.

the person or persons holding the inquiry or arbitration shall hear any authorities or parties whose interests would be affected, by themselves or their counsel or agents, and may hear witnesses:

(13) The Board shall not make any Order for purchasing the whole or any part of any park, garden, pleasure-ground, or other land required for the amenity or convenience of any dwelling-house, or any land the property of a railway company or canal company which is or may be required for the purposes of their undertaking, or any land which, in the opinion of the Board, is being held or may be required for the extension of a factory or public work:

(14) The Board shall, in making an Order for purchasing land, have regard to the extent of land held in the neighbourhood by any owner, and to the convenience of other property belonging to the same owner, and shall, as far as is practicable, avoid taking an undue or inconvenient quantity of land from any one owner:

(15) The expression "Act of Parliament" in the Telegraph Act, 1878, shall include an Order under this section, although such Order may not have been confirmed by Parliament:

(16) The Board shall in their annual report include a statement of any proceedings under this section.

PART IX

LEGAL PROCEEDINGS

Enforcement of and Procedure under Act

Procedure if Local Authority neglect its duty under Act

146.—(1) If any nuisance[1] shall exist upon or in premises[2] possessed or managed by the local authority,[3] or in which the local authority have any interest, or if the local authority shall fail or neglect to perform any duty imposed upon them by this Act, or to take all due proceedings in this Act authorised for the removal of nuisances or preservation of health, or due regulation of lodging-houses, or for any other of the purposes of this Act, it shall be competent for any ten

[1] *v.* § 16, *ante*. [2] *v.* § 3, *ante*.
[3] *i.e.*, D.C.; *v.* § 17 (2) (c), L.G.A., 1889, p. 159.

ratepayers residing within the district, or for a parish council, or for the procurator-fiscal of the sheriff court of the county, or for the Board, to give written notice to such local authority of the matters in which such neglect exists; and if the local authority do not within fourteen days after such notice, or, in the case of neglect to enforce any regulation or direction [1] of the Board under Part IV. of this Act, within two days after such notice, remove or remedy the nuisance referred to, or in any other case neglect to take the steps authorised or required by or under this Act, it shall be competent for the parties aforesaid, or any one of them, to apply to the sheriff [2] by summary petition, and the sheriff shall thereupon inquire into the same, and may make such decree as shall in his judgment be required to enforce the removal or remedy of the nuisance, or otherwise to compel execution of or carry out the provisions and purposes of this Act, and may appoint the same to be carried into effect by and at the sight of such persons as he may think fit, and at the expense of the local authority, or of other parties on whom the expense ought in his opinion to be laid, and for payment of the expenses of such application by the petitioners or by the local authority or other party, as justice may require: Provided always, that in regard to any nuisance for the removal of which drainage works are necessary, the sheriff may suspend consideration of the complaint for such time as may seem proper, in order to enable a general system of drainage under any general or local Act or otherwise to be carried out, the better to remove such nuisances. [156, 157]

Procedure under 18 & 19 Vict. c. 68

(2) It shall be competent for the Board,[3] or for any local authority,[3] or for any parish council,[3] to present a petition to the sheriff, under the fourth section of the Burial Grounds (Scotland) Act, 1855, to the same effect, and to be followed out in like manner, as if presented by any of the persons or parties therein mentioned.

Provision for refusal or neglect of Local Authority

147. (Amended by Burgh S.D.W.S.A., 1901.) In case any local authority shall refuse or neglect to do what is herein or in the Burgh Police (Scotland) Act, 1892,[4] or other-

[1] *v.* § 81, *ante*. [2] *v.* § 154, *post*.

[3] *v.* § 4, Burial Grounds Act, 1855, p. 287. The L.A. may also proceed under § 16 (11), *ante*.

[4] The words after "herein" are added by Burgh Sewerage and Drainage Act, 1901.

wise by law required of them, or in case any obstruction shall arise in the execution of this Act, it shall be lawful for the Board, with the approval of the Lord Advocate, to apply by summary petition to either division of the Court of Session, or during vacation or recess to the Lord Ordinary on the Bills, which division or Lord Ordinary are hereby authorised and directed to do therein and to dispose of the expenses of the proceedings as to the said division or Lord Ordinary shall appear to be just. [173]

Procurator-Fiscal may Sue by Directions of Board

148. In any place within the jurisdiction of a local authority the procurator-fiscal of the sheriff court, on the Board being satisfied that the local authority have made default in doing their duty, may, with the approval of the Lord Advocate, institute and follow out proceedings against the local authority for compelling them to do their duty, and may institute and follow out in all respects any proceeding which the local authority of such place might institute with respect to the removal of nuisances or otherwise; and the expense as between agent and client of all such proceedings shall be paid by the local authority, but with such relief to them against the author of any nuisance or any other party as may be competent.

Procedure where Nuisance beyond District

149. Where a nuisance is situated in a district the local authority of which does not cause the same to be removed, which nuisance is offensive, or injurious, or dangerous to another district, the local authority of the latter district may call on the first-mentioned local authority to take all competent steps for removal of such nuisance, and the said first-mentioned local authority shall be bound to do so accordingly; and any expense thereby occasioned to the said second-mentioned local authority shall be reimbursed by the first-mentioned local authority, the amount of such reimbursement in the case of dispute to be finally determined by the Board.

Local Authority may require Payment of Costs, etc., from Owner or Occupier, and Occupier Paying to deduct from Rent

150. It shall be lawful for the local authority, at their discretion, to require the payment of any costs or expenses which the owner[1] of any premises may be liable to pay

[1] *v.* definition, § 3, *ante*.

under this Act either from the owner or from any person who then or at any time thereafter occupies such premises, and such owner[1] or occupier[1] shall be liable to pay the same, and the same shall be recovered[2] in manner authorised by this Act, and the owner shall allow such occupier to deduct the sums of money which he so pays out of the rent from time to time becoming due in respect of the said premises, as if the same had been actually paid to such owner as part of such rent: Provided always, that no such occupier who shall not be the author of a nuisance shall be required to pay any further sum than the amount of rent for the time being due from him, or which, after such demand of such costs or expenses from such occupier, and after notice[3] not to pay his landlord any rent without first deducting the amount of such costs or expenses, becomes payable by such occupier unless he refuse, on application being made to him for that purpose by or on behalf of the local authority, truly to disclose the amount of his rent and the name and address of the person to whom such rent is payable, but the burden of proof that the sum demanded from any such occupier is greater than the rent due by him at the time of such notice, or which has since accrued, shall lie upon such occupier: Provided also, that nothing herein contained shall be taken to affect as between the contracting parties any contract made or to be made between any owner, tenant, or occupier of any house, building, or other property, whereby it is or may be agreed that the tenant or occupier shall pay or discharge all rates, dues, and sums of money payable in respect of such house, building, or other property, or to affect as between the contracting parties any contract whatsoever between landlord and tenant. [8]

Penalty for Wilful Damage of Works

151. If any person wilfully damages any works or property belonging to any local authority, he shall be liable to a penalty not exceeding five pounds, in addition to the cost of repairing such works or property.[4]

Appearance of Local Authorities in Legal Proceedings

152. Any local authority may appear and plead before any sheriff, magistrate, or justice, or in any legal proceeding, by any officer or member, or other person authorised gener-

[1] *v.* definition, § 3, *ante*.
[2] For recovery of expenses, *v.* §§ 153 and 154, *post*.
[3] *v.* §§ 14, *ante*, and 159, *post*.
[4] *v.* also §§ 30, 117, and 127, *ante*.

ally, or in respect of any special proceeding, by resolution of such authority, certified under the hand of the clerk thereof, and such person being so authorised shall be at liberty to institute and carry on any proceeding which the authority is authorised to institute and carry on under this Act; and it shall not be necessary for the local authority to appear in any other manner in any prosecution or proceeding at their instance.

Recovery of Penalties

153. All penalties under this Act, and also all sums of money and expenses herein directed to be recovered in a summary manner, may, unless otherwise provided[1] in this Act, be recovered at the suit of the local authority,[2] and may be applied for the purposes of this Act: Provided always, that nothing contained in this section shall impair or affect any other mode of recovery allowed by this Act: Provided also, that all contraventions of the provisions contained in this Act relating to overcrowding[3] of houses, and all contraventions of the provisions in this Act or of the bye-laws, rules and regulations made under the authority of this Act relating to common lodging-houses[4] may be prosecuted as police offences before any judge or magistrate having police jurisdiction, and in the same way and manner as police offences are prosecuted before him under any general or local police Act; and in the event of the offender being convicted, and failing to make immediate payment of the penalty which may have been imposed, he shall be liable to imprisonment in accordance with the provisions of the Summary Jurisdiction (Scotland) Acts, without prejudice to diligence by poinding or arrestment, if no imprisonment has followed on the conviction.

Form of Applications to the Sheriff, etc.

154. All applications to enforce any provision of this Act, or for the recovery of penalties herein imposed, or other sums of money becoming due to the local authority in virtue of this Act, in so far as not herein otherwise provided for, may be by summary petition, and such petition may refer to the sections of this Act on which it is founded, without setting forth the same; and the sheriff, magistrate, or justice shall thereupon, if he see fit, appoint the petition to be answered within three days after service, or may order the parties to

[1] *v.* §§ 87 and 88, *ante*. [2] *v.* § 14, *ante*.
[3] *v.* §§ 16 (7) and 16 (8) (iii.), 72, 73, 92, 84 and 76, *ante*.
[4] *v.* §§ 89-100, *ante*.

attend him in person, and on advising such answer, or hearing the parties, or on the respondent failing to appear, he may at once discern, or may appoint any competent person to examine the premises and report to him, and may decern on such report, or he may, if either party desire it, order proof to be led before himself on any specified points, and shall in that case appoint a day, not more than five days thereafter, for hearing such proof, and if the proof be not on that day completed may adjourn the same from time to time until completed, and within three days after such completion he shall give decree, and he may find either party liable in expenses, or in any modified sum of expenses, and may, without prejudice to diligence by poinding or arrestment, grant warrant for the imprisonment of the person convicted or found liable in a penalty or sum of money, unless he shall pay the whole sums found due within a specified time, until the same be paid, such imprisonment to be in accordance with the provisions of the Summary Jurisdiction (Scotland) Acts.

No Written Pleadings, etc., Allowed

155. No written pleadings, other than the petition and answers (when ordered), shall be allowed, and the sheriff, magistrate, or justice shall have power to grant diligence in common form to cite witnesses and havers, and in cases under sub-sections (9), (10), and (11) of section sixteen of this Act the sheriff shall take the evidence in like manner as in civil proofs: Provided always, that no decree under this Act against any party shall bar his right to relief against any other party legally liable therein.

Appeal in Certain Cases

156. Where in cases under sub-sections (9), (10), and (11) in section sixteen it shall appear to the sheriff that the true value of the subject complained of as a nuisance, or the cost of the operations necessary to remove or amend it as ordered, or the value of the trade or business interfered with, exceeds the sum of twenty-five pounds but does not exceed the sum of fifty pounds, he shall certify his opinion to that effect in his decree, and the parties shall thereupon be entitled to appeal from the sheriff-substitute, where the judgment has been pronounced by him to the sheriff, on lodging, within three days after the decree, a note of appeal with the sheriff clerk, and serving the same on the opposite party or the agent acting in such proceedings for such party, and such note shall operate as a sist of execution until the appeal be

determined; and on such note being lodged the sheriff clerk shall transmit the process, together with the evidence, to the sheriff, whose decision thereon shall be final where the value certified is not above fifty pounds; and in the event of such value or cost being so certified to exceed the sum of fifty pounds, the parties shall be entitled to present a note of appeal[1] to the Lord Ordinary on the Bills against the judgment either of the sheriff-substitute or of the sheriff, whether this last be an original judgment or on appeal: Provided that, along with such note, the appellant shall lodge a sufficient bond of caution by one or more obligants, to the amount of fifty pounds sterling, for payment or performance of any judgment that may be pronounced under his appeal; and also provided that such note be lodged in the Bill Chamber, and a copy thereof served on the opposite party or his said agent within eight days after the date of the sentence or judgment complained of, which note shall in like manner operate as a sist of execution until a judgment be pronounced by the Lord Ordinary, which judgment shall be final unless the Lord Ordinary shall allow a reclaiming note to the inner house, and the judgment of the inner house shall be final. [28]

No Appeal otherwise

157. Save in so far as otherwise provided, no appeal shall be competent from any decree or order of any magistrate or justice, or from the decree or order of any sheriff, except in cases certified in terms of the preceding section; and no decree or order, or any other proceeding, matter, or thing done in the execution of this Act, shall, excepting as herein provided, be subject to review in any way whatever. [28]

Justices, etc., being Members of Local Authority, may Act

158. The sheriff, justices of the peace, or magistrates may in all cases, notwithstanding their being members of the local authority, exercise the jurisdiction vested in them under this Act.

Service of Notices, Petitions, and Orders

159. Notices, intimations, petitions, and orders under this Act may be served by any person[2] by delivering the same to or at the residence of the parties to whom they are respectively addressed, or by being put into the post office duly addressed to the parties; and where addressed to the

[1] *v.* also § 32 (4), *ante.* [2] *v.* §§ 14, 19 and 20, *ante.*

owner or occupier of premises they may be served by any person delivering the same or a true copy thereof to some person upon the premises,[1] or, if there be no person upon the premises who can be so served, by fixing the same upon some conspicuous part of the premises; and service of such notices, petitions, or orders may be proved by a certificate under the hand of the person who posted or delivered or affixed the same, attested by one witness who was also present.

Proof of Regulations of Local Authority and Board

160. Copies of any orders, resolutions, or regulations (other than bye-laws) of the local authority or their committee purporting to be signed by the clerk of such body or committee, shall, unless the contrary be shown, be received as evidence thereof without proof of their meeting, or of the official character or signature of the person signing the same.

One or more Joint Owners may be proceeded against alone

161. In case of any demand or complaint under this Act to which two or more parties, whether as owners[2] or occupiers[2] of premises, may be jointly answerable, it shall be sufficient to proceed against any one or more of them without proceeding against the others or other of them, and any one or more of such persons may be proceeded against, notwithstanding that the acts or defaults of any one or more of them would not separately be an offence against this Act; but nothing herein contained shall prevent the parties so proceeded against from recovering relief in any case in which they would now be entitled to relief by law. Proceedings against several persons included in one demand or complaint shall not lapse by reason of the death of any one or more of such persons, but all such proceedings may be carried on as if the deceased persons had not been originally so included. Whenever in any proceeding under the provisions[3] of this Act relating to nuisances it becomes necessary to mention or refer to the owner or occupier of any premises, it shall be sufficient to designate him as the owner or occupier of such premises without name or further description.

Penalty on Occupier obstructing Owner

162. If the occupier[4] of any premises prevent the owner[4] thereof from obeying or carrying into effect the provisions of

[1] *v.* definition, § 3, *ante.*
[2] *v.* definition, § 3, *ante.*
[3] *v.* §§ 16 to 26, *ante.*
[4] *v.* definition, § 3, *ante.*

this Act, the sheriff or any magistrate or justice to whom application is made shall, by order in writing, require such occupier to permit the execution of the works required to be executed, provided that such works appear to such sheriff, magistrate, or justice to be necessary for the purpose of obeying or carrying into effect the provisions of this Act; and if within a reasonable time after the making of such order the occupier against whom it is made refuse to comply therewith, he shall be liable to a penalty not exceeding five pounds for every day afterwards during the continuance of such refusal.

Penalty for Violating Act or Obstructing its Execution

163. Whoever wilfully violates or contravenes any provision of this Act to which a pecuniary penalty is not herein attached, obstructs any person acting under the authority or employed in the execution of this Act, or wilfully violates any direction or regulation issued by the Board under this Act, shall be liable for every such offence to a penalty not exceeding five pounds.

Compensation[1] to be made

164. Full compensation shall be made, out of any fund or assessment applicable to the purposes of this Act, to all persons sustaining any damage by reason of the exercise of any of the powers of this Act, except when otherwise specially provided; and in case of dispute, if the sum claimed do not exceed the sum of fifty pounds sterling, the same may be ascertained on a summary application by either party to the sheriff, whose decision shall be final and not subject to review, unless when pronounced by the sheriff-substitute, in which case it may be reviewed by the sheriff on appeal; and when the sum claimed exceeds fifty pounds sterling, such compensation shall be ascertained and disposed of by a sole arbiter appointed in manner set forth in sub-section eleven of section one hundred and forty-five of this Act. [11-14, 37-42]

Convictions not Void for want of Form

165. No conviction or other legal proceeding under this Act shall be void for want of form, or for want of any previous notice, provided in this latter case the party proceeded against or convicted has appeared or the charge had come to

[1] For provisions as to, *v.* §§ 47 (5), 48 (2), 96, 102, and 145 (11), *ante*.

NOTE.—The following Case was decided on 23rd October 1905, too late to be inserted in its proper position. It is, however, at the time of going to press, open to appeal to the Sheriff Principal :—

P.H.A. (Scot.) 1897, Sec. 164.—*Blyth* v. *The Magistrates of the City of Edinburgh.*

Held, by Sheriff Henderson, that the expenses legitimately incurred in resisting a petition for a condemnation order under Sec. 43 of the P.H.A. fall to be included as part of the "full compensation" falling to be made by a L.A. in terms of Sec. 164.

See also *Bater* v. *Mayor, etc., of Birkenhead*, 1893, 2 Q.B. 77, 62 L.J.M.C 107; and *Walshaw* v. *Mayor, etc., of Brighouse*, 1899, 2 Q.B. 286, 68 L.J.Q.B. 828, on the corresponding section (308) in the P.H. (Eng.) Act, 1875.

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See also Slater v. Mayor, etc., of Berwick-on-Tweed, 1858, 2 Q.B. 77, 62 L.J.M.C. 107; and Wolcott v. Mayor, etc., of Brighouse, 1899, 2 Q.B. 286, 68 L.J.Q.B. 858, on the corresponding section (308) in the P.H. (Eng.) Act, 1875.

his knowledge; and the charge may be amended at any time, and the proceedings may be adjourned on the ground of want of sufficient notice, or for other good cause.

Local Authority or Board not Liable for Irregularity of their Officers

166. The local authority and the Board shall not be liable in damages for any irregularity committed by their officers in the execution of this Act, or for anything done by themselves in the *bonâ fide* execution of this Act; and every officer acting in the *bonâ fide* execution of this Act shall be indemnified by the local authority under which he acts in respect of all costs, liabilities, and charges to which he may be subjected; and every action or prosecution against any person acting under this Act on account of any wrong done in or by any action, proceeding, or operation under this Act shall be commenced within two months after the cause of action shall have arisen; provided that nothing in this section shall exempt any member of any local authority from being surcharged with the amount of any payment which may be disallowed by the auditor in the accounts of such authority, and which such member authorised or joined in authorising. [18, 19, 37, 174, 175, 176]

Forms

167. The forms contained in the Second Schedule to this Act annexed, or any forms to the like effect, may be used for the purposes of this Act, and shall be sufficient therefor, and all proceedings or documents under this Act may be wholly or partly written or printed.

Exemption from Stamp Duties

168. All bonds, assignations, conveyances, instruments, agreements, receipts, or other writings made or granted by or to or in favour of the local authority under this Act shall be exempt from all stamp duties.

Police Constables to Aid in executing Act

169. The constabulary and police force in their respective jurisdictions shall aid the authorities and officers acting in execution of this Act, or any directions or regulations issued as aforesaid.[1]

Act not to Impair Right of Action, etc.

170 Nothing in this Act shall be construed to impair any right of action in respect of nuisances at common law.

[1] *v.* §§ 19, 43 (1) and (5), 54 and 55, *ante*.

Powers of Act Cumulative

171. All powers given by this Act shall be deemed to be in addition to, and not in derogation of, any power conferred by Act of Parliament not hereby specifically repealed, or any law or custom; and such last-mentioned powers may be exercised in the same manner as if this Act had not passed, but without prejudice to the powers conferred by this Act.

PART X

PORT SANITARY AUTHORITY

Constitution of Port Local Authorities

172. The Board may by order constitute any local authority whose district or part of whose district forms part of or abuts on any part of a port in Scotland or the waters of such port, or any persons having authority in or over such port or any part thereof, the local authority of the whole of such port or of any part thereof (in this Act referred to as the "port local authority").

The Board may also by order constitute a joint port local authority for the whole or any part of a port by combining any two or more local authorities having jurisdiction within the proposed area or part thereof to act together for the purposes of this Part of the Act, and may prescribe the mode of such joint action; or by forming a joint port local authority consisting of representative members of any two or more of such local authorities in the same manner. Further the Board may by order constitute a joint port local authority for any two or more ports consisting of representative members of all or any of the local authorities having jurisdiction within such port or any part thereof.

The Board may from time to time alter, vary, renew, or rescind said order, and a copy of said orders when made shall be forthwith laid before both Houses of Parliament.

Any order constituting a port local authority or joint port local authority may assign to such authority any powers, rights, duties, capacities, liabilities and obligations under this Act, and direct the mode in which the expenses of such authority are to be paid, and where such order constitutes a joint port local authority, it may contain all the regulations with respect to the carrying out of the provisions of this Act by such authority.

A port shall mean a port as established for the purposes of the laws relating to the Customs of the United Kingdom.

Jurisdiction of Port Local Authority

173. The order of the Board constituting a port local authority or joint port local authority shall be deemed to give such authority jurisdiction over all waters[1] within the limits specified in the order, and also over the whole or such portion of the district within the jurisdiction of any local authority as may be so specified.

Delegation of Powers by Port Local Authority

174. A port local authority or joint port local authority may, with the sanction of the Board, delegate to any local authority within or bordering on their district the exercise of any powers conferred on such authority by the order of the Board, but, except in so far as such delegation may extend, no other authority shall exercise any powers conferred on a port local authority or joint port local authority by the order of the Board within the district of such authority.

Expenses of Port Local Authority

175. Any expenses incurred by a joint port local authority shall be defrayed out of a common fund to be contributed by the local authorities in such proportions as the Board thinks just.

A port local authority, if itself a local authority under this Act, independently of its character of a port local authority, shall raise the proportion of expenses due in respect of its own district in the same manner as if such expenses had been incurred by it in the ordinary manner for the purposes of this Act.

For the purposes of obtaining payment from the contributory local authorities of the sums to be contributed by them a port local authority or joint port local authority shall issue their requisition to each such authority, requiring such authority, within a time limited by the requisition, to pay the amount therein mentioned to such authority, or to such person as such authority may direct.

Any contribution payable by a local authority to such port local authority or joint port local authority shall be a debt due from them, and may be recovered accordingly, such contribution being deemed general expenses of that authority. If any local authority makes default in complying with the requisition addressed to it by such port local authority or

[1] *v.* §§ 177 and 178, *post*.

joint port local authority such authority may, instead of instituting proceedings for the recovery of the debt, or in addition to such proceedings as to any part of the debt which may for the time being be unpaid, proceed in the summary manner in this Part of this Act mentioned to raise within the district of the defaulting authority such sum as may be sufficient to pay the debt due.

Where several local authorities are combined in the district of one port local authority or joint port local authority, the Board may by order declare that one or more of such authorities shall be exempt from contributing to the expenses incurred by such authorities.

Proceedings for raising a Sum for Payment of Debt within District of a Defaulting Authority

176. Where any port local authority, joint port local authority, or other authority, are authorised in pursuance of this Act to proceed in a summary manner to raise within the district of a defaulting authority such sum as may be sufficient to pay any debt due to them, the authority so authorised for the purpose of raising such sum shall, within the district of the defaulting authority, have, so far as relates to the raising such sum, the same powers as if they were the defaulting authority, and as if such sum were expenses properly incurred by the defaulting authority within the district of such authority; and the port local authority, joint port local authority, or other authority, may raise the amount by assessment, in like manner and with all the powers of imposition, levy, and recovery of the defaulting local authority.[1]

The authority so authorised as aforesaid may, in making an estimate of the sum to be raised for the purpose of paying the debt due to them, add such sums as they think sufficient, not exceeding ten per cent. on the debt due, and may defray thereout all costs, charges, and expenses (including the remuneration to any person they may employ) to be incurred by such authority by reason of the default of the defaulting authority; and the authority so authorised as aforesaid shall apply all moneys raised by them in payment of the debt due to them, and such costs, charges, and expenses as aforesaid, and shall pay to the defaulting authority the balance, if any, remaining in their hands after such application.

[1] *v.* §§ 135 and 136, *ante*.

PART XI

MISCELLANEOUS

Provisions as to Ships[1]

Provision as to Ships within the Jurisdiction of Local Authority

177. Any ship[2] lying in any river, harbour, or other water shall be subject to the local authority of the district within or *ex adverso* of which such river, harbour, or other water is situate, and to the sheriff, magistrates, and justices of the peace having jurisdiction in such district, and shall be within the provisions of this Act in the same manner as if such ship were a house[3] within such district, but this section shall not apply to any ship belonging to Her Majesty or to any foreign government.

Provision as to District of Local Authority extending to Places where Ships are Lying

178. For the purposes of this Act, any ship that is in a place within three miles of the coast of Scotland, and not within the district of a local authority, shall be deemed to be within the district of such local authority as may be prescribed by the Board, and until a local authority has been prescribed then of the local authority whose district nearest adjoins the place where such ship is lying.

Charge for Medical Officer attending Sick on Board any Ship, and to be paid by Captain[4]

179. Whenever, in compliance with any regulation[5] of the Board which they are hereby empowered to make under this Act, any medical officer employed by a local authority performs any medical service on board any ship the local authority shall be entitled to charge for such service, and such charge shall be payable by the captain of such ship on behalf of the owners thereof, together with any reasonable expenses for the treatment of the sick, and in the event of dispute the amount shall be determined by the sheriff in a

[1] *v.* also §§ 78, 79, 85 and 88, *ante;* also § 13, I.D. (N.) Act, 1889, p. 258; *v.* likewise sections of M.S. Act, p. 272, which are not affected thereby.

[2] *v.* definition, § 3, *ante.*

[3] And the person in charge, its "occupier," definition, § 3, *ante.*

[4] The L.A. charges captain for services of M.O.H., but it is the M.O.H. that can sue for payment.

[5] *v.* §§ 78 and 79, *ante.*

summary manner; and if such services shall be rendered by any medical practitioner who is not a medical officer of the local authority, he shall be entitled to charge for any service rendered on board, with extra remuneration on account of distance, at the same rates as those which he is in the habit of receiving from private patients of the class of those attended and treated on shipboard, to be paid as aforesaid; and in case such charges be not paid, the medical officer or practitioner may bring an action against the person in charge of such ship for the same, and the ship, cargo, and tackle thereof, shall be subject to a lien for the amount of such charges.

Power to remove to Hospital Sick Persons brought by Ship[1]

180. Any local authority may make bye-laws[2] for the removal to any hospital to which such authority are entitled to remove patients, and for keeping in such hospital so long as may be necessary any persons brought within their district by any ship who are infected with an infectious disease.

Provisions as to Buildings

Bye-Laws as to Regulation of Buildings

181. (1) The local authority of any district other than a burgh may, subject to the approval of the county council,[3] make bye-laws[4] for the whole or any part of their district for regulating the building or rebuilding of houses or buildings, or the use for human habitation of any building not previously so used, or any alteration in the mode of occupancy of any existing house in such a manner as will increase the number of separate houses in respect to the following matters:

(*a*) The drainage of the subsoil of sites for and the prevention of dampness in houses intended for human habitation;[5]

(*b*) The structure of walls, foundations, roofs, and chimneys of new buildings in so far as likely to affect human health;

(*c*) The ventilation of houses and buildings intended for human habitation;

(*d*) The sufficiency of the space about buildings to secure a free circulation of air;

[1] *v.* § 54, *ante*.
[2] *v.* §§ 183 to 187, *post*.
[3] Both C.C. and B. must approve.
[4] *v.* §§ 183 to 187, *post*.
[5] *v.* also § 182, *post*.

(*e*) The construction and arrangement of the drainage of houses and buildings and of soil-pipes and waste-pipes, and the construction and position of water-closets, earth-closets, privies, ashpits, cesspools, dungsteads, slop-sinks, and rainwater pipes and rhones;

(*f*) The production of suitable building plans in respect of the matters in this section mentioned, and their inspection;

(*g*) The intimation previous to the commencement by the owner or person laying out the work to the local authority of the date of the commencement, and for the due inspection in respect of the matters in this section mentioned of houses or buildings in process of erection or alteration, and the examination of the drains thereof, and for the pulling down, alteration, or amendment of any work which has been carried out in contravention of the bye-laws.

(2) In making such bye-laws the local authority shall have regard to the special circumstances of their district or the part thereof to which such bye-laws relate. [20]

Penalty for erecting Buildings on Ground filled up with Offensive Matter

182. (1) It shall not be lawful to erect a new building on any ground which has been filled up with any matter impregnated with fæcal, animal, or vegetable matter, or upon which any such matter has been deposited unless and until such matter shall have been properly removed by excavation or otherwise, or shall have been rendered or have become innocuous.

(2) Every person who does, or causes, or wilfully permits to be done, any act in contravention of this section shall for every such offence be liable to a penalty[1] not exceeding five pounds, and a daily penalty not exceeding forty shillings.

Provisions as to Bye-Laws[2]

Authentication of Bye-Laws

183. All bye-laws made by a local authority under and for the purposes of this Act shall be under their common seal

[1] *v.* §§ 153, 154, *ante*.

[2] *v.* Circular pointing out General Principles for framing Bye-Laws, issued 10th September 1900 by L.G.B., at p. 11 of their Instructions, Forms, and Recommendations to L.A.s, to be purchased from Oliver & Boyd, Edinburgh; price 1s. 3d. For a list of Model Bye-Laws, which may be adopted under this Act, *v.* p. 292 of this book. The sections under which bye-laws may be made under this Act are 32 (3) and 33 (6), 65, 68, 72, 73 (2), 92, 180, and 181, *ante*.

or if they have no common seal shall be signed by two members and the clerk of such authority, and any such bye-law may be altered or repealed by a subsequent bye-law made pursuant to the provisions of this Act: Provided that no bye-law made under this Act by a local authority shall be of any effect if repugnant to the law of Scotland or to the provisions of this Act. [5]

Power to Impose Penalties on Breach of Bye-Laws[1]

184. Any local authority may, by any bye-laws made by them under this Act, impose on offenders against the same such reasonable penalties as they think fit, not exceeding the sum of five pounds for each offence, and in the case of a continuing offence a further penalty not exceeding forty shillings for each day after written notice of the offence from the local authority; but all such bye-laws imposing any penalty shall be so framed as to allow of the recovery of any sum less than the full amount of the penalty.

Nothing in the provisions of any Act incorporated herewith shall authorise the imposition or recovery under any bye-laws made in pursuance of such provisions of any greater penalty than the penalties in this section specified.

Confirmation of Bye-Laws

185. Bye-laws made by a local authority under this Act shall not take effect unless and until they have been submitted to and confirmed by the Board, who are hereby empowered to allow, modify, or disallow the same, as they may think proper; nor shall any such bye-laws be confirmed—

Unless notice of intention to apply for confirmation of the same has been given in one or more of the local newspapers circulated within, or by handbills posted throughout, the district to which such bye-laws relate, one month at least before the making of such application; and

Unless for one month at least before any such application is considered a copy of the proposed bye-laws has been kept at the office of the local authority, and in the case of districts other than burghs at the office of the parish council of every parish to which such bye-laws relate, and has been open during office hours thereat to the inspection of the ratepayers of the district to which such bye-laws relate, without fee or reward.

[1] *v.* also § 32 (4), *ante*.

Any person aggrieved by any proposed bye-law, or by any proposed alteration of a bye-law, may within such last-mentioned month, forward notice of his objection to the Board, who shall consider the same before granting confirmation.

The clerk of the local authority shall, on the application of any such ratepayer, furnish him with a copy of such proposed bye-laws or any part thereof, on payment of sixpence for every hundred words contained in such copy.

A bye-law when confirmed by the Board shall not require confirmation, allowance, or approval by any other authority.[1] [5]

Bye-Laws to be Printed, etc.

186. All bye-laws made by a local authority under this Act shall be printed and hung up in the office of such authority, and be open to the inspection of any ratepayer of the district at all reasonable hours; and a copy thereof shall be delivered to any ratepayer of the district to which such bye-laws relate, on his application for the same; a copy of any bye-laws made by a district committee shall also be transmitted to the parish council of every parish to which such bye-laws relate, to be deposited with the public documents of the parish, and to be open to the inspection of any ratepayer of the parish at all reasonable hours, and a copy thereof shall be delivered to any ratepayer of the parish on his application for the same.

Evidence of Bye-Laws[2]

187. A copy of any bye-laws made under this Act by a local authority, signed and certified by the clerk of such authority to be a true copy and to have been duly confirmed, shall be evidence until the contrary is proved in all legal proceedings of the due making, confirmation, and existence of such bye-laws without further or other proof.

As to Regulations of Local Authority

188. The provisions of this Act relating to bye-laws shall not apply to any regulations[3] which a local authority is by this Act authorised to make; nevertheless, any local authority may cause any regulations made by them under this Act to be published in such manner as they see fit.

[1] *v.* § 181 (1), *ante*, where for Building Bye-Laws approval of C.C. is necessary.

[2] *v.* § 160, *ante*.

[3] Regulations as distinct from Bye-Laws may be made under §§ 15, 19, 70 (1), and 110, *ante*.

PART XII

SAVING CLAUSES AND REPEALS

Saving Clauses

Act not to affect Navigation of Rivers or Canals, or Irrigation of Lands

189. Nothing in this Act contained shall prejudice or affect, or shall enable any local authority or other person to injuriously affect—

(1) The irrigation of lands in a rural district, or the supply of water used for such irrigation ;

(2) Any supply of water which has been conducted to and is being used for any house[1] or building used in connection with such house or occupied for agricultural purposes ;

(3) The supply of water required for the purposes of any waterworks established by or under the provisions of any Act of Parliament, or of the compensation water required to be given by the owners of such waterworks, unless the local authority shall have previously obtained the consent of such owners ;

(4) The navigation on or use of any river, canal, dock, harbour, lock, reservoir, or basin, in respect of which any persons are by virtue of any Act of Parliament entitled to take tolls or dues, or the supply of water to the same, or any bridges crossing the same, or any towing-path thereon ;

(5) The purification of any river or stream in respect of which any persons are by virtue of any Act of Parliament authorised to exercise jurisdiction, or the rights, powers, jurisdictions, and authorities conferred by such Act.

Provided always, that it shall not be lawful for the local authority to execute any works in, through, or under any wharves, quays, docks, harbours, locks, reservoirs, or basins without the consent in writing in every case of the persons entitled by virtue of any Act of Parliament to take tolls or dues in respect thereof, and such persons may at their own expense, and on substituting other sewers, drains, culverts, and pipes equally effectual, and certified as such by the inspector to the local authority, take up, divert, or alter the level of any sewers and drains, culverts or pipes, constructed by any local authority, and passing under or interfering with

[1] *v.* definition, § 3, *ante*.

such rivers, canals, docks, harbours, reservoirs, or basins, or the towing-paths thereof, and do all such matters and things as may be necessary for carrying into effect such taking up, diversion, or alteration.

Saving of Certain Acts

190. Except in so far as expressly provided, nothing in this Act shall prejudice or affect the provisions of the Local Government (Scotland) Acts,[1] or of the Local Authorities Loans (Scotland) Act, 1891, as amended, or of the Burgh Police (Scotland) Act, 1892, as amended,[2] or of the Public Health (Scotland) Amendment Act, 1891, or of the Anatomy Acts, 1832 and 1871.[3]

Saving for County Councils and Standing Joint-Committees

191. Except in so far as expressly provided, nothing in this Act shall prejudice or affect the powers, rights, and liabilities of county councils [4] and standing joint-committees with respect to capital works, rating, borrowing, or acquiring and holding land.

Saving of Local Acts

192. (1) Nothing in this Act shall supersede, prejudice, or affect the provisions of any local Act applicable to any burgh or the forms of prosecutions and procedure in use therein, but the provisions of this Act shall operate to confer additional powers on the local authorities of such burghs, and the before-mentioned forms and procedure may be used therein in all prosecutions under this Act.

(2) Nothing contained in this Act [5] shall prejudice or affect the provisions of any local Act under which any authority is constituted for supplying water within any district or limits created by such Act.

For the purposes of this and the immediately succeeding section the expression "local Act" includes a Provisional Order and the Act confirming such Order.

Reference to Public Health Acts

193. Where, in any public, general, or local Act the Public Health Acts or any sections thereof are referred to, such reference shall be deemed to mean and include a reference to this Act or the corresponding sections of this Act and any amendments thereof; and the expression "public

[1] *v.* §§ 122 (3) and 131 (3), 38, and 138, *ante*; also Sched. I., *post*.
[2] *v.* § 15, and proviso in § 124, *ante*.
[3] *v.* § 69, *ante*.
[4] *v.* proviso, § 12, *ante*.
[5] *v.* § 126 (1) proviso, *ante*.

health rate" in any such Act shall mean, and a reference to any of the assessments mentioned in section ninety-five of the Public Health (Scotland) Act, 1867, shall be deemed to be a reference to, the public health general assessment under this Act.

Exemption of Government Property from Building Regulations

194. Without prejudice to any existing right of the Crown, there shall be exempted from so much of the provisions of this Act as relates to buildings and structures, every building, structure, or work vested in, or in the occupation of, Her Majesty, her heirs and successors, either beneficially or as part of the hereditary revenues of the Crown, or in trust for the public service or for public services; also any building, structure, or work vested in, or in the occupation of, any department of Her Majesty's Government for public purposes or for the public service.

Application of Act to City of Aberdeen

195. With respect to the city and Royal burgh of Aberdeen, all charges and expenses incurred by the local authority in executing this Act, or any of the Acts hereby repealed, shall, notwithstanding anything contained in section thirty-nine of the Aberdeen Corporation Act, 1891, be included under the sixth head of the estimate directed by that section to be made up, and the rate or assessment to be imposed in respect of such charges and expenses shall be payable, one-half by the owners and one-half by the occupiers of all lands and heritages within the district of the local authority.

Repeal of Acts

Repeal of Acts

196. (1) The Acts specified in the First Schedule to this Act are hereby repealed to the extent mentioned in the third column of that schedule, and so much of any public general Act as is inconsistent with this Act is also hereby repealed.

(2) The repeal of the said Acts shall not annul or in anywise prejudice or affect any purchase, sale, conveyance, grant, lease, bond, security, act, matter, or thing, heretofore made, done, executed, commenced, or instituted, under or by virtue or in pursuance of the said Acts; but all such purchases, sales, conveyances, grants, leases, bonds, securities, acts, matters, and things shall have priority and be as good, valid, and effectual to all intents and purposes as if the said Acts had not been repealed.

SCHEDULES

FIRST SCHEDULE

Enactments Repealed

(Section 196)

Session and Chapter.	Short Title.	Extent of Repeal.
30 & 31 Vict. c. 101.	Public Health (Scotland) Act, 1867.	The whole Act.
34 & 35 Vict. c. 38.	Public Health (Scotland) Amendment Act, 1871.	The whole Act.
38 & 39 Vict. c. 74.	Public Health (Scotland) Act, 1867, Amendment Act, 1875.	The whole Act.
45 & 46 Vict. c. 11.	Public Health (Scotland) Act, 1867, Amendment Act, 1882.	The whole Act.
52 & 53 Vict. c. 50.	Local Government (Scotland) Act, 1889.	In sub-section three of section eighty-one, the words "and the assessments in respect of the drainage and water supply shall be levied in the same manner as they were before such district was formed into a police burgh."
53 & 54 Vict. c. 20.	Public Health Amendment (Scotland) Act, 1890.	The whole Act.
57 & 58 Vict. c. 58.	Local Government (Scotland) Act, 1894.	In sub-section six of section forty-four, the words "as ascertained for the purposes of the Poor Law (Scotland) Act, 1845."
59 & 60 Vict. c. 19.	Public Health Act, 1896.	The whole Act (except the repeals therein contained) in so far as it relates to Scotland.

SECOND SCHEDULE

Bond for Borrowed Money

(Sections 139-141, 167)

We, the local authority of the burgh [*or as the case may be*] of considering that, by resolution of the said local authority [*or as the case may be*] passed on the day of , it was resolved to borrow the sum of pounds, under the powers contained in the Public Health (Scotland) Act, 1897, section , for the purpose of [*specify purpose*], and on security of the after-mentioned assessments, and further considering that we have accordingly borrowed and received the sum of from [*name and designation of the lender*], therefore we bind the said local authority [*or as the case may be*] to repay the said sum of pounds [*here insert obligation to repay in accordance with the arrangement made between the local authority* [*or as the case may be*] *and the lender*], and in security of the said loan we hereby assign to the said and his foresaids the [*specify the assessments on the security of which the money is borrowed*], and we consent to the registration hereof for preservation and execution. In witness whereof, *&c.*

Transfer

I, *A.B.* [*designation*], in consideration of the sum of paid to me by *C D.* [*designation*], do hereby assign and transfer to the said *C.D.* and his heirs, executors, and successors, a certain bond, number , granted by the local authority of the burgh [*or as the case may be*] of , in favour of , bearing date the day of for securing the sum of and interest thereon, and all my right and interest in and to the money thereby secured, and in and to the [*here specify the assessments on the security of which the money was borrowed*] thereby assigned; and I consent to registration hereof for preservation. In witness whereof, *&c.*

Discharge

I, *A.B.* [*designation*], in consideration of the sum of paid to me by *C.D.* [*designation*], do hereby discharge a certain bond, number , granted by the local authority of the burgh [*or as the case may be*], of , in favour of , bearing date the day of , and all interest due thereon, and I declare the assessments thereby assigned to be freed and discharged thereof; and I consent to registration hereof for preservation. In witness whereof, *&c.*

PUBLIC HEALTH (SCOTLAND) AMENDMENT ACT, 1891

(54 & 55 Vict. c. 52)

(The only P.H. Scotland Act not repealed)

Short Title and Construction

Short Title and Construction

1. This Act may be cited for all purposes as the Public Health (Scotland) Amendment Act, 1891, and the Public Health (Scotland) Acts and this Act shall be read and construed together as one Act.

Commencement of Act

2. This Act shall not take effect within any district in any county until after the county council shall, on the application of the district committee, have passed a resolution approving of its taking effect within such district, such resolution having been passed, and such application having been sanctioned at meetings called with special notice of the resolution to be submitted thereat.

An application of a district committee or a resolution of a county council shall not have effect for the purposes of this section unless approved of by an absolute majority of the whole members of the district committee or county council, as the case may be.

Incorporation of Act and Parts of Acts

3. The following Acts, and parts of Acts, so far as the same respectively are applicable for the purposes and are not inconsistent with the provisions of the Public Health (Scotland) Act, 1867 (30 & 31 Vict. c. 17), are hereby incorporated with that Act:—

The Waterworks Clauses Act, 1847 (10 & 11 Vict. c. 17), except the provisions with respect to the amount of profits to be received by the undertakers when the waterworks are carried on for their benefit, and except the words in section forty-four thereof, "with the consent in writing of the owner or reputed owner of any such house or of the agent of such owner";

The Waterworks Clauses Act, 1863 (26 & 27 Vict. c. 93).

The provisions of the Railway Clauses Consolidation (Scotland) Act, 1845 (8 & 9 Vict, c. 33), with respect to the temporary occupation of lands near the railway during the construction thereof, but such last-mentioned provisions shall apply only in the case of any reservoir, filter, or distributing tank which the local authority may be authorised to construct, and the works immediately connected therewith; and for the purposes of this Act those provisions shall be read as if such reservoir, filter, or tank, and works were therein mentioned, instead of "the railway," and the boundaries of such reservoir, filter, or tank, and works, instead of "the centre of the railway"; and the prescribed limits shall be two hundred yards from such boundaries.

Division of Assessment for Water Supply into (1) Domestic Water Rate and (2) Public Water Rate

4. Upon this Act taking effect the expense incurred or to be incurred by the district committee as local authority under the provisions of the Public Health (Scotland) Acts during the year ensuing for water supply (including the sums necessary for payment of interest on and repayment of instalments of any money borrowed for providing such supply) shall be paid out of the assessments in this section authorised; that is to say:—

(1) It shall be lawful for the county council, and they are hereby authorised and required, once in every year to impose and levy an assessment (to be called the domestic water rate) upon all lands and heritages within the district which shall have been supplied with water by the district committee as local authority at such rate in the pound as shall be sufficient, when supplemented by the public water rate, if any, to defray the expense hereinbefore mentioned;

(2) It shall be lawful for the county council, and they are hereby authorised, once in every year, to impose and levy an assessment (to be called the public water rate) if they shall think fit upon all lands and heritages within

the district, but such rate if imposed shall not exceed threepence in the pound, and may be such less amount as the county council may from time to time determine.

(3) The assessments or rates in this section mentioned shall not in the aggregate exceed the rates authorised by the Public Health (Scotland) Acts, and shall be imposed and levied and be payable, and may be recovered in the same manner, as nearly as may be, as assessments under the provisions of the Public Health (Scotland) Acts.

Provided always that—

(*a*) Where a special water supply district has been formed in the manner provided in the said Acts, and a sufficient supply of water has been obtained and is maintained therein under the authority of the said Acts, the lands and heritages situated within such special water supply district shall not be liable to assessment for the expense of supplying water to other parts of the district:

(*b*) The local authority shall not be obliged to furnish a supply of water to any person for any less sum than five shillings in any one year:

(*c*) No person shall be entitled to demand such supply of water or to require the local authority to lay down communication pipes, unless some pipe of the local authority shall have been laid within one hundred feet of the house or other premises in respect of which such supply or communication pipes are demanded, or unless the local authority shall become bound by virtue of a requisition and agreement made and executed in the manner and to the extent required by the Waterworks Clauses Act, 1847, to cause pipes to be laid down within the said distance of one hundred feet of such house or other premises.

Power to Borrow on Security of Assessments

5. The county council as the local authority may, in addition to the powers conferred by section eighty-nine (six) of the Public Health (Scotland) Act, 1867, borrow money for the purposes therein set forth on the security of the assessments hereby authorised, and may assign the said assessments and the general assessments that may be imposed under the said Act or any of them in security of the money to be so borrowed.

Power to Abolish certain Special Water Supply Districts

6. If in any special water supply district the maximum rates leviable shall be inadequate to provide and maintain a sufficient supply of water, it shall be lawful for the local authority, at a meeting called with special notice, to resolve by an absolute majority of their number, to apply to the county council, who may by an absolute majority of the whole members of the council resolve, subject to such conditions as they may determine regarding the payment of any debt that may affect such special water supply district, that the area embraced within the boundaries of such special water supply district shall cease to exist as a special water supply district, and, in the event of such local authority so resolving, such area shall, subject as aforesaid, from and after a date to be fixed by such local authority cease to be rated and assessed for the purposes of water supply separately from the district; but such area may continue to be rated and assessed separately from the district for the purpose of the payment of such debt.

A resolution of a local authority under this section shall not have effect until it is confirmed by the Secretary for Scotland on the application of the county council, and after such inquiry as the Secretary for Scotland shall deem necessary. The costs of any such inquiry shall be borne by the local authority.

Saving for existing Water Companies and Commissioners

7. Nothing contained in or done in pursuance of the provisions of this Act shall authorise the supply of water to, or any assessment to be imposed and levied within, any district or part of a district which is already authorised to be supplied with water by any water company or water commissioners or trustees established by Act of Parliament, or shall prejudice or affect the last proviso of sub-section one of section eighty-nine of the Public Health (Scotland) Act, 1867.

Saving for existing Loans

8. Nothing contained in or done in pursuance of the provisions of this Act shall in any way prejudice the rights or powers of creditors who before the passing of this Act have advanced moneys to any local authority under the Public Health (Scotland) Acts, and all securities for such moneys may be enforced against the same assessments against which they may be enforced at the passing of this Act.

ABSTRACT OF
BURGH POLICE (SCOTLAND) ACT, 1892

[55 & 56 Vict. Ch. 55.]

As Amended by Burgh Police (Scotland) Act, 1903 [3 Edw. 7. Ch. 33]; and by Burgh Sewerage, Drainage, and Water Supply (Scotland) Act, 1901 [1 Edw. 7. Ch. 24].

All sections in inverted commas are given verbatim. The meaning of other sections related to sanitary matters is epitomised.

Definitions

4. "The following words and expressions in this Act shall have the meanings hereby assigned to them, unless there be something in the subject or context repugnant to such construction; that is to say,

"(1.) The Board shall mean the L. G. B. of Scotland for the relief of the poor and of public health:

"(2.) 'Broker' shall include any person dealing in second-hand goods or articles, or in yarn or waste, or in other unwrought material, or in old metals, bones, or rags: Provided always, that wholesale dealers in rags, ropes, and waste, purchasing only from licensed brokers or licensed marine store dealers, or in quantities of not less than half a ton, shall not be included in this definition:

"(4.) 'Burgh,' when used alone, unless otherwise expressed or inconsistent with the context, shall include royal burgh, parliamentary burgh, burgh incorporated by Act of Parliament, burgh of regality, burgh of barony, and any populous place or police burgh administered in whole or in part under any general or local Police Act or any burgh created under this Act:

"(6.) 'Cattle' shall include any horse, mare, gelding, foal, colt, filly, bull, cow, heifer, ox, calf, ass, mule, ram, ewe, wether, lamb, goat, kid, or swine:

"(7.) 'Chief Magistrate' shall mean the lord provost, or provost, or in his absence the acting Chief Magistrate:

"(8.) 'Clerk,' 'treasurer,' and 'collector' shall mean the clerk, treasurer, and collector respectively, appointed by the Commissioners:

"(9.) 'The Commissioners' shall mean the Commissioners for the purposes of this Act, in their collective capacity, not being Commissioners appointed by the Secretary for Scotland for holding local inquiries under this Act:

"(10.) 'Court,' where by the context it applies to a space contiguous to buildings, shall mean a court or recess or area forming a common access to lands and premises separately occupied, including any common passage or entrance thereto:

"(11.) 'Court of Session' shall mean either division of the Inner House thereof:

"(11*a*.) 'Drain' shall include all soil pipes and all other pipes, traps, and apparatus used for, or in connection with, the removal of sewage or waste water:

"(12.) 'General Police Acts' shall mean the Acts specified in Schedule I. of this Act:

"(13.) 'House,' where not otherwise expressed, shall mean dwelling-house, and shall include out-houses and other erections, being pertinents of the house:

"(14.) 'Householder' shall mean any occupier or inhabitant occupier of lands or premises whose occupancy would qualify him to vote for a member of Parliament for a burgh; and shall include any female occupier of lands or premises who would be entitled to vote at municipal elections:

"(15.) 'Infectious disease' shall mean and include cholera, small-pox, typhus, typhoid, scarlet, relapsing, continued, and puerperal fever, measles, scarlatina, and diphtheria, and such other disease as the Commissioners, with the approval of the Board of Supervision, or Her Majesty by Order in Council, may from time to time order, for the purposes of this Act, to be deemed infectious:

"(16.) 'Lands and premises' shall include all lands, springs, rights of servitude, dwelling-houses, shops, warehouses, vaults, cellars, stables, breweries, manufactories, mills, and the fixed or attached machinery therein, yards, places, and other heritages specified or included in the Acts for the valuation of lands and heritages in Scotland in force for the time being:

"(17.) 'Local Police Act' shall mean any Act other than the General Police Acts providing for the watching, lighting, paving, draining, cleansing, or improving of a burgh, or incorporating any portion of the General Police Acts, but shall not include any Act dealing exclusively with harbours, markets, or slaughter-houses, water supply, gas supply, sewerage, tramways, or financial arrangements, or such part of any Act dealing mainly with these subjects as relates exclusively to them:

"(18.) 'Lord Ordinary' shall mean any Lord Ordinary in the Outer House of the Court of Session:

"(19.) 'Magistrate' shall mean a magistrate or judge having jurisdiction under this Act:

"(20.) 'Magistrates' shall include the lord provost or provost:

"(21.) 'Occupier' shall mean tenant or sub-tenant, or any person in the actual occupancy; and shall not include a lodger, or a person in the occupation as tenant of a furnished house let for a less period than one year; but shall include the person by whom such furnished house is so let:

"(22.) 'Owner' shall include joint owner, fiar, life-renter, feuar, or other person in the actual possession of or entitled to receive the rents of lands, and premises of every tenure or description, and the factor, agent, or commissioner of such persons, or any of them, or any other person, who shall intromit with or draw the rents:

"(23.) 'Parliamentary burgh' shall mean a burgh having the right of sending or contributing to send a member to Parliament:

"(24.) 'Police Act, 1857,' shall mean the Act passed in the twentieth and twenty-first years of the reign of Her present Majesty, chapter seventy-two:

"(25.) 'Police burgh' shall mean a populous place the boundaries whereof have been fixed under the General Police Acts or under any Local Police Act or under this Act:

"(26.) 'Populous place' shall mean any town, village, place, or locality, containing a population of seven hundred inhabitants or upwards, not being administered under any general or local Police Act; and for the purposes of this Act, two or more contiguous towns, villages, places, or localities, not being burghs, may be held to be a populous place:

"(27.) 'Private court' shall mean a court maintained or liable to be maintained by persons other than the Commissioners:

"(28.) 'Private street' shall mean any street maintained or liable to be maintained by persons other than the Commissioners:

"(29.) 'Public Health Acts' shall mean the Public Health (Scotland) Act, 1867, and any Act amending the same:

"(30.) 'Sheriff' shall include sheriff-substitute, except as regards (1) the duty of fixing and extending boundaries, (2) the compulsory acquisition of land, (3) any proceeding under section fifteen of this Act:

"(31.) 'Street' shall include any road, highway, bridge, quay, lane, square, court, alley, close, wynd, vennel, thoroughfare, and public passage or other place within the burgh used either by carts or foot passengers, and not being or forming part of any harbour, railway, or canal station, depôt, wharf, towing-path, or bank."

Application of the Act

5.—"(1.) This Act shall apply—

"(*a.*) From its commencement to every existing burgh, with the exception of the burghs named in Schedule II. of this Act, and

"(*b.*) To every burgh created under this Act from the date when its creation is recorded in the sheriff court books."

Adoption of the Act

15. "In any burgh named in Schedule II., this Act may be adopted in whole or in part, that is to say, in parts, sections, or sub-sections, by a resolution of the council where there is no separate board of Commissioners, and where there is such a separate board by such Commissioners, at a meeting called for the purpose after a month's previous notice in a newspaper published or circulating in the burgh, which notice shall specify the parts, sections, or sub-sections of this Act proposed to be adopted and the portions of local Police Acts proposed to be repealed: Provided that such adoption in part of this Act shall not affect any private interests which shall have been specially regulated by any local Act, and provided further that in every case where Part V. of this Act shall be adopted only in part, such adoption shall include the provisions of this Act relating to incidence of assessments.

"Such resolution shall be reported to the sheriff, who shall pronounce a deliverance thereon declaring the parts, sections, or sub-sections of this Act specified in the resolution to have been adopted, and shall cause such resolution to be recorded in the sheriff court books.

"From and after the recording of such resolution the parts, sections, or sub-sections of this Act so adopted shall come into force in the burgh, and shall have effect as if they were provisions of and enacted in the local Police Acts, and such Acts and references therein shall be construed accordingly, and all portions of local Police Acts inconsistent with or dealing with the same matters as the parts, sections, or subsections so adopted shall be repealed, which portions shall be specified in the resolution so recorded."

16. "Where a populous place has not been declared a burgh by the sheriff, another application to have such populous place declared a burgh in manner hereinbefore provided may be made, but such application shall not be competent until after the lapse of two years from the date of the deliverance on the last preceding application."

38. "The magistrates and Commissioners elected in virtue of this Act shall, within the limits of the burgh for the purposes of this Act, possess such and the like rights, powers, authorities, and jurisdiction as are possessed by the magistrates and council of royal and parliamentary burghs in Scotland."

43. "Notwithstanding the provisions of any general Act or local Police Act, the provost, magistrates, and town council or Commissioners in every burgh shall be the local authority under the Public Health (Scotland) Act, 1867,[1] within the area of such burgh: Provided that nothing contained in this Act shall prejudice or affect the provisions of section eighty-one of the Local Government (Scotland) Act, 1889,[2] and if any question shall arise under this proviso, the same, failing agreement, may be determined by the Secretary for Scotland after such inquiry as he shall think fit, and the provisions of section ninety-three, sub-section three, of the last-mentioned Act shall apply to such inquiry."

[1] Now read P. H. (Scot.) Act, 1897, *v.* p. 1, *ante*. [2] *v.* p. 162.

Provisional Orders

45. "Whenever it shall appear to the Commissioners of any burgh to which this Act applies that they require additional powers for the better carrying out of the purposes of this Act, and specially powers relating to the supply of gas or water, or to the roads and streets, or to drainage or sewers or the utilisation of sewage in addition to the powers conferred by the Public Health Acts, or for the repeal or amendment of any local Acts of Parliament relating to such subjects, or their adaptation and adjustment to the provisions of this Act, with such amendments as may be found necessary, or for the repeal of any exemption from rating derived from this or any general or local Act, or to other matters cognate to the purposes of this Act, they may apply to the Secretary for Scotland for a provisional order.

"Or whenever it appears desirable to the magistrates and council or the Commissioners of contiguous or adjacent burghs that provision should be made for amalgamating the administration of such burghs for all or any of the purposes of this Act or both for municipal purposes and the purposes of this Act, or carrying on jointly such administration or any part thereof by joint committees or otherwise, or for executing jointly any conduits or main sewers, or any other drainage works necessary for the more effectually draining of such contiguous or adjacent burghs, such Commissioners or magistrates and council, as the case may be, may make joint application to the Secretary for Scotland for a provisional order.

"Two drafts of the order proposed shall be transmitted with every application for a provisional order." [43]

46. Deals with procedure *re* provisional orders.

54. Gives power to Commissioners to appoint committees of their number, either with directions to report to the Commissioners, or for carrying the various purposes of the Act into execution. [44]

55. (6.) Gives the Commissioners full power and authority to make rules, orders, and regulations, whether such require confirmation or not, by the sheriff: provided always that these and bye-laws so to be made shall not be contrary to the law of Scotland or to anything in this Act contained.

60. Deals with procedure with respect to the purchase and taking of lands or premises otherwise than by agreement, craving from the sheriff power under the Lands Clauses Acts, the sheriff's decision being *on appeal* reviewable by Secretary for Scotland.

Surveyor, Inspector, and Medical Officer of Health

73. "The Commissioners shall from time to time appoint a person duly qualified to act as a surveyor of the paving and drainage and other works authorised under the provisions of this Act, and who shall be called the burgh surveyor."

74. The Commissioners may appoint an inspector of cleansing to superintend and enforce due execution of all duties to be performed by the scavengers appointed, and to report to the Commissioners any breach of provisions of the Act, and he shall keep a book and enter therein complaints and actions taken thereon, which book shall be at all reasonable times open for inspection by interested persons. The Commissioners may also appoint an inspector of lighting.

75. The Commissioners shall appoint a sanitary inspector, subject to the provisions of the Public Health Acts, whose duty it shall be to superintend and enforce the sanitary provisions of such Acts and this Act.

76. "The Commissioners may, if they think fit, appoint the same person to fill any two or more of the offices in the three immediately preceding sections mentioned."

77.—(1.) "The Commissioners shall appoint a medical officer of health who shall be a registered medical practitioner, and who shall also, if appointed after the fifteenth day of May, one thousand eight hundred and ninety-four, be registered on the Medical Register as the holder of a diploma in sanitary science, public health, or state medicine, under section twenty-one of the Medical Act, 1886."

Cleansing

107. "The dust, night soil, dung, ashes, rubbish, filth, and manure, including slaughter-house manure, whether such slaughter-house is or is not the property of the Commissioners (excepting always cattle dung, mill dust, and the ashes of any kiln, engine, furnace, baker's oven, or the clinkers of any stove, and the refuse of any breweries, tanworks, soap, or chemical or other work), within the burgh, shall be vested in the Commissioners, who shall have power to sell and dispose of the same as they think proper, and the money arising therefrom shall be applied to the general purposes of this Act; and the Commissioners shall cause all the streets and footpaths from time to time to be properly swept and cleansed, and all the dust, night soil, dung, ashes, rubbish, filth, and manure which is found on them, or in privies, sewers, cesspools, houses, or other premises, to be collected and removed at such convenient hours and times as they shall consider proper; and in all cases where there is insufficient access for a cart or wheel-barrow to the dungstead, ashpit, or privy, the owner shall be bound to provide such access to the satisfaction of the Commissioners, and, failing his doing so, he shall be bound to pay the extra expenses of the removal as the same shall be fixed by the Commissioners, and the same shall be recoverable as a private improvement assessment." [45]

108. "The Commissioners may from time to time provide places convenient for the deposit, treatment, and disposal of the dust, night soil, dung, ashes, rubbish, filth, and manure to be collected under the authority of this Act."

Section 23 of 1903 Act stipulates:—"If any house, or part of a house, occupied by a separate family, is at any time without a sufficient fixed or

moveable receptacle for rubbish appropriated either solely to their use or to their use along with other occupants of the same tenement, the town council may serve a notice on the owner requiring him, within a period of not less than seven days, to be specified in said notice, to provide such receptacle, of the description, and to be placed in the position, specified in the notice." Further, section 24 of same Act enacts penalties for non-compliance.

109. Gives power to Commissioners to remove dust, ashes, and refuse, etc., in covered carts at hours they may fix. [45]

110. Gives power to Commissioners to erect or continue *public* water-closets or earth-closets, latrines, or urinals and temporary places for street sweepings.

This section is by section 104, 1903 Act, extended to lavatories, waiting-rooms, and other similar accommodation, and any constructions may be whole or in part below the street level.

111. The Commissioners may contract with any Water Company or person for water for cleansing streets, flushing sewers and drains, and erect pumps, etc., for this purpose.

112. Gives power to employ scavengers.

113. Enacts penalty not exceeding five pounds for obstructing scavengers in performing their duties.

114. Authorises penalty not exceeding two pounds on persons other than scavengers removing dung, night soil, filth, etc.

115. Authorises penalty not exceeding five shillings for every offence by occupiers of every house, flat, or storey who fail in sweeping and washing of their landing and stair immediately below and keeping clean areas and common passages leading thereto, etc., all to the satisfaction of the sanitary inspector. [46]

116. Foot-pavements are to be swept and cleansed by occupier.

117. Enacts that owners of all common stairs and common passages shall whitewash or at option of owners paint the same yearly if required by sanitary inspector, and that the owners of all premises occupied as dwelling-houses let for shorter periods than six months, shall whitewash such premises and every part and pertinent thereof once every year if required and to the satisfaction of the sanitary inspector on penalty of two pounds.

118. Makes lawful at all reasonable times for the burgh surveyor, inspector of cleansing, medical officer of health, or sanitary inspector to enter all dwelling-houses and other premises and their pertinents which he has reason to believe are not in cleanly condition, and to cause cleansing and purifying of the same and removal of filth therefrom at the expense of owner if unoccupied, but if occupied at expense of occupier. If objection made by either occupier or owner to entry of either of above-mentioned officials, entry must be procured by a warrant from the magistrate.

119. Entails a penalty not exceeding two pounds on every person occupying any part of a building let out as separate dwelling-houses who shall keep the same or any building or place appurtenant thereto, in a dirty, unwholesome or unhealthy condition after notice served by the

sanitary inspector to cleanse the same, and to further penalty not exceeding one pound for every day during which the offence continues *after conviction*.

120. All private courts, yards, areas, roofs of out-buildings, and other places not cleansed by burgh scavengers, must be (on penalty not exceeding ten shillings for each offence in addition to expense of cleansing) kept clean by occupiers, or at their expense, or at that of one or other of them, as magistrate may think is the offender (the word occupier including all persons having right of use to such courts, yards, etc.), or if Commissioners think fit, they themselves may cause cleansing at expense of the burgh assessments, or if property is unoccupied, charge the owner.

121. All stables, byres, and areas therewith connected, and roofs of outhouses, must be kept clean to satisfaction of inspector of cleansing or sanitary inspector by occupier under penalty of one pound for each offence.

122. It shall not be lawful to deposit, except for purpose of removal, any cattle dung upon the streets (mews or stable lanes excepted); and no cattle dung, wherever lawfully kept, shall be mixed with dung, soil, dirt or ashes, or filth, declared by this Act to be the property of the Commissioners; if it is, Commissioners may sell it.

123. Gives power to Commissioners to cause dungsteads, etc., to be cleaned out periodically, as they may determine. Anyone under obligation to do so, and fails, is liable to penalty not exceeding one pound, besides forfeiture of dung to Commissioners.

124. Fixes times for laying down dung, manure, hay, or straw, for removal, namely 8 A.M. from 1st October to 1st April, and before 7 A.M. from 1st April to 1st October, under penalty of two pounds for contravention, besides forfeiture of dung or manure.

125. Empowers Commissioners, after giving due notice, to fix hours for removal of offensive matters from any premises within, or into, or through the burgh; and no one shall remove at any hour (if hour is not fixed by Commissioners) offensive matter in an uncovered cart or carriage, or if in so doing spills offensive matter, and fails to cleanse every place from which removal or at which spilling has occurred, shall be liable to a penalty of two pounds. If the actual offender cannot be apprehended, the person in charge of the cart or carriage shall be deemed the offender.

126. Allows of dung being laid down on any nursery field or garden ground for purpose of manuring; but this if it is certified as offensive or prejudicial to health by the medical officer of health, removal may be ordered under penalty not exceeding five pounds, besides forfeiture of such manure.

127. Empowers Commissioners to make bye-laws for enforcing provisions of preceding sections with reference to cleansing.

164. *As amended by Schedule to* 1903 *Act.*—"The owner of every house or building or covered way, shall put up and keep in good condition, shoots or rhones or gutters thereon, both at the front and back of such houses or buildings, as also at the sides thereof, in positions to the satisfaction of the Commissioners, and shall connect the same with pipe or trunk or cistern, to carry the water from the roof thereof to the adjacent sewer or drain;

and the owner of every land or heritage shall prevent any surface-water therefrom from flowing over upon any street; and so far as may be necessary for the said purposes, it shall be lawful for any such owner to take up so much of the pavement, causeway, or flagging of any street as may be requisite, and to lay down such drains or tunnels, or fix iron drain gutters under the direction of the Commissioners"; making good all damage afterwards; "and in default of compliance with this enactment, the owner shall be liable to penalty not exceeding two pounds for every day that he shall so make default, after being required by the Commissioners to comply therewith."

Plans of New Buildings, and Regulations

166. "Every person who proposes to erect any house or building, or to alter the structure of, and to use for human habitation, any existing house or building which had not been previously used for that purpose, or alter the mode of occupancy of any existing house in such a manner as to increase the number of houses or occupants, shall lodge with the clerk of the Commissioners a petition for warrant so to do, and such petition shall set forth a description of the intended house, or building, or alteration, and shall be accompanied by a plan of the site, showing the immediately conterminous properties, and also the position and width of any street, court, or footpath from which the property has access, or upon which it abuts; and also plans, sections, elevations, and such detailed drawings as are necessary to show the height and mode of structure and arrangement of the intended house or building or alteration, and the lines of the intended drainage thereof, and the levels thereof relatively to the street, court, foot pavement, or footpath, and to the sewer or drain with which the soil pipes and drains of the property to be built or altered are intended to be connected; and in regard to any building of a public character intended as a place of public resort, such plans shall show the arrangements for ventilation and the provision intended to be made for ingress and egress; and all plans to be lodged as aforesaid shall be drawn to a graduated scale as follows, viz., of one and one-quarter inch to every ten feet for buildings under one hundred feet long; of one inch to every ten feet for buildings one hundred feet and under three hundred feet long; and of three-quarters of an inch to every ten feet for buildings three hundred feet long and upwards; and such plans and sections, with such alterations thereon as may be made as after provided, shall be registered and indexed by the clerk of the Commissioners: and the said plans and sections and register and index shall be open to inspection by any owner or ratepayer upon payment of a fee of one shilling."

By *section* 104 *of* 1903 *Act*, this section relating to the lodging of plans and petitions with the town clerk shall extend to "every person who proposes to alter, add to, or take down, in whole or part, or to re-erect or restore after destruction by fire or otherwise, the structure of any house or building, or to make any excavation in connection with such operations or with any operation mentioned in the said section, and a copy of every petition presented under the section shall be served upon the master of

works or surveyor of the burgh for the public interest, and also upon the immediately conterminous proprietors, and on such other persons as the town council may direct:

"The town council shall, before giving their decision upon any petition lodged under section one hundred and sixty-six, give parties interested an opportunity of being heard and of leading evidence, and in dealing with such petition the town council shall have the same powers and jurisdiction and the procedure shall be the same as is provided by the principal Act, and this Act, with regard to any Dean of Guild Court to be established thereunder":

167. "The clerk of the Commissioners shall, at their first meeting, after receiving such petition, give notice thereof to the Commissioners, who may decline to grant warrant for the erection of any new house or building, or for the alteration of the structure of any existing house or building, until satisfied that the plans provide suitably for stability, light, ventilation, and other sanitary requirements thereof. [47, 48]

168. *As amended by section* 104, *Act of* 1903.—"The council shall cause every existing building used or proposed to be used as a place of public amusement or entertainment, or for holding large numbers of people for any purpose whatsoever, to be inspected, and shall, after hearing the persons interested, direct such means to be taken for providing proper means of access to and exit from such buildings, and for protection from fire and other dangers to the public, as to the council shall seem fit. Any person who refuses access to the council or anyone appointed by them to any such building, shall be liable to a penalty not exceeding five pounds for each day during which such refusal continues, and any owner who fails to provide the means directed by the council within the period specified by them shall be liable to a penalty not exceeding twenty pounds for each day after the expiry of such period on which the building is used as aforesaid.

"The Dean of Guild Court on the application of the council may interdict, prevent, and stop the use of any such building unless and until the means directed by the council as aforesaid have been provided:

"Provided that in any case where any such order or interdict has been granted and an appeal taken, such order or interdict shall not be operative until the whole cause has been decided on the merits by the Court of Session, and the Court of Session shall have power in any case where they may think proper to ordain the appellant to find caution as a condition of being allowed to insist on the appeal."

169. "Every person who shall erect or begin to erect any house or building, or who shall alter the structure of any existing house or building, or use for human habitation any building not previously so used, or alter the mode of occupancy of any existing house in such a manner as will increase the number of separate houses or occupiers without a warrant, or otherwise than in conformity with a warrant of the Commissioners, and every person who shall, in the erection or alteration of any house or building, the erection of which has been sanctioned by the Commissioners, deviate from the plan or plans and section or sections so sanctioned, or shall

otherwise contravene the building provisions of this Act, shall be liable to a penalty not exceeding five pounds, besides, being bound, if and in so far as required by the Commissioners, to take down and remove the said house or building, or to restore it to the state it was in previous to the alterations thereon, or to alter it in such way as the Commissioners shall direct, so as to make it in conformity with the warrant of the Commissioners." [49]

170. This section may be annulled by *section* 63 *of the B. P. Act*, 1903, *which is adoptive* and reads as follows :—"Every new building intended to be used in whole or part as a dwelling-house or houses, and every building not previously so used when the same is altered for the purpose of being so used, shall (subject as hereinafter provided) have immediately adjoining it, on the further side of the building from that fronting the street on which it abuts, an open space for light and ventilation, equal in breadth at the narrowest part to the height of the building (measured from the floor of the lowest room to be occupied as a dwelling-house or part thereof to where the roof of the building rests upon the wall), and extending along the whole length of the side of the building which such space subtends. The said space may consist in whole or part either of—

"(*a.*) A public street, lane, or court :

"(*b.*) A private street, lane, or court, or other vacant space over which a servitude exists in favour of the ground occupied by the proposed new building or building altered as aforesaid, entitling the owner thereof to insist that it shall be always kept open, and unbuilt upon, except as regards the conveniences aftermentioned ;

"(c.) Ground belonging to the owner of the said building which he undertakes to keep vacant, except as regards such conveniences ; or of

"(*d.*) Ground which, in the opinion of the Dean of Guild Court, is not likely to be built on in such a manner as to exclude or restrict light and ventilation :

"No buildings of any kind shall be erected upon the said open space above the level of the floor of the lowest room to be occupied as a dwelling-house or part thereof, other than the sloping roof of any saloon used for business premises situated below the level of the said floor, or other than the water-closets, privies, ashpits, coal-houses, washing-houses, or other similar conveniences attached to dwelling-houses, which conveniences shall not exceed fifteen feet in height above the ground, and shall be limited to such extent of area and placed in such position as the Dean of Guild Court may determine, so as to interfere as little as possible with the light and ventilation of the dwelling-houses adjoining the said open space : Provided that—

"(1.) In the case of any building or part of a building situated within sixty feet of the junction of the building lines of any two streets or courts, the provisions of this section shall be modified to such extent as shall, in the opinion of the Dean of Guild Court, be necessary to permit the corner stance to be built upon :

"(2.) In the case of any new building erected on the site of any building

used at the date when this section comes into force in whole or part as a dwelling-house or houses, the provisions of this section shall be subject to the modification that, where the said new building does not exceed the limits of the old building as regards height, breadth, and length, and the open space in rear of it is, at the said date, less than or of a different character from that required by this section, the owner shall not be required to provide additional open space:

"(3.) In the event of any one or more flats in any building ceasing to be occupied as dwelling-houses, the owner of the open space adjoining such building may (if otherwise entitled to do so, and if building upon the same will not interfere with the open space required for any other building) build upon the said open space up to the level of the floor of the lowest flat still occupied in whole or part as a dwelling-house, but the part of the building below such level shall not be again used as a dwelling-house except upon removal of such additional buildings." [50-53, 60, 61]

Another section which is *adoptive* and bearing on necessity of open space is *section* 64 *of* 1903 *Act*, which reads as follows:—"It shall not be lawful for any owner to let as a sleeping apartment, or for any person to hire, use, or suffer to be used as a sleeping apartment, any room unless there be in front of at least one-half of every window of such room an open space, beyond any obstruction or impediment from overhanging balconies, of a breadth equal to at least three-fourths of the height of the wall in which the window is placed, measuring such space in a straight line from and at right angles to the plane of the window, and measuring such wall from the floor of the room to where the roof of the building rests upon such wall: Provided that—

"(1.) This enactment shall not be held to be contravened in the case of any room having two or more windows, one of which contains the area of glass required by the one hundred and seventy-third section of the principal Act, and has in front of at least one-half thereof an open space as above specified:

"(2.) Where any room at or prior to the adoption of this section used as a sleeping apartment is wholly or partly below the level of the street or other open ground which its window faces, the open space required by this section so far as below the said level need not be of greater width than the distance from the surface of the floor to the said level:

"(3) Notwithstanding that any room used as a sleeping apartment in any existing building does not comply with this section, it may for the period of two years from the date when this section comes into force continue to be so used, and the town council may on the application of the owner, and after a report by the medical officer and burgh surveyor as to the fitness of the room for use as a sleeping apartment, pass a resolution extending the said period to such date as they may fix. The owner may appeal against any refusal or delay for more than a month to pass such resolution in terms of section three hundred and thirty-nine of the principal Act:

"(4) This section shall not apply to any room at or prior to the adoption thereof legally used as a sleeping apartment, and contained in any building erected since the commencement within the burgh of the principal Act and in conformity with the provisions of that Act.

"Any person contravening this enactment shall be liable to a penalty not exceeding five shillings for each room for every day or part of a day during which such room is used in contravention thereof.

Section 65 of 1903 Act is adoptive, and reads:—"It shall not be lawful in any dwelling-house to make any new enclosed bed or bed recess which is not open in front for three-fourths of its length, and from floor to ceiling (with the exception only of carrying-beams). No building which contains any enclosed bed or bed recess shall be altered so as to increase the number of dwelling-houses or occupiers in such building, unless all such enclosed beds and bed recesses therein are opened up to the extent foresaid."

Section 66 of 1903 Act is adoptive, and reads:—"No dwelling-house shall hereafter be erected, provided, or constructed in any new or existing building, and no dwelling-house shall be altered so as to be (exclusive of any lobbies, closets, presses, and recesses) of less than the dimensions following, viz.:—

"Dwelling-houses of one apartment, 1000 cubic feet:

"Dwelling-houses of two apartments, 1600 cubic feet:

"Dwelling-houses of three apartments, 2400 cubic feet:

"Provided that—

"(1) The provisions of this section shall not prevent the restoration, according to the original plan, of dwelling-houses destroyed by fire, unless the building is destroyed or taken down to within fifteen feet of the level of the street:

"(2) Where it is proposed to alter an existing dwelling-house so as to increase its dimensions, it shall be in the power of the town council to permit said alteration, though the increase may not be sufficient to bring the dimensions up to the above scale:

"(3) This section shall not apply to the erection, provision, construction, or alteration of any dwelling-house in accordance with any warrant of the Dean of Guild Court granted before the date when this section comes into force.

"The word 'recess,' in this section and in the section immediately following, shall mean and include any recess having no separate window, which is not open from front to back, from floor to ceiling, and from side to side, and is not free from fixtures."

Section 67 of 1903 is adoptive, and reads as follows:—"Any person appointed in writing by the town council may at any reasonable time enter any dwelling-house which consists of not more than three apartments for the purpose of measuring, in cubic feet, the space contained therein (exclusive of lobbies, closets, presses, and recesses), and, if the cubic contents thereof do not exceed two thousand four hundred feet, may, in such position and style as the town council see fit, mark thereon, or affix thereto a ticket on which are marked, the number of such cubic feet,

and the number of persons exceeding the age of ten years who, without a breach of the provisions of this section, may sleep therein, reckoning one such person for every four hundred cubic feet; and any person who obliterates, defaces, removes, or alters such marking or ticket, shall be liable to a penalty not exceeding ten shillings."

Section 68 of 1903 is adoptive, and reads as follows:—"If any dwelling-house is used for the purpose of sleeping therein by a number of persons greater than is marked or ticketed thereon, in pursuance of the provisions of the immediately preceding section (every two persons of less than ten years of age being reckoned as one person exceeding the said age) every person so using the said dwelling-house, or suffering the said dwelling-house to be so used, shall be liable to a penalty not exceeding twenty shillings for every day or part of a day during which it is so used or suffered to be used, and any persons authorised in writing by the town council, and exhibiting their authority if called upon to do so, may at any time enter any dwelling-house marked or ticketed as aforesaid, if they believe that the provisions of the said section are being contravened."

Section 69 of 1903 Act defines the term "hollow square" as any space less than one acre in area surrounded by streets and admitting of buildings being built upon it around its margin, and sections 70 to 74 make provisions as to ventilation of such square.

171. "No new tenement of houses, except with the authority of the Commissioners, which in special circumstances the Commissioners may grant, shall have more than twelve dwelling-houses entering from one common stair or passage where the common stair or passage is within the tenement, but where there is an outside stair with balconies, twenty-four houses may be permitted to enter from said common stair or passage, and the width of such stairs, passages, balconies, and stair landings shall in no case be less than four feet, finished size."

172. "In every new building to be used as a dwelling-house, and in every building not previously used as a dwelling-house, when altered to be used as a dwelling-house, every habitable room in the ground floor shall be in every part thereof nine feet six inches in height at least from the floor to the ceiling, and every other habitable room, except attic rooms, shall be in every part thereof nine feet in height at least from the floor to the ceiling, and every habitable attic room shall be at least eight feet in height from the floor to the ceiling, through not less than one third of the area of the room, and it shall at no part thereof be less than three feet." [54]

173. "In every new or altered building to be used as a dwelling-house, every habitable room shall have at least one window, and the total area of glass in the windows, clear of the frame and sash, shall be (unless in any case the Commissioners otherwise determine) at least one-tenth of the area of the room, and the top of at least one of the windows shall not be less than seven feet six inches above the floor, and in case of a sash window the upper half at least shall be made to open the full width, and in case of a casement window one half at least shall be made to open." [54]

174. "The owners of premises in or entering from common stairs and

common passages shall keep the steps, landing-places, and passages in a proper state of repair, and provide and keep in proper repair rails at the side of such stairs, landing-places, and passages, to the satisfaction of the surveyor, and when required by him, shall fence, in such manner as he shall direct, all windows in such common stairs and passages; and any owner who fails so to do, after notice served on him by the surveyor, shall be liable in a penalty not exceeding five pounds."

175. "Every public building, theatre, or place of public entertainment shall be supplied with means of lighting, and of sufficient ingress and egress for the protection of the public in cases of emergency, to be approved of by the Commissioners from time to time as they shall deem necessary."

176. "No pipe for conveying smoke or heated air shall be fixed in any new building otherwise than in the wall thereof, except in a manner to be approved by the Commissioners."

177. "With regard to new buildings, the rules contained in Schedule IV. of this Act shall be observed, but such rules may be altered by the Commissioners with the approval of the sheriff." These are they :—

Rules for New Buildings (in addition to preceding Sections of Regulations)

(1) "The site of the intended building shall be dug out to such depth as shall be necessary, in the opinion of the Commissioners, for the removal therefrom of soil or refuse; and it shall not be lawful for any person to build upon any site until such soil or refuse is so removed.

"(2) The walls of every new building to be used as a dwelling-house shall have a damp course of durable material, impervious to moisture; the damp course for external walls to be at the level of the ground directly abutting upon the external wall, or at such other level as the Commissioners shall order. Party walls to have the damp course at a level of not less than the under side of the joisting of the lowest floor; and where in the judgment of the Commissioners the nature of the soil or subsoil requires it, the whole internal area of the site shall be covered with a layer of asphalte, cement, concrete, or suitable material to their satisfaction.

"(3) The outer walls and the party walls or separate side or end walls, and the joisting and principal timber and ironwork, shall be of sufficient strength and stability.

"(4) There shall be to the satisfaction of the Commissioners sufficient ashpit and water-closet or privy accommodation in connection with the building.

"(5) The plan of the building shall not contemplate the raising or lowering of any article from windows or openings towards any public streets by hoists or other appliances outside the building line.

"(6) All party walls and gables shall be built solid, except at vents, fireplaces, presses, and where the Commissioners may allow them to be built otherwise.

"(7) All external walls, party walls, passage walls, partition walls dividing separate houses, staircases, stairs, and landings, shall be constructed with incombustible materials, and all party walls shall be carried through and above the roof to form a parapet. The parapet to be finished on top with a cope, and the height of parapet to be not less than twelve inches, measured at right angles with the slope of the roof, above the covering of the roof of the highest building to which such party wall belongs.

"(8) All walls of dwelling-houses shall be so constructed as to prevent damp.

"(9) The mortar to be used in the construction of new or altered buildings shall be composed of fresh burnt lime and clean sharp pit sand, grit or ground bricks, or freestone shivers, without earthy matter, and no sea or ballast sand shall be used.

"(10) The joists under every hearth shall be bridled, and, where practicable, the hearth shall be supported by a brick arch or concrete under its whole area, or to be otherwise constructed or supported as the Commissioners may direct. Every fireplace shall have jambs and lintels or arches of incombustible material projecting at least to the flush of the plaster work. No timber, joist, beam, or safety lintel shall be inserted into a wall nearer to the fireplace or vents, where practicable, than twelve inches.

"(11) Every building shall have rhones, gutters, or spouts along the eaves thereof, with down spouts and perforated gratings, to carry all water falling on the roof thereon to the drains.

"(12) No part of a built chimney or flue must be less than 9″×9″, and no part of a wall on the outside or house side of the chimney to be of less thickness than nine inches. Every chimney head shall have a stone cope, into which chimney cans can with safety be inserted, and such chimney cans shall be sufficiently guarded.

"(13) The floors between each flat of a tenement shall be deafened.

"(14) All apartments in every dwelling-house shall be plastered with three coats plaster.

"(15) All plumber work connected with sanitary arrangements and house drains shall be ventilated, trapped, and otherwise constructed and tested to the satisfaction of the Commissioners.

"(16) In ground floors where the space from surface has to be filled up to level of floors, the same shall be filled up, subject always to sufficient space being left for ventilation, with dry stone shivers or such other materials as the Commissioners may appoint.

"(17) All private courts, common passages, and common areas (other than bleaching greens) shall be paved with natural or artificial stone, or such other material as the Commissioners shall approve, and be provided with proper and sufficient means for taking off the surface water.

"(18) No external covering of any roof shall be constructed of combustible materials; and it shall not be lawful for the owner of any building having, at the date when this Act comes into operation, a roof covered with thatch, or other combustible material, and contiguous to or adjoining to any other building, to suffer such covering to such roof to remain for a longer period

than seven years thereafter, unless with the consent in writing of the Commissioners. And every person who shall suffer the covering of any roof to continue, contrary to the provisions herein contained, and who shall not remove or alter the same within one month after notice given to him for that purpose by the Commissioners, shall be liable to a penalty not exceeding one pound for every day that such building or covering to such roof shall so continue."

Regarding this, *section* 21 *of the* 1903 *Act* reads thus:—"The town council shall be entitled to call upon the owner or owners of, or entitled to the use of, any private court or any close, passage, or area (other than a bleaching green, garden, or shrubbery) attached to and used in common by two or more occupiers of any tenement of dwelling-houses, to pave the same (so far as not already paved to the satisfaction of the council), and to maintain, renew, and extend the pavement, all to such extent, with such material, in such manner and within such time as the town council may require, and also to make and maintain such provision for the drainage of surface water as the town council may require. In the event of more than one owner being interested in the cost of such operations, the town council shall, on the application of any owner interested, fix the proportion of cost to be borne by each; and in the event of the town council in consequence of the failure of an owner or owners to obey any requisition under this section executing the work required they shall be entitled to charge or apportion the expense upon or among the said owner or owners as they may deem just."

178. Deals with restriction as to steam pipes and funnels for conveying smoke.

179. "It shall not be lawful for any person to erect any building upon any ground which shall have been filled up with any material impregnated with fæcal matter, or with any animal or vegetable or other offensive matter, which, in the opinion of the medical officer or sanitary inspector, may tend by decomposition or otherwise to the prejudice of the health of any future resident or occupier of such building, or of any resident in the neighbourhood, except upon a certificate of such medical officer or sanitary inspector that proper precautions, in his opinion, have been taken to obviate any such result; and every person who erects or causes to be erected, either wholly or partially, any building on any such ground, shall for every such offence be liable to a penalty not exceeding five pounds, and a further penalty not exceeding forty shillings for every day during which such building, or part of a building, shall continue upon any such ground."

180. Enacts that new houses or buildings or structural alteration of existing houses or buildings, must within one month of completion, or before such house or building or any portion thereof has been occupied, obtain a certificate of fitness for occupation from the surveyor. Contravention of this section entails a penalty not exceeding five pounds, with additional penalty of two pounds for every day occupation continues. [55]

Ventilation

181. Any person before beginning to alter or erect any church, chapel or school, or place for public entertainment, or for holding large numbers of people for any purpose, must notify and send plans and description of proposed construction with respect to ventilation thirty days before to the Commissioners, who may approve or cause alteration to be made, *but* if Commissioners fail to give approval in writing within seven days from first meeting after notice, the person notifying may proceed with the erection if it is in accordance with this Act. As to such existing buildings, Commissioners may cause proper ventilation to be effected.

182. "Provided also, if the owner or other person so intending to build, or the owner of any existing building, be dissatisfied with the determination of the Commissioners as to the said proposed manner of construction, he shall have the same right of appeal against the determination of the Commissioners, and such appeal shall be conducted in the same manner as is herein provided in the case of appeals against any order of the Commissioners with respect to works to be constructed by or subject to the approval of the Commissioners."

183. "Every habitable room built after the commencement of this Act of less area than one hundred superficial feet, and without a fireplace, shall be provided with special means of ventilation, to be determined by the Commissioners."

184. "Means of ventilation to be approved of by the Commissioners shall, on their order, after cause shown, be provided in or for every building, whether erected before or after the application of this Act, and in every case by the owner of such building; and any owner who fails to carry into effect the order of the Commissioners in respect to such means of ventilation shall be liable to a penalty not exceeding forty shillings for every day or part of a day during which such failure continues."

185. "The owners of all common stairs and common passages constructed or which may be constructed shall provide proper means of ventilating the same, where practicable, by means of windows or skylights, or otherwise ventilating the same to the satisfaction of the Commissioners or their surveyor or sanitary inspector; and any owner failing so to do when required by the Commissioners shall be liable to a penalty not exceeding forty shillings."

Dean of Guild Court

201. "In burghs where there is a Dean of Guild Court at the commencement of this Act, or where such court shall be established as hereinafter provided, the Dean of Guild Court shall come in room and place of the Commissioners for carrying out the provisions of this Act, in so far as they apply to new buildings or alteration of existing buildings, ventilation, and precautions during the construction, alteration, or repair of buildings and streets, and to old and ruinous tenements, and to the setting up of hoardings; and in that case all the powers and duties of the Commissioners in reference to these provisions, and also in reference to the inspection of

buildings in process of construction or alteration, or any work connected therewith, and the surveying and certifying of buildings before occupation, shall devolve on and be carried out by the Dean of Guild Court and the officers thereof, as herein provided for, but nothing herein contained shall be taken to restrict or prejudice the jurisdiction or to alter the constitution of any Dean of Guild Court as existing at the commencement of this Act."

In the *amending Act of* 1903, *section* 42 states that:—"In any burgh where there is no Dean of Guild Court, the functions of the Dean of Guild Court under the Burgh Police Acts shall be performed by the town council, to whom all applications required to be made to the Dean of Guild Court shall be made. Providing that nothing herein contained shall entitle the town council to act as a court for the trial of Guild offences."

202. Dean of Guild Court may be established when not already existing. *Section* 39, *Burgh Police Act*, 1903, adds:—"The Dean of Guild Court may, upon a report in writing by the medical officer and burgh surveyor that adequate provision is made for light and ventilation, and with the consent of the town council, in any special case, relax or modify to such extent and under such conditions as the court may think proper, all or any of the provisions of the Burgh Police Acts with regard to the laying out of streets and the erection or alteration of buildings, and the open space adjoining buildings, provided the court is of opinion that there are exceptional circumstances justifying such relaxation or modification."

Public Sewers

215. All sewers and drains within the burgh are the property of the Commissioners (except private branch drains, drains used for the purpose of draining, preserving or improving land, and sewers made under any local or private Act of Parliament). [56]

216. Gives power to Commissioners to purchase etc. certain sewers.

217. Stipulates that private sewers or water-courses etc. are not to be used by the Commissioners without consent in writing of the person legally entitled to grant their use.

218 "The Commissioners shall form the whole burgh into one drainage district, subject to the following exceptions and provisions:—

"(1) Where at the application of this Act separate districts exist, they shall be maintained unless and until they are altered in the manner hereinafter provided.

"(2) The Commissioners may divide the burgh into separate drainage districts with the approval of the sheriff, if special and exceptional circumstances exist to the satisfaction of the sheriff, making it expedient to make such division.

"(3) The Commissioners may unite or alter existing separate districts with the approval of the sheriff.

"(4) Any alteration of districts existing at the application of this Act shall be subject to such conditions as the sheriff may impose, having regard to the assessments which have been paid in the existing districts, so as to afford equitable relief to the properties in respect of which such assessments have been paid. [62]

"(5) The Commissioners shall cause their surveyor to define and describe the several drainage districts, and any alterations that may from time to time be made thereof, upon a plan of the burgh to be made as herein provided for."

219. Gives power to Commissioners to construct sewers where none exist, with reservoirs, sluices, engines, etc., necessary, and if needful may carry sewers through and across all underground cellars and vaults under streets, making compensation to owners of property. [63]

220. Enacts that 28 days at least before making any sewer or altering course or level, or abandoning any sewer, the Commissioners must give notice of their intention by posters, etc., and specifying a place where detailed plan can be seen.

221. The Commissioners shall meet at place mentioned in notice and hear objections in the presence of the surveyor, and the Commissioners may abandon or make alterations in the intended work, as they judge fit.

222. Enacts that where works for sewage are provided, streams are not to be polluted, and the Commissioners are authorised and required to allow junction drains from premises on such terms as they may arrange with the persons requiring drainage, and failing such arrangement, terms will be adjusted by sheriff. Every person infringing this section is liable to a penalty not exceeding five pounds, and a further penalty not exceeding one pound for each day during which such infringement shall be continued.

223. Enacts a penalty not exceeding two pounds from any person who shall lay or throw, or cause or procure to be laid or thrown, any rubbish, earth, ashes, corks, straw, soil, filth, or refuse into the channel or on the banks or on the sides of any river, burn, or water-course flowing through or on the bounndary of the burgh.

225. Enacts that Commissioners are not to destroy existing sewers, etc., without providing others, failing doing which, they shall forfeit to any person aggrieved a sum not exceeding two pounds for each day after expiration of seven days during which he is deprived of the use of the drain or sewer he was entitled to, and not provided with another.

227. (*As amended by Burgh Sewerage, Drainage, and Water Supply Act*, 1901).—"Every person not being employed or authorised for that purpose by the Commissioners, who shall make any drain from any lands or premises into any of the sewers vested in the Commissioners, shall be liable to a penalty not exceeding five pounds."

229. "All sewers and drains, whether public or private, shall be trapped and ventilated by the Commissioners or other persons to whom they severally belong."

230. "The Commissioners shall have power for the purpose of providing ventilation for the existing sewers or drains, or for such sewers or drains as may hereafter be constructed, to acquire, by agreement, lands and premises, and to construct all ventilating shafts, furnaces, and other means of ventilating the sewers and other works which may from time to time be found necessary, and if for completing any works required in the execution of this provision it be found necessary to carry them upon, into, or through any enclosed or other private premises, the Commissioners

shall have and may exercise the like powers and be liable to the like conditions and restrictions which are by this Act provided with reference to the construction of sewers."

231. "The Commissioners may also arrange with the owners or occupiers of any manufactory, gaswork, or brewery, having furnace and chimney shafts so situated as to be available for the ventilation of the adjacent sewers and drains for such ventilation, or of other suitable premises, to lay and fix such ventilators, pipes, or shafts into, on, or against all such buildings or premises as to them may seem proper, and as may be agreed on, making compensation to the owners thereof."

233. (*v.* Section 4, Burgh Sewerage, Drainage, and Water Supply Act, 1901, p. 156.)—"Any owner or occupier of distilleries, manufactories, or other works who causes or permits any refuse, refuse water, steam, or other substance fitted to interrupt the free passage of a sewer or to be otherwise injurious thereto, or to be injurious to the health of persons living in the vicinity, to enter a public sewer, river, or inland loch, or public reservoir or dock from any such works shall be guilty of an offence, and shall, on conviction before the sheriff, be liable to a penalty of five pounds for every day or part of a day during which such offence continues, besides being liable for all damages, and for all expenses for taking out of the sewer any refuse or substance that may have entered it from his works.

"Such owners and occupiers shall construct pools or reservoirs as near their works as possible, for receiving and depositing such refuse and other substances.

"If it shall be impracticable, in the judgment of the Commissioners, to render such refuse or other substances inoffensive or innocuous, or to prevent the same from interrupting the free passage of the sewer, or otherwise injuring the same, it shall be lawful for the Commissioners to prohibit and interdict such owner or occupier from permitting the same to run into such sewer from his works aforesaid; and while such prohibition and interdict are in force, or if and so long as the owner or occupier of such works makes no use of the sewers, in consequence of having before this Act came into operation made separate arrangements for the drainage of the works, such owner or occupier shall be entitled to be exempted from the sewer rates to the extent of seventy-five per centum thereof applicable to the whole building or such part or parts thereof as by such prohibition or previous separate arrangement are deprived directly or indirectly of any benefit from the sewer; provided that the sewer rates payable in respect of the other parts of such distilleries, manufactories, and other works, and all warehouses, offices, and other buildings connected therewith, shall still remain payable; and if the prohibition and interdict be at any time by the Commissioners withdrawn, or the owner or occupier having previous separate arrangements shall begin to use the sewers, then the exemption shall cease so soon as the owner or occupier avails himself to any extent of the withdrawal of the prohibition by permitting the substances prohibited to pass into the sewers, and if the owner or occupier is dissatisfied with the

decision of the Commissioners as to the question of practicability aforesaid, or as to the part of the works for which such exemption ought to be made, it shall be lawful for such owner or occupier to appeal to the sheriff in manner after provided."

234. "Any person, being the owner or occupier of any lands or premises beyond the burgh, or not included in any drainage district thereof, and in respect of which he would not be liable for the payment of the rates authorised to be levied under this Act or the local authority of any district under the Public Health Acts, may, with the consent of the Commissioners in writing, upon payment to them of a reasonable sum of money, to be agreed upon between them, at his or their own expense and under the superintendence of the surveyor of the Commissioners, cause to branch into and to communicate with any of the sewers belonging to the Commissioners any sewer or drain in respect of the said lands or premises or district which may be lawfully made therefrom, of such size and in such form of communication as the Commissioners approve of; but nothing in this Act contained shall affect any right theretofore acquired by such owner or occupier to use any of the sewers or drains belonging to the Commissioners." [28]

235. "If the Commissioners shall consider it necessary for public health that any drain should discharge itself below high-water mark they shall be entitled, with the consent of the Board of Trade, to construct the requisite works for that purpose under the regulations provided in regard to works authorised by this Act."

236. (*v.* section 4, Burgh Sewerage, Drainage, and Water Supply Act, 1901, p. 156.) "It shall be lawful for the Commissioners to borrow, for the purpose of making, purchasing, enlarging, ventilating, reconstructing, and maintaining sewers, and on the security of the said special sewer rates and general sewer rates, such sums of money, and at such times, as the Commissioners shall deem necessary for that purpose, and to assign the said special sewer rates and general sewer rates in security of the money to be so borrowed; and the provisions of this Act with respect to the borrowing of money and the granting of bonds therefor, and the transference and recording of such bonds, shall be applicable to the borrowing of money for such purpose; and the bonds to be granted for the money so to be borrowed shall, *mutatis mutandis*, be as near as may be in the form set forth in this Act for bonds to be granted for money borrowed under the general powers of this Act, and shall constitute a lien over the special sewer rates and general sewer rates thereby assigned, and shall entitle the creditors therein to recover the sums thereby due from the Commissioners and their officers out of the first and readiest of the said special and general sewer rates; and the money so borrowed shall be applied wholly to the purpose aforesaid, and to no other purpose whatsoever; and the special and general sewer rates shall not be liable for nor be assigned in security of the payment of any sums borrowed by the Commissioners for any other than such purpose."

237. "It shall be lawful for any person whose property may be taken or injuriously affected by the making, altering, and maintaining sewers,

B.P.A. Sec. 235.—*Duke of Richmond* v. *The Burgh of Lossiemouth*, 1904, 11 S.L.T. 604, 12 S.L.T. 166.

Held that a L.A. is not entitled, with the consent of the Board of Trade, to discharge sewage, purified or unpurified, into the sea, or on to the foreshore, in any way and at any place, to the interference of private rights. Section 235 "merely means that assuming private rights to be fully conserved, the proprietary rights of the Crown may be negotiated with the Board of Trade."

See also P.H.A. 1897, Sec. 119.

R.P.A. Sec. 295.—Duty of Richmond v. The Barge of Leadenhall, 1904, 11 S.L.T. 604, 12 S.L.T. 186.

Held that a L.A. is not entitled, with the consent of the Board of Trade, to discharge sewage, purified or unpurified, into the sea, or on to the foreshore, in any way and at any place, to the interference of private rights. Section 295 "merely means that assuming private rights to be fully conserved, the proprietary rights of the Crown may be negotiated with the Board of Trade."
See also P.H.A. 1907, Sec. 119.

or who may think himself thereby aggrieved to appeal to the sheriff in manner after provided."

Drainage of Houses

238. *For this section is substituted the following section* 104 (*n*), *Burgh Police Act*, 1903:—"If any house or building and its pertinents be at any time not drained by a sufficient drain or pipe communicating with some sewer or with the sea, to the satisfaction of the council, and if there shall be such means of drainage within one hundred yards of any part of such house or building, the council may require the owner of such house or building to construct or lay therefrom a covered branch drain or pipe of such materials, of such size, at such level, and with such fall as they think necessary for the drainage of such house or building, its areas, water-closets, and offices:

"If there shall be no such means of drainage within such distance, the town council may require the owner to construct or lay from such house or building a covered branch drain or pipe as aforesaid, and lead the same into a covered cesspool or other place to be constructed by such owner, and such drain or pipe and cesspool shall be subject to the conditions as to construction and repair specified in section two hundred and thirty-nine:

"The town council may charge and recover from the owner of any branch drain a sum not exceeding ten shillings for the supervision of each connection thereof with any sewer vested in them:

"If any owner fail to commence the construction and laying of any drain or pipe, or the construction of any cesspool or other place required under this section within three weeks from the date of requisition, or to complete the same within six weeks of that date, or within such longer periods as the council may in their requisition determine, the council may themselves construct and lay, construct, or complete the same:

"All expenses incurred by the council under this clause shall be recoverable from the owner of such house or building as private improvement expenses." [63]

239. For this section is substituted *section* 104 (*o*), *Burgh Police Act*, 1903, viz.:—"No house or building shall be built upon a lower level than will allow the drainage of the wash and refuse thereof to fall into some sewer belonging to the council, either then existing or marked out upon the map herein directed to be made by them; and if there be such means of drainage existing within one hundred yards of such intended house or building, the council may require the owner of such house or building to cause a branch drain leading thereunto from the intended site of such house or building to be made of such materials, of such size, at such level, and with such fall as they think fit; or if there be no such means of drainage within one hundred yards of any part of the said intended site of such house or building, then such drain shall be made so as to lead into such covered cesspool or other place as the council direct, not being under any dwelling-house or other occupied building, and shall be constructed and kept in complete repair to the satisfaction of the council, so as effectually to prevent any leakage or effluvium therefrom until such sewer as aforesaid is made by the

council, when they shall make a drain to communicate with such new-made sewer, and shall demolish and fill up any such cesspool, and if any owner fails to commence the construction or repair of such branch drain, and where necessary of such cesspool, or other place within three weeks from the date of such requisition, or to complete the same within six weeks of that date, or within such longer periods as the council may in their requisition determine, the council may themselves construct or repair or complete the construction or repair of such branch drain, and where necessary of such cesspool or other place. All expenses incurred by the council under this section shall be recoverable from the owner of such house or building as private improvement expenses :

"No cesspool shall be constructed within one hundred feet of any dwelling-house, or within two hundred feet of any well or spring of water, without the consent in writing of the town council."

240. "Whenever any house is rebuilt, the level of the cellar or other lowest floor of such house shall be raised sufficiently to allow of the construction of such drain as is hereinbefore provided in the case of houses to be built after the application of this Act; and whenever any house is taken down to or below the ceiling of the floor, commonly called the ground or street floor, for the purpose of being built up again, such building shall be deemed a rebuilding within the meaning of this Act."

241. "Proper ventilation shall, if required by the Commissioners, be provided in the drainage of every house or building by special pipe or shaft, or by such other method as they shall direct; and all other inlets to drains shall be properly trapped."

242. "All branch drains, as well within as without the premises to which they belong, and all cesspools or reservoirs, shall be under the survey and control of the Commissioners, and shall be reconstructed or altered, repaired, and kept in proper order at the cost and charges of the owners of the premises to which the same belong, or for the use of which they are constructed or continued."

243. "The surveyor of the Commissioners may, and when requested by the medical officer of health or the sanitary inspector shall inspect any drain or cesspool or reservoir, and for that purpose, at all reasonable times in the daytime, after twenty-four hours' notice in writing to the occupier of the premises to which such drain or cesspool or reservoir is attached, may enter upon any premises with such assistants or workmen as may be necessary, and cause the ground to be opened where he thinks fit, doing as little damage as may be; and if such drain or cesspool or reservoir be found to be in proper order and condition, he shall cause the ground to be closed and made good as soon as may be; and the expense of opening, closing, and making good such drain or cesspool or reservoir shall in that case be defrayed by the Commissioners; and all branch drains which have been opened for repairs, or for any purpose whatever, shall not be covered up before they have been inspected and tested by the Commissioners or their surveyor, which inspection and testing shall be made within twenty-four hours after notice has been given by the owner of the branch drain; and any owner or agent or builder who opens or causes to be opened, and who

covers up or causes to be covered up any branch drain without such notice to the Commissioners or their surveyor shall be liable to a penalty of five pounds; and the Commissioners may order such branch drain to be again uncovered for the purpose of inspection and test at the expense of the owner or agent or builder who opened or caused the drain to be opened."

244. "If such drain or cesspool or reservoir be on inspection found to have been constructed after this Act came into force, contrary to the directions and regulations of the Commissioners, or contrary to the provisions of this Act, or if any person, without the consent of the Commissioners, shall construct, rebuild, or unstop any drain or cesspool or reservoir, every person so doing shall be liable to a penalty not exceeding five pounds; and the Commissioners may cause such amendments or alterations to be made in any such drain or cesspool or reservoir as they think fit."

245. "It shall be lawful for any person whose property may be thereby taken or injuriously affected by the construction or use of house or branch drains, and who thinks himself thereby aggrieved, to appeal to the sheriff in manner hereinafter provided."

Soil-Pipes and Water-closets

246. (*As amended by sections* 24 *and* 104 (*p*) *of* 1903 *Act*).—"Within one month after notice given by the Commissioners in writing for that purpose, the owner of every house or part of a house occupied by a separate family, into which water has not been already introduced, shall, subject to the provisions of any bye-laws made by the Commissioners, introduce water thereto, and shall fit up in some window, recess, or other well-lighted and ventilated place, a sink sufficient to carry off the whole foul water; and after a like notice every such owner shall also, subject as aforesaid, provide for such house or part of a house occupied by a separate family, wherever practicable, a sufficient water-closet: Provided always, that if, in the opinion of the Commissioners, it is not advisable to introduce water-closets into each house, or part of a house, they, after a like notice, may, subject as aforesaid, require the owners of a tenement to construct on each flat, or in some convenient place or places adjacent to such tenement, a sufficient number of water-closets for the separate use of each sex of the inmates and occupiers of the said tenements: Provided further, that this enactment shall not be enforced by the Commissioners where, from water not having been laid under sufficient pressure, or from drains being still unmade, or from any other cause, such works shall be impracticable or inexpedient, and in such case the council may, subject to the aforesaid conditions, require a sufficient earth-closet to be provided"; and *section* 24 *of* 1903 *Act* empowers penalties to be exacted for failure of any requirement under this section to an extent "not exceeding forty shillings, and to a further penalty not exceeding five shillings for each day during which such non-compliance continues," said penalties to be paid by owner.

247. "It shall be lawful for the owners of any one or more floors or

storeys of any house or other building to have a supply pipe from any water-pipe in the street brought up the common staircase, or along the back or side wall of the tenement on the outside, and either passing underground through the sunken storey or lowest flat, or, where practicable, through any common entry: Provided always, that authority shall be first obtained from the magistrate, which may be granted summarily, on hearing the parties concerned, without written pleading, to lay and put up such pipe; and the expense thereof, and of keeping the same in repair, and the damage thereby occasioned to the street and otherwise, shall be defrayed by the person, owner or owners of the properties for which such supply pipe has been provided; and no person shall have power to join the supply pipe to any main pipe without the sanction of the magistrate so obtained, and of any water company or other persons who may supply such water."

248. "Where there are two or more houses in any tenement, the owner and occupier of each house shall permit soil-pipes, if unavoidably necessary, to be carried through the same; and the owner and occupier of the lowest storey shall permit such soil-pipes, if necessary, to be carried through and under the same, and all such owners and occupiers shall at all reasonable times afford access to all such houses for the construction of the works, and for making all repairs necessary thereon, without any claim for compensation: Provided always, that the work shall be so executed at the sight of the burgh surveyor, and so as to occasion the least inconvenience to any such owner and occupier, and that any injury done to such houses in the execution of the works shall be forthwith repaired, and that the authority of the magistrate shall first be obtained, in the manner hereinbefore provided with respect to supply pipes from water-mains."

249. "The occupier of any house or other place into the cesspool or soil-pipe of which any ashes, or other matter calculated to choke the same, shall be introduced or allowed to enter by him or others in his house, shall be liable in a penalty not exceeding forty shillings, besides being liable to repair any damage."

250 "In all streets and other places where common sewers are or may be constructed, it shall be lawful for any owner of one or more floors or storeys of any house or other building divided into separate floors or storeys (on obtaining authority for the purpose from the magistrate summarily, on the report and recommendation of the surveyor, or of such other person skilled in building as any of the magistrates may appoint, and on hearing the parties interested), to erect a waste or foul water-pipe or soil-pipe with trap in or upon the common staircase, or upon any wall of the tenement on the outside, to communicate with any drain underground leading into the common sewer where there is such drain, and with power to make such drain if none such already exist: Provided always, that the sanction of the Commissioners shall be obtained before connecting such drain with any common sewer in the street; and the expense and damage occasioned by erecting and constructing such pipe, drain, and communication, with the expense of restoring the street,

so far as interfered with, and the expense of keeping such drain and communication clean and in good repair, with such reasonable allowance for the use of the common sewer in the street as the Commissioners may fix, shall be defrayed by the owners of the floors or flats making use thereof, in proportion to their respective rents or annual value, as the same may be ascertained from the valuation roll or police assessment books or otherwise; and in case of dispute among the parties or any of them relative to their proportion of such expense, the same shall be determined by the magistrates, or any one of them, in a summary manner, and such decision shall be final."

251. "The situation, dimensions, materials, and construction of every water-closet or earth-closet and privy shall be subject to the approval of the Commissioners, and every water-closet, earth-closet, or privy hereafter to be constructed shall be placed in such a position that one of its sides shall be an external wall, with a window therein, containing an area of at least six superficial feet, one half of which shall be made to open; and the cistern which supplies the water-closet (except the service pipe connected therewith) shall have no communication with the water-closet: Provided that in the case of water-closets, earth-closets, or privies constructed prior to the passing of this Act it shall be optional for the Commissioners to require the owner or occupier to comply with the provisions of this section, or otherwise to provide ventilation therefor, and any owner or occupier who is dissatisfied with the requirement of the Commissioners may appeal to the sheriff, whose judgment shall be final." [64]

252. "A cesspool shall not be allowed for any house or building except when unavoidable, in which event it shall be constructed in such situation and in such manner and under such conditions as the Commissioners direct. It shall in every case be made water-tight, it shall be arched or otherwise covered over, and shall have a current of fresh air conducted by pipe or shaft thereinto, and a pipe or shaft for ventilation shall be carried up from it or from the drain communicating with it from the water-closet or privy, as the Commissioners may direct."

253. "The situation, dimensions, drainage, materials, mode of access, and construction of every ashpit shall be subject to the approval of the Commissioners, and shall be of sufficient size to contain the ashes and dry refuse likely to accumulate between such visits of the scavengers as the Commissioners may prescribe: Provided further, that if any person, not being the owner or occupier of the house or premises to which any ashpit belongs or is attached, shall deposit or use the said ashpit for the deposit of ashes or dry refuse, or any other matter or thing, such party shall be guilty of an offence, and on conviction thereof liable to a penalty not exceeding forty shillings."

254. "The owner of any privy, ashpit, cesspool, or midden, extending wholly or partially under or close to any room built before or after this Act comes into operation in the burgh, shall within one month after notice to that effect from the Commissioners remove or cleanse and build up such privy, ashpit, cesspool, and midden."

Section 24 of Burgh Police Act, 1903, enacts that any requirement under this section not complied with, "owner is liable to penalty not exceeding two pounds, and to further penalty not exceeding five shillings for each day during which such non-compliance continues."

255. "Where any privy, ashpit, or cesspool is certified by the medical officer of health to be prejudicial to health, of defective construction, or without drainage, or in a bad state of repair, or to be so situate that the removal of filth or refuse therefrom is prejudicial to health, the Commissioners may, by written notice, require the owner of the same within a reasonable time, to be specified in the notice, to reconstruct, or alter, or repair, such privy, ashpit, or cesspool, or to convert the privy into a water-closet or earth-closet, all as the case may require, to the satisfaction of the Commissioners; and the Commissioners may, if they think fit, order the removal of such privy, ashpit, or cesspool."

256. "The Commissioners may order the owner or occupier of any inn, public-house, beerhouse, eating-house, cook-shop, or other place of public entertainment or amusement, built before or after this Act, to provide within such time as the Commissioners think fit, and thenceforward to maintain upon or adjoining his premises, water-closets, earth-closets, and urinals, one or more, to the satisfaction of the Commissioners; and if any person fail in any respect to comply with the provisions of this enactment he shall be liable to a penalty not exceeding five shillings for every day during which such failure continues after the expiration of fourteen days from the service of such order on him, and the Commissioners may order the owner and occupier of any premises to remove any water-closet, earth-closet, or urinal belonging thereto, where it appears to them so situated or constructed as to be a nuisance or offensive to public decency, or otherwise objectionable, and all such urinals shall be cleansed once in twenty-four hours by the occupier of the house or place to which they belong, to the satisfaction of the Commissioners; and in default thereof such occupier shall be liable to a penalty not exceeding forty shillings for every offence."

Supply of Water

257. "The Commissioners, except when provision is otherwise made under the authority of an Act of Parliament, shall cause all existing public cisterns, pumps, wells, conduits, fountains, and other waterworks used for the gratuitous supply of water to the inhabitants within the burgh, unless the water therein is found to be dangerous or injurious to health or unfit for dietetic purposes, to be continued, maintained, and supplied with water, or they shall substitute other such works equally convenient, and shall cause them to be maintained and supplied with water; and such public cisterns and other works shall be vested in the Commissioners, and be under their management and control; and the Commissioners may construct and maintain any number of new cisterns, pumps, conduits, fountains, and other waterworks for the gratuitous use of any persons who choose to carry the water away, not for sale, but for

their own private use, and may supply with water any public baths or wash-houses."

262. Enacts that burghs having less than 5000 inhabitants may obtain from the sheriff compulsory powers for water supply. [65]

263. Enacts that service pipes may be laid by owners where the Commissioners have resolved to supply tenements and houses within the burgh with water, and in such case where the Commissioners have so resolved, they may compel owners to lay service pipes under penalty, or may lay them at owners' expense.

264. Enacts that water is to be used only for domestic and ordinary purposes, unless by agreement with Commissioners.

265. "A supply of water for domestic and ordinary purposes shall not include a supply of water for cattle or for horses, or for washing carriages, or for steam engines, or for railway purposes, or for warming or ventilating purposes in public buildings, or for working any machine or apparatus, for any trade, manufacture, or business whatsoever, or for watering gardens by means of any tap, tube, pipe, or other such like apparatus, or for fountains, or for flushing sewers or drains, or for public baths or wash-houses, or for any ornamental purpose whatever."

266. "The Commissioners may from time to time erect and maintain, or allow to be erected and maintained, in any street or public place any ornamental drinking fountain or trough."

267. "With respect to the supply of water all the clauses and provisions of the Waterworks Clauses Acts, 1847 and 1863, and any Act amending the same, with respect to the following matters; (that is to say,)

"The construction of the waterworks:

"The communication pipes to be laid by the inhabitants:

"Waste or misuse of the water supplied by the undertakers:

"Guarding against fouling the water of the undertakers:

"The payment and recovery of the water rates:

"The recovery of damages not specially provided for, and of penalties, and to the determination of any other matter referred to justices or to the sheriff:

shall, so far as the same are not varied by the provisions of this Act, be incorporated with this Act; and the expression 'the undertakers' in the said Waterworks Clauses Acts shall, in reference to this Act, mean the Commissioners under this Act: Provided always, that the water to be supplied by the Commissioners need not be constantly laid on under pressure; and provided also, that for shops the water rate, or portion of burgh general assessment applicable to water, shall be chargeable only on one fourth of the rental of the premises, unless in special circumstances the Commissioners see cause to charge the ordinary rates, and in that case it shall be lawful for any person who may think himself thereby aggrieved to appeal to the sheriff in manner hereinafter provided." [66, 67]

268. "It shall be lawful for the Commissioners to make bye-laws regulating all or any matters and things whatsoever connected with the water to be supplied within the burgh through their pipes."

269. "The provisions of this Act with respect to supply of water shall not apply in the case of any burgh which is or may be before the thirty-first day of December, one thousand eight hundred and ninety-four, supplied with water under the powers of any local Act or Acts."

Slaughter-Houses

278. (*As amended by Burgh Police Act (Schedule)* 1903.)—"The Commissioners may provide, establish, improve, or extend, within or without the burgh, fit shambles or slaughter-houses for the purpose of slaughtering cattle, and for that purpose may borrow such sums of money as they shall find necessary, on the security of the burgh general assessment, and of the rates to be taken and levied for the use of such shambles and slaughter-houses, and of the shambles or slaughter-houses and ground on which the same are erected, or on any one or more thereof: Provided that any town council which is refused by a local authority a licence under section 33 of the Public Health (Scotland) Act, 1897 for premises for a slaughter-house without the burgh, may appeal to the Local Government Board for Scotland against such refusal, and the decision of the Board shall be final.

"And where in any burgh the Commissioners, or their predecessors in office, shall have provided and established such shambles or slaughter-houses, and shall have paid for that purpose moneys out of the police or other funds under their charge, the Commissioners may repay such moneys out of the burgh general assessment, or out of any moneys borrowed on the security thereof, in so far as the moneys so paid exceed in amount the moneys borrowed for the purposes of such shambles or slaughter-houses, under the powers of any special Act or provisional order, and may for the purpose of such repayment borrow money on the security of the burgh general assessment; and they may also apply any funds under their charge towards the maintenance and management of such shambles or slaughter-houses, and the payment of any feu duties or other annual burdens affecting the same, in the event of the rates levied for the use thereof not being sufficient for those purposes."

280. (*As amended by Schedule of* 1903 *Act.*)—"The medical officer of health of the burgh shall report to the Commissioners on the sanitary condition of all slaughter-houses belonging to or licensed under the Public Health (Scotland) Act, 1897, by the Commissioners at least twice every year, and he, as well as the sanitary inspector, and any other person who may be specially appointed by the Commissioners for the purpose, shall have right of access to such slaughter-houses at all reasonable times for the purpose of inspecting the same."

281. (*As amended by Schedule of* 1903 *Burgh Police Act.*)—Commissioners may make bye-laws for the registering, regulation, and inspection of slaughter-houses.

282. (*As amended by Schedule of* 1903 *Burgh Police Act.*)—Enacts that a licence to any person to slaughter cattle, granted under the Public Health (Scotland) Act, 1897, may be suspended for not more than two months, if such person is convicted of killing or dressing any cattle contrary to the

provisions of this Act, and after conviction of a second offence the licence may in addition be revoked.

284. If Commissioners provide slaughter-house, no other place can be used as such without their permission, under penalty of five pounds for each offence; and any animal killed within two miles of burgh, renders the slaughterer liable to slaughter rates if any part of the carcase is taken within the burgh boundary. One may kill, however, for family consumption within the burgh. After passing of this Act, and for one year after no other slaughter-house shall be erected within two miles of the burgh, unless with consent of Commissioners; or is situated within another burgh. [Amended by B.P.A. 1903, Schedule.] [3]

285. Places for slaughtering horses must be licensed. Penalty for contravention not exceeding ten pounds, and further penalty not exceeding two pounds for every day offence continues. [Amended by B.P.A. 1903, Schedule.] [57]

309. Commissioners are empowered to erect public baths and drying grounds, and charge for their use.

316. "The Commissioners may from time to time make bye-laws as they think fit for the purposes after mentioned, *videlicet*:—

"*B.—For Sanitary Purposes.*

"(1) For inspecting all places where horses are killed, and carrion is kept or sold, and keeping such places in a cleanly and proper state, and removing the filth therefrom, and requiring that all such places shall be provided by the occupiers with proper paving, drainage, and a sufficient supply of water:

"(2) For removing the contents of ashpits, dungsteads, drains, cesspools, water-closets, lavatories, baths, and privies within reasonable periods; for preventing foul water soaking from any house or building, and for preventing any ashpit, dungstead, privy, drain, ditch, cesspool, dunghill, or manure heap from being a nuisance or annoyance:

"(3) For inspecting and periodical cleaning of cisterns erected in buildings for the use of two or more families:

"(4) For regulating the time and mode of the removal of any offensive matter or thing:

"(5) For regulating the keeping of depôts of bones, carrion, rags, or any other offensive matter or thing:

"(6) For reducing or removing the noxious or injurious effects attending the business of a blood boiler, bone boiler, tanner, slaughterer of horses or animals of any description, soap boiler, tallow melter, tripe boiler, or other noxious or offensive business, trade, or manufacture:

"(7) For providing that cattle, dogs, and poultry shall not be kept in such places or in such manner as to be a nuisance or annoyance to the inhabitants; for prescribing the situations or places in which swine may be kept, and for prohibiting, on cause shown, the keeping of swine:

"(8) For requiring owners or occupiers of houses and buildings to keep clean closes, areas, courts, passages, stairs, roofs of outhouses, and common water-closets, and thoroughfares owned or occupied by them:

"(9) For regulating the sweeping and cleansing of common stairs in accordance with the sections of this Act relating to cleansing and fencing and keeping the same clear of obstruction:

"(10) For carrying out the provisions of sections two hundred and thirty-eight to two hundred and fifty-six, both inclusive."

The following additional bye-laws are adoptive under section 93 Burgh Police Act, 1903:—

"(1) The drainage of the subsoil of sites for, and the prevention of dampness in, buildings intended for human use or habitation:

"(2) The ventilation of and admission of light to buildings:

"(3) The construction and arrangement of the drainage of buildings and of soil pipes and waste pipes, and the construction and position of water-closets, earth-closets, privies, ashpits, cesspools, dungsteads, slop sinks, and rainwater pipes, and rhones:

"(4) The level, construction, causewaying, and paving of streets and of the footways thereof, and provision for drainage of surface water therefrom, and the provision of lanes or other secondary means of access, where necessary for the purpose of removing refuse:

"(5) The protection of trees, shrubbery, or ornamental or pleasure grounds in or adjacent to streets:

"(6) The due inspection of buildings in course of erection or structural alteration, the examination of the drains thereof, and the pulling down, alteration, or amendment of any work which has been carried out in contravention of lawful requirements and which the town council are entitled to pull down, alter, or amend.

"All such bye-laws shall be enforceable by such penalties as may be prescribed therein, not exceeding five pounds for each contravention, and in other respects shall be subject to the same conditions and provisions as bye-laws made by the town council under the Principal Act, or any local Building or Police Act, as the case may be.

"The said bye-laws shall be consistent with the law of Scotland and with any provisions as to the above matters contained in the Burgh Police Acts (or local Building or Police Act, as the case may be), the Public Health (Scotland) Act, 1897, or any other public general Act, but may alter or supplement any of the building rules contained in Schedule IV. of the Principal Act."

318. Before coming into operation all sanitary bye-laws must be confirmed by the Board, and authenticated by the signature of the sheriff or the chairman of the Board. They must also be confirmed by the Secretary for Scotland. Bye-laws relating solely to the Commissioners or their officers or their servants are excepted.

319. No such bye-laws shall be confirmed unless notice has been given in some newspapers circulating in the district, one month at least before making application for confirmation.

320. Proposed bye-laws must be open for inspection at the office of the clerk for at least one month previous to application.

321. Bye-laws when confirmed shall be printed and hung up in office, and copies given to any person wishing them at a charge not exceeding one penny.

336. Deals with the form and service of notices.

Appeal

339. (*As amended by sec.* 104 (2) *s*, *Burgh Police Act*, 1903.)—" Any person liable to pay or to contribute towards the expense of any work ordered or required by the Commissioners under this Act, and any person whose property may be affected, or who thinks himself aggrieved, by any order, or resolution, or deliverance, or act of the Commissioners made or done under any of the provisions herein contained, may, unless otherwise in this Act specially provided, appeal either to the sheriff or to the Court of Session by lodging a note of appeal within fourteen days after intimation of the order or deliverance of the Commissioners complained of, or within fourteen days after the commission of the act complained of, with the sheriff-clerk of the county in which the burgh is situated, if the appeal is made to the sheriff, or with any principal clerk of Session at Edinburgh if the appeal is made to the Court of Session, which note of appeal shall state the grounds of such appeal, and be signed by the appellant or his counsel or agent, and the sheriff or court shall order a copy of the appeal to be served on the clerk to the Commissioners, and appoint him within six days after such service to lodge answers thereto, and shall thereafter hear parties and determine the matter of the appeal, and shall make such order thereon, either confirming, quashing, varying, or redressing, the order, resolution, deliverance, or act appealed against, and shall award such costs to either of the parties as the sheriff or court shall think fit: Provided always, that the judgment of the sheriff-substitute shall be subject to review by the sheriff, and, subject to this appeal to the sheriff, the judgment of the sheriff-substitute shall be final, and not subject to review by any other court, except as after mentioned: Provided that any party dissatisfied with the judgment of the sheriff as erroneous in point of law, may appeal thereagainst to the Court of Session in terms and subject to the provisions of the Summary Prosecutions Appeals Act, 1875, provided that the limit of time for such appeal shall be six days instead of three days, as provided by the last cited Act." [58, 59, 61, 64, 66]

ABSTRACT OF BURGH POLICE (SCOTLAND) ACT, 1903 (3 Edw. 7. Ch. 33).

The sections of this Act bearing upon the sections given of the preceding or "Principal Act," and amending sections thereof or substituting sections therefor are printed *in extenso*, and embodied or added to the sections of the Principal Act given in this book.

54.—"(1) Any person being a manufacturer of, or merchant or dealer in, ice-cream or other similar commodity, who within the burgh—

"(*a*) Causes or permits ice-cream or other similar commodity to be manufactured, sold, or stored in any cellar or room in which there is an inlet or opening to a drain; or

"(*b*) In the manufacture, sale, or storage of any such commodity does any act or thing likely to expose such commodity to infection or contamination, or omits to take any proper precaution for the due protection of such commodity from infection or contamination; or

"(*c*) Omits on the outbreak of any infectious disease amongst the persons employed in his business to give notice thereof to the medical officer;

shall be liable for every such offence to a penalty not exceeding forty shillings.

"(2) In the event of any inmate of any building, any part of which is used for the manufacture of ice-cream or similar commodity, suffering from any infectious disease the medical officer may seize and destroy all ice-cream or similar commodity or materials for the manufacture of the same in such building, and the council shall compensate the owner of the ice-cream, commodity, or materials so destroyed" (*v.* also section 97 of this Act adoptive by counties).

The following important sections of this Act not embodied in, or added to, or amending of, sections in the Principal Act, and bearing directly upon sanitation are new and *adoptive*:—

82.—"(1) Every person who shall keep, or suffer to be kept or used, or use any house, building, part of a building, or other premises, as an ice-cream shop or aerated water shop without being registered in a register to be kept by the town council, who are hereby required to keep a register for that purpose, in which they shall enter the names of applicants without charge, shall be liable to a penalty not exceeding five pounds, and, in the event of such premises being continued to be kept or used for such purpose after conviction, to a continuing penalty not exceeding five pounds for every day during which the offence is committed or continued.

"(2) Section three hundred and sixteen of the Principal Act shall be deemed to confer power on the town council to make bye-laws in regard to the hours of opening and closing of premises registered under this section, the hours for business not being more restricted than fifteen hours daily, and the provisions of the Principal Act relating to bye-laws and the confirmation and enforcement thereof shall apply accordingly.

"(3) The town council may at any time authorise the inspection of any house, building, part of a building, or other premises used, or suspected of being used, as an ice-cream shop or aerated water shop, and the occupier, keeper, or other person having charge thereof shall give admission thereto at any time to the medical officer, sanitary inspector, constable, or any other person authorised in writing by the town council, and every occupier or keeper or other person having the charge of such

premises who shall not admit such authorised person on exhibition of his authority shall be liable to a penalty not exceeding two pounds.

"(4) A reference in this section to the Principal Act and section three hundred and sixteen thereof shall, in the case of any burgh named in Schedule II. to the Principal Act, be read and construed as a reference to the provisions of the local Act or Acts, conferring power to make bye-laws for police purposes and otherwise relating to such bye-laws and the confirmation and enforcement thereof.

"(5) In this section the expression 'ice-cream' shall include any preparation sold under the name of ice-cream or any similar title, whether containing milk or cream or not."

Supply of Milk from Diseased Cows

83. "In the sections of this Act under the heading 'Supply of milk from diseased cows':—

"The expressions 'dairy,' 'dairyman,' 'district,' 'local authority,' and 'medical officer' shall respectively have the same meanings as in the Public Health (Scotland) Act, 1897; and the expression 'veterinary surgeon' shall mean a member of the Royal College of Veterinary Surgeons approved by the local authority for the purposes of the said sections."

84.—"(1) Every person who knowingly sells, or suffers to be sold or used for human consumption within the burgh, the milk of any cow which is suffering from tuberculosis of the udder, shall be liable to a penalty not exceeding ten pounds.

"(2) Any person, the milk of the cows in whose dairy is sold or suffered to be sold or used for human consumption within the burgh, who, after becoming aware that any cow in his dairy is suffering from tuberculosis of the udder, keeps or permits to be kept such cow in any field, shed, or other premises along with other cows in milk, shall be liable to a penalty not exceeding five pounds.

"(3) Every dairyman who supplies milk within the burgh, and has in his dairy any cow affected with, or suspected of, or exhibiting signs of, tuberculosis of the udder, shall forthwith give written notice of the fact to the medical officers of the burgh and of the district in which such dairy is situated, stating his name and address and the situation of the dairy or premises where the cow is.

"Any dairyman failing to give such notice shall be liable to a penalty not exceeding forty shillings."

85. "It shall be lawful for the medical officer of the burgh or any person provided with, and if required exhibiting, the authority in writing of such medical officer, to take within the burgh for examination samples of milk produced or sold or intended for sale within the burgh."

86.—"(1) If milk from a dairy situate within the burgh is being sold or suffered to be sold or used within the burgh, the medical officer of the burgh or any person provided with, and if required exhibiting, the authority in writing of the medical officer of the burgh, may, if accompanied by a

veterinary surgeon, at all reasonable hours enter the dairy and examine the cows kept therein; and, if the medical officer of the burgh or such person has reason to suspect that any cow in the dairy is suffering from tuberculosis of the udder, he may require the cow to be milked in his presence, and may take samples of the milk, and the milk from any particular teat shall, if he so requires, be kept separate, and separate samples thereof be furnished.

"(2) If the medical officer of the burgh is of opinion that tuberculosis is caused, or is likely to be caused, to persons residing in the burgh from consumption of the milk supplied from a dairy situate within the burgh, or from any cow kept therein, he shall report thereon to the burgh local authority, and his report shall be accompanied by any report furnished to him by the veterinary surgeon, and the burgh local authority may thereupon serve on the dairyman notice to appear before them within such time, not less than twenty-four hours, as may be specified in the notice, to show cause why an order should not be made requiring him not to supply any milk from such dairy within the burgh until the order has been withdrawn.

"(3) If, in their opinion, the dairyman, being a dairyman whose dairy is situated within the burgh, fails to show cause why such an order may not be made as aforesaid, the burgh local authority may make the said order, and shall forthwith serve notice of the facts on the Local Government Board for Scotland.

"(4) The said order shall be forthwith withdrawn on the burgh local authority or their medical officer being satisfied that the milk supply has been changed, or that it is not likely to cause tuberculosis to persons residing in the burgh."

87.—"(1) If the medical officer of the burgh has reason to believe that milk from any dairy situate outside the burgh from which milk is being sold, or suffered to be sold or used, within the burgh is likely to cause tuberculosis to persons residing within the burgh, the medical officer of the burgh shall forthwith intimate the same to the medical officer of the local authority of the district in which such dairy is situate, and the medical officer of such local authority or some person provided with and, if required, exhibiting his authority in writing accompanied by a veterinary surgeon shall be bound forthwith to examine the cows therein, and if the medical officer of such local authority, or person authorised by him as aforesaid, has reason to suspect that any cow in the dairy is suffering from tuberculosis of the udder, he may require the cow to be milked in his presence, and may take samples of the milk, and the milk from any particular teat shall, if he so requires, be kept separate, and separate samples thereof be furnished, previous notice of the time of such examination having been given to the burgh local authority in order that the medical officer of the burgh, or a veterinary surgeon, may, if they so desire, be present at the examination, and the medical officer of the local authority of such district shall forthwith report the results of the examination, accompanied by the report of the veterinary surgeon (if any), to that local authority, or any committee of that local authority, appointed under

section fourteen of the Public Health (Scotland) Act, 1897, and shall also furnish a copy of such report to the burgh local authority.

"(2) The local authority of such district or any committee of the local authority appointed as aforesaid shall, unless the medical officers of the district and the burgh are both satisfied that there is at the dairy no cow suffering from tuberculosis of the udder, meet forthwith and consider the report or reports together with any other evidence that may be submitted by the parties concerned, previous notice of not less than twenty-four hours of their meeting and of the purpose thereof having been given to the dairyman and to the burgh local authority, and shall either make an order requiring the dairyman not to supply any milk from such dairy until the order has been withdrawn or resolve that no such order is necessary, and in the event of their making an order shall forthwith serve notice of the facts on the Local Government Board for Scotland and on the burgh local authority.

"(3) Where proceedings are taken or any order is made or refused to be made under this section by the local authority of a district other than a burgh it shall not be competent to appeal against the said proceedings or against the said order to the county council.

"(4) The local authority may require the dairyman not to supply milk either within or without the district, and shall give notice of the fact to the local authority of any district within which they believe milk to be supplied from such dairy.

"(5) Any such order shall be forthwith withdrawn on the local authority or their medical officer on their behalf being satisfied that the milk from the dairy is no longer likely to cause tuberculosis to persons, but notice shall be given to the burgh local authority of any proposal to withdraw the order, and an opportunity given to them of being heard and submitting evidence before the order is withdrawn."

88.—"(1) If any person, after an order under either of the two preceding sections has been made, supplies any milk or sells it for consumption, in contravention of the order, he shall be liable to a penalty not exceeding five pounds, and, if the offence continues, to a further penalty not exceeding forty shillings for every day during which the offence continues.

"(2) A dairyman shall not be liable to an action for breach of contract if the breach be due to an order under either of the two preceding sections.

"(3) Every dairyman and the persons in his employment shall render such reasonable assistance to the medical officer or such authorised person or veterinary surgeon as aforesaid as may be required by such medical officer, person, or veterinary surgeon for all or any of the purposes of the two preceding sections, and any person refusing such assistance or obstructing such medical officer, person, or veterinary surgeon in carrying out the purposes of such sections shall be liable to a penalty not exceeding five pounds.

"(4) It shall be open to the local authority, or any dairyman aggrieved by any resolution or order, or withdrawal of order, under either of the two preceding sections to appeal in a summary manner to a sheriff having

jurisdiction in the district in which the dairy is situate, and the sheriff may either make an order requiring the dairyman to cease from supplying or selling milk, or may vary or rescind or continue any order which has been made, and he may at any time withdraw any order made under either of the two preceding sections. Pending the disposal of any such appeal the order shall remain in force."

89. "If an order is made without due cause, or if the local authority unreasonably refuse to withdraw the order, the dairyman shall, if not himself in default, be entitled to recover from the local authority making the order full compensation for any damage which he has sustained by reason of the making of the order, or of the refusal of the local authority to withdraw the order, and the sheriff may determine and state whether an order the subject of appeal has been made without due cause, whether the local authority have unreasonably refused to withdraw the order, and whether the dairyman has been in fault."

90. "All expenses incurred by the local authority in pursuance of any section of this Act under the heading 'Supply of milk from diseased cows,' shall be chargeable on the public health general assessment leviable under the Public Health (Scotland) Act, 1897, and the local authority may also charge on the same rate any expenses incurred by them in the application by a veterinary surgeon of the tuberculin or other reasonable test for the purpose of discovering tuberculosis to any cow whose milk is, or was recently, being supplied within the district: Provided that no such test shall be applied except with the previous consent of the owner of such cow."

91. "The town council shall cause to be given public notice of the effect of the provisions of this Act relating to supply of milk from diseased cows by advertisement in a newspaper circulating in the burgh, and by hand-bills, and otherwise in such manner as they think sufficient, and the said provisions shall come into operation at such time, not being less than one month after the first publication of such advertisement as aforesaid, as the town council may fix."

92. "Penalties imposed by any section of this Act under the heading 'Supply of milk from diseased cows' shall be recoverable in any court having summary jurisdiction where the dairy in question is situated, at the instance of the local authority or of any public prosecutor in such court."

97. "A county council may, at a meeting called after due notice, by resolution adopt the sections of this Act whereof the marginal notes are respectively 'Manufacture and sale of ice-cream' and 'Ice-cream shops, etc., to be registered,' or either of such sections, and after a date to be specified in the resolution, the adopted section or sections shall have effect throughout the county, with the substitution of 'county' for 'burgh,' of 'county council' for 'town council,' and of the Local Government (Scotland) Act, 1889, and section fifty-seven thereof for the Principal Act and section three hundred and sixteen thereof.

"In this section the expression 'county' shall mean a county excluding any burgh or police burgh situate therein."

SECTIONS OF BURGH SEWERAGE, DRAINAGE, AND WATER SUPPLY (SCOTLAND) ACT, 1901

(1 Edw. 7. Ch. 24).

(*An Act to amend the Law in regard to the Sewerage and Drainage and Water Supply of Burghs in Scotland.*)

This short Act of ten sections repeals sections 101, 113, 133, 134, and 137 of the Public Health (Scotland) Act, 1897, as regards burghs, and section 232 of the Burgh Police Act, 1892. It amends section 227 of the Burgh Police Act, 1892, which section, as amended, is found under that Act in this book. It likewise amends sections 340 and 347 of the Burgh Police Act, 1892, not given in this book.

Part I.

1. "Where sums of money have been borrowed or are owing by the town council or commissioners of a burgh under any Act for purposes of sewerage and drainage or water supply, the town council as the authority under the Burgh Police (Scotland) Act, 1892 (hereinafter referred to as the Principal Act, 55 & 56 Vict. c. 55), as amended by the Town Councils (Scotland) Act, 1900 (63 & 64 Vict. c. 49), shall provide the sums necessary for repaying the principal and paying the interest of such sums out of the assessments hereinafter mentioned, and the said sums shall constitute a charge on the said assessments, and the creditors shall have all the powers, rights, and remedies at the passing of this Act exerciseable by a lender of money on the security of the assessments originally assigned to them, and the said assessments hereinafter mentioned shall be deemed to be assigned to such creditors in security of their debt."

2. "In any burgh, or in any special or separate drainage district formed therein under any Act, the expense incurred either before or after the passing of this Act for sewerage and drainage or water supply, as the case may be, within the same, or for the purposes thereof, and the sums necessary for repayment of any money borrowed therefor either before or after the passing of this Act, together with the interest thereof, shall be paid out of a sewer assessment or water assessment, as the case may be, which the town council of the burgh shall raise and levy on and within such burgh or (in the case of the sewer assessment) within such special or separate district, in the same manner, and with the same remedies and modes of recovery and incidents, as are provided for the public health general assessment therein.

"Provided that where a special or separate drainage district has been formed under the provisions of any Act, and drainage works have been executed and are maintained therein, the lands and heritages situated within such special or separate district shall not be liable to assessment for the expense of sewerage and drainage works in other parts of the burgh: Provided also that for shops the water assessment shall be chargeable only on one-fourth of the rental of the premises, unless in special circumstances the town council see cause to charge the ordinary rates,

and in that case it shall be lawful for any person who may think himself aggrieved to apply to the sheriff in the manner provided in the Principal Act.

"The sewer assessment and the water assessment together shall not in any burgh or special or separate drainage district exceed the rate of four shillings in the pound: Provided that if the produce of a rate of four shillings in the pound in any burgh or special or separate drainage district shall not be sufficient to meet the expenditure (including the annual charge for interest and repayment of debt) *bonâ fide* incurred or contemplated within such burgh or special or separate district, it shall be lawful to increase such rate to such extent as may have been approved of by the Local Government Board for Scotland.

"Provided also, that it shall not be lawful to impose any rate in respect of the expenditure within any special or separate drainage district upon any premises without such district."

3. "All special or separate drainage districts that may have been formed in any burgh under any Public Health Act shall, subject to the provisions of this Act, be deemed to be drainage districts under the Principal Act, and any special or separate water supply districts which have been so formed shall cease to exist as such and shall be united to the other parts of the burgh for the purposes of water supply, and all rights and liabilities connected therewith: Provided that nothing herein contained shall affect any special water supply district partly within a county and partly within a burgh, or the provisions relating thereto of section eighty-one of the Local Government (Scotland) Act, 1889 (52 & 53 Vict. c. 50), as amended by section forty-four of the Local Government (Scotland) Act, 1894 (56 & 57 Vict. c. 73)."

4. "(1) Section two hundred and thirty-three and section two hundred and thirty-six of the Principal Act shall be read as if the sewer assessment hereinbefore mentioned were substituted for the sewer rates therein mentioned (amendment of 55 & 56 Vict. c. 55).

"(2) Section two hundred and sixty-four of the Principal Act shall be read as though for the words 'portion of the burgh general assessment applicable to the water supply' the words 'water assessment' were substituted.

"(3) Section three hundred and forty-seven of the Principal Act shall be read as though for the words 'burgh general assessment so far as it is applicable to water' the words 'water assessment' were substituted.

"(4) Section three hundred and sixty-three of the Principal Act shall be read and have effect as if for the words 'said assessments' the words 'sewer assessments' were substituted.

"(5) Notwithstanding anything contained in section two hundred and sixty-nine of the Principal Act, the provisions of that Act with respect to supply of water shall apply in the case of any burgh which is supplied with water by the town council thereof under the powers of any local Act or Acts."

5. "The powers and duties of the town council of any burgh, as the authority under the Principal Act, with reference to sewerage and drainage

or water supply shall extend to the whole area of the burgh as existing for the purposes of the Public Health (Scotland) Act, 1897 (60 & 61 Vict. c. 38), and the town council of any burgh, as the authority under the Principal Act, in addition to the powers conferred upon them by the Principal Act, or any other Act, shall, with reference to sewerage and drainage or water supply within such area, have the same rights, powers, and privileges as are conferred by the Public Health (Scotland) Act, 1897, upon local authorities under that Act in districts other than burghs, with the exception of the rights, powers, and privileges conferred by sections one hundred and twenty-two and one hundred and thirty-one of the last-mentioned Act, to which sections the present section shall not apply, and in so far as necessary for giving effect to this enactment the last-mentioned Act and the Acts and parts of Acts incorporated therewith are, subject to the necessary modifications, incorporated with the Principal Act.

"Provided that all costs and charges incurred by the town council in the exercise of such rights, powers, and privileges shall be provided for out of the sewer assessment or water assessment before mentioned, as the case may be, and that where it shall be necessary for the town council to borrow money for the purposes of sewerage and drainage or water supply they shall be entitled to do so on the security of the sewer assessment or water assessment hereinbefore mentioned, in lieu of the assessments mentioned in the Principal Act, or the Public Health (Scotland) Act, 1897, as the case may be."

Part II.

6. "(1) Section one hundred and forty-seven of the Public Health (Scotland) Act, 1897 (amendment of 60 & 61 Vict. c. 38), shall be read as though the words 'or in the Burgh Police (Scotland) Act, 1892,' were inserted after the word 'herein.'

"(2) Section two hundred and sixty-one of the Principal Act shall be read and have effect as if for the words 'for other purposes' the words 'for these purposes' were substituted."

7. "The Acts specified in the schedule to this Act are hereby repealed to the extent mentioned in the third column in so far as the same apply to burghs to which this Act applies from its commencement."

8. "The term 'burgh' in this Act has the meaning assigned to it in the Principal Act, but Part I. of this Act shall not apply—

"(1) To any burgh to which the Principal Act does not apply;

"(2) To any burgh in which at the passing of this Act a local Act (including an Act confirming a Provisional Order) is in force with respect to sewerage, drainage, or water supply.

Provided that it shall be in the power of the town council of any burgh to which Part I. of this Act does not apply from its commencement by resolution to adopt Part I. of this Act, and from and after the date specified in such resolution Part I. of this Act shall come into force in the burgh, and the Acts specified in the schedule to this Act shall in so far as the same apply to such burgh be deemed to be repealed to the extent

mentioned in the third column thereof and all local Acts (including as aforesaid) which apply exclusively to such burgh, so far as inconsistent with or dealing with the same matters as Part I. of this Act, shall also be repealed, which Acts or portions of Acts shall be specified in the resolution. Every such resolution shall be forthwith communicated to the Secretary for Scotland."

9. "This Act shall come into operation on the fifteenth day of May, one thousand nine hundred and two, which date is herein called the commencement of this Act."

10. "This Act may be cited as the Burgh Sewerage, Drainage, and Water Supply (Scotland) Act, 1901, and shall apply to Scotland only."

ABSTRACT OF LOCAL GOVERNMENT (SCOTLAND) ACT, 1889 (52 & 53 VICT. CH. 50).

(*As amended by Local Government Act*, 1894, *and by Public Health (Scotland) Act*, 1897).

14. "Where a burgh contains a population of less than seven thousand, then on and after the appointed day all powers, duties, and liabilities of the magistrates and council of such burgh as the local authority under the Contagious Diseases (Animals) Acts, and the Destructive Insects Act, 1877, within the burgh shall cease, and subject to the provisions of this Act as to the existing officers of the said local authority, the county council shall have the same powers and duties and shall have transferred to it the same liabilities as regards the administration of the Contagious Diseases (Animals) Acts, and the Destructive Insects Act, 1877, or any order made thereunder, within such burgh as they have in every other part of the county."

17. "With respect to the transference to the county council of the powers and duties of certain local authorities under the Public Health Acts, the following provisions shall have effect:—

"(1) For the purposes of the administration of the laws relating to public health, the county shall, except as hereinafter provided, be divided into districts in the manner provided in this Act, and there shall be a district committee for each such district constituted as provided in this Act.

"(2) A district committee shall, subject to the provisions of this Act, be the local authority under the Public Health Acts, and as such shall have and may exercise within its district all the powers and duties and be subject to all the liabilities by this Act transferred to or conferred on the county council with respect to the administration of the laws relating to public health, except those relating to medical officers or sanitary inspectors for the county, and subject to the provisions following:—

"(*a*) A district committee shall have no power of raising money by rate or loan:

"(*b*) The county council shall make general regulations for the government of a district committee, and such committee shall conform to those regulations:

"(*c*) Any five ratepayers in the district may appeal from any proceedings or order of a district committee to the county council, who shall have power to confirm or vary or rescind such proceedings or order; and such proceedings or order shall be stayed pending the appeal, but the power of appeal hereby given shall not apply to any proceedings for the removal of a nuisance; and nothing in this Act contained shall affect or prejudice any proceedings to enforce the provisions of the Public Health Acts, save only that when necessary such proceedings shall be taken by or against the district committee instead of against the parochial board as local authority under the said Acts. The medical officer or the sanitary inspector of the county or district may appeal to the county council, and the county council may on such appeal make an order under the Public Health Acts.

"(3) The power of appointing officers under the Public Health Acts is hereby varied, so that it shall be lawful to appoint such officers either for the whole district or for any part thereof or parish therein as shall be deemed expedient. The officers so appointed shall have, as nearly as may be, within the areas respectively assigned to them the same powers, duties, rights, and tenure (if any) as the officers, as the case may be, of the existing local authority have within the area of the parish.

"(4) The sums necessary to meet any deficiency in respect of the expenditure under the Public Health Acts within any district shall be levied by the county council by a rate imposed on all lands and heritages within such district, or within any special drainage or water supply district within the meaning and subject to the provisions of the Public Health Acts." [1, 68, 69]

18. "(6) No works involving capital expenditure (in this Act referred to as capital works) shall be undertaken in any county, or any district thereof, under or in pursuance of powers transferred or conferred by this Act, or any other act, without the consent in writing of the standing joint committee appointed in terms of this section.

"(7) Capital works shall include the erection, rebuilding, or enlargement of buildings, the construction, re-construction, or widening of roads and bridges, the construction or extension of drainage or water supply works, and shall also include the acquisition of land or of any right or interest or servitude in or over land or water for the purposes of any capital work."

52. "(1) The council of every county shall appoint and pay a medical officer or medical officers and a sanitary inspector or sanitary inspectors, who shall not hold any other appointment or engage in private practice or employment without express written consent of the council.

"(2) The county council and any district committee, as the local

authority under the Public Health Acts, may from time to time make and carry into effect arrangements for rendering the services of such officer or officers regularly available in the district of the district committee, on such terms as to the contribution by the district committee to the salary of any medical officer or sanitary inspector, or otherwise, as may be agreed, and the medical officer or sanitary inspector shall have within such district all the powers and duties of a medical officer or sanitary inspector appointed by a district committee.

"(3) So long as such an arrangement is in force, the obligation of the district committee as the local authority under the Public Health Acts to appoint a medical officer or sanitary inspector shall be deemed to be satisfied without the appointment of a separate medical officer or sanitary inspector."

53. "(1) Every medical officer and sanitary inspector under the Public Health Acts for a district in any county shall send to the county council a copy of every report of which a copy is for the time being required by the regulations of the Board of Supervision (which they are hereby authorised to make) to be sent to that Board.

"(2) If it appears to the county council that the Public Health Acts have not been properly put in force within any district, or that any other matter affecting the public health of the district requires to be remedied, the council may cause a representation to be made to the Board of Supervision on the matter."

54. "(1) No person shall hereafter be appointed the medical officer of any county or district or parish, unless he is a registered medical practitioner.

"(2) No person shall after the first day of January one thousand eight hundred and ninety-three be appointed the medical officer under the Public Health Acts for a county or district or parish which contained, according to the last published census for the time being, a population of thirty thousand or upwards, unless he is qualified as above mentioned, and also is registered on the Medical Register as the holder of a diploma in sanitary science, public health, or State medicine under section twenty-one of the Medical Act, 1886.

"(3) No person shall, except with the express consent of the Board, be appointed as the sanitary inspector for a county unless he has been during the three consecutive years preceding his appointment the sanitary inspector of a local authority under the Public Health Acts.

"(4) Every medical officer and every sanitary inspector appointed under this Act or under the Public Health Acts shall be removable from office only with the sanction of the Board."

55. "(1) On and after the appointed day a county council shall have power, in addition to any other authority, to enforce the provisions of the Rivers Pollution Prevention Act, 1876 (subject to the restrictions in that Act contained), in relation to so much of any stream as is situate within, or passes through or by, any part of their county, and for that purpose they shall have the same powers and duties as if they were a sanitary authority within the meaning of that Act, or any other authority

having power to enforce the provisions of that Act, and the county were their district.

"(2) Any county council shall have power to contribute towards the expenses of any prosecution under the said Act instituted by any other county council or by any sanitary authority.

"(3) The Secretary for Scotland, by provisional order made on the application of the council of any of the counties and burghs concerned, may constitute a joint committee or other body representing all the counties and burghs through or by which a river, or any specified portion of a river, or any tributary thereof, passes, and may confer on such committee or body all the powers of a sanitary authority under the Rivers Pollution Prevention Act, 1876, or such of them as may be specified in the order, and the order may contain such provisions respecting the constitution and proceedings of the said committee or body as may seem proper, and may provide for the payment of the expenses of such committee or body by the counties and burghs represented by it, and for the audit of the accounts of such committee or body, and their officers.

"A provisional order made under this section shall be of no effect until it is confirmed by Parliament."

73. "(8) The councillors or members of district committees appointed to represent a burgh or an electoral division consisting of a police burgh or part of a police burgh shall not act or vote in respect of any matters involving expenditure to which such burgh does not contribute or for which the lands and heritages in such burgh or police burgh are not assessed."

74. "(1) A county council appointing under this Act any committee may from time to time, subject to the provisions of this Act, make, vary, and revoke regulations respecting the quorum and proceedings of such committee; but, subject to such regulations, the proceedings and quorum and the place of meeting, whether within or without the county, shall be such as the committee may from time to time direct, and the chairman at any meeting of the committee shall have a casting vote as well as a deliberative vote.

"(2) Every committee shall report its proceedings to the county council by whom it was appointed."

77. (*As amended by Local Government Act*, 1894.)—Enacts that every county shall be divided into districts for public health purposes.

78. (1) When a county is divided into districts, the district committee for health purposes shall consist of the county councillors for the electoral divisions comprised in the district, together with one representative from the parish council of each parish comprised or partly comprised therein.

(2) When a county is not divided into districts the district committee for public health purposes shall consist of the county councillors, together with one representative from each parish comprised or partly comprised within the county.

Section 19. (7) Local Government Act, 1894, with regard to the above reads as follows:—"The representative from a parish council on a district

committee of a county council, or on the county council sitting as a district committee where a county is not divided into districts, shall, subject to the provisions of section seventy-eight of the Principal Act, be appointed annually at the statutory meeting of the parish council from their own number: provided always that, in the case of parishes partly landward and partly burghal, he shall be appointed by the landward committee from their own number."

81. (*As amended by Public Health Act*, 1897, *v. Schedule I.*)—"With respect to special drainage districts or special water supply districts the following provisions shall have effect:—

"(1) Where a special drainage district or special water supply district has been formed in any parish under the Public Health Acts, the district committee may, subject to regulations to be from time to time made with the consent of the county council, appoint a sub-committee for the management and maintenance of the drainage or water supply works, and such sub-committee shall in whole or in part consist of parish councillors of the parish or parishes in which the special district is situated whether members of the district committee or not.

"(2) Where a special drainage district or special water supply district is partly within a county and partly within a burgh or police burgh, the sub-committee appointed under the immediately preceding sub-section and such number of the town council or police commissioners (as the case may be) of such burgh or police burgh as failing agreement the Secretary for Scotland may determine having regard to all the circumstances of the case, shall be charged with the management and maintenance of the drainage or water supply works within such special district, and the determination of the Secretary for Scotland may provide for the regulation of the proceedings and for the allocation and payment of the expenses incurred under this sub-section;

"(3) Where a special drainage district or special water supply district is wholly within a police burgh formed after the passing of this Act, the police commissioners of such police burgh shall become the local authority under the Public Health Acts for such special district." [70, 71, 72]

105. "In this Act, if not inconsistent with the context, the following terms have the meanings hereinafter respectively assigned to them; that is to say,—

"The expression 'county' means a county exclusive of any burgh wholly or partly situate therein, and does not include a county of a city.

"The expression 'burgh' means any royal or parliamentary burgh. [1, 73]

"The expression 'police burgh' has the meaning assigned to it in the Burgh Police (Scotland) Act, 1892.

"The expression 'owner' has the same meaning as the expression 'proprietor' has in the Valuation Acts, and shall not include a crofter within the meaning of the Crofters' Holdings (Scotland) Act, 1886.

ABSTRACT OF LOCAL GOVERNMENT (SCOTLAND) ACT, 1894 (57 & 58 VICT. CH. 58).

(*As amended by Public Health (Scotland) Act*, 1897.)

4. "(1) The Board shall consist of a President, being the Secretary for Scotland, the Solicitor-General for Scotland, and the Under Secretary for Scotland, together with three appointed members, of whom one shall also be appointed Vice-President and Chairman of the Board in the absence of the President, the second shall be a member of the Faculty of Advocates of not less than seven years' standing, and the third shall be a registered medical practitioner, who is also registered on the Medical Register as the holder of a diploma in sanitary science, public health, or State medicine, under section twenty-one of the Medical Act, 1886, or has been for a period of not less than five years medical officer of a county or burgh. Such third appointed member shall not hold any other appointment or engage in private practice or employment.

"(2) The appointed member shall be appointed by Her Majesty, on the recommendation of the Secretary for Scotland, at any time after the passing of this Act, and from time to time as vacancies occur, and shall receive out of moneys provided by Parliament such salaries as the Treasury may assign. They shall hold office during Her Majesty's pleasure.

"(3) The Board shall be deemed to be established from and after the date of the first appointment of a Vice-President under this Act."

24. (1) To provide or acquire buildings for public offices, etc.

"(3) With a view to the due enforcement of the provisions of the Public Health Acts, a parish council shall have and may exercise, within, or in respect to, the parish the same powers as are conferred upon any two householders by section ninety-six of the Public Health (Scotland) Act, 1867, and upon any five ratepayers by section seventeen of the Principal Act, and upon a county council by sub-section (2) of section fifty-three of the Principal Act.

"(6) A parish council shall have the same power of making any complaint or representation as to unhealthy dwellings or obstructive buildings as is conferred on inhabitant householders by the Housing of the Working Classes Act, 1890 (53 & 54 Vict. c. 70)."

44. "(1) It shall be lawful in a county for a parish council or for any two or more parish councils, or for not fewer than ten parish electors of any landward parish or of the landward part of any parish partly landward and partly burghal, to make a requisition in writing to the district committee of the county council, or when a county is not divided into districts to the county council, calling upon them to form such parish or parishes or landward part of a parish or any portion or portions thereof into a special district for the following purposes or any one or more of them; that is to say,—

(*a*) The lighting of the special district and the adoption for such purpose by the district committee or county council as the case may be of the provisions contained in sections ninety-nine to one hundred and five, inclusive, of the Burgh Police (Scotland) Act, 1892, or any one or more of them: [74, 75]

(*b*) The scavenging of, and the removal of dust, ashes, and other refuse from, the streets, roads, footpaths, lands and premises in such special district, and the adoption for such purposes by the district committee or the county council, as the case may be, of the provisions contained in sections one hundred and seven to one hundred and twenty-seven, and two hundred and fifty-three to two hundred and fifty-five, inclusive, of the Burgh Police (Scotland) Act, 1892, or any one or more of them: [45]

(*c*) The provision and maintenance of public baths or bathing places, wash-houses, and drying grounds, and the adoption for such purposes by the district committee or county council, as the case may be, of the provisions contained in sections three hundred and nine to three hundred and fourteen, inclusive, of the Burgh Police (Scotland) Act, 1892, or any one or more of them.

"(2) Upon such requisition being received, the district committee or county council, as the case may be, shall be bound to meet, after twenty-one clear days' notice, and shall consider the propriety of forming such parish or landward part of a parish or portion thereof into a special district, and shall by resolution either approve or disapprove of the formation of a special district (which shall in no case include a police burgh or any portion thereof) for the purposes stated in the requisition or any one or more of them, and, if they approve thereof, shall define the boundaries of such special district and specify which of the provisions of the Burgh Police (Scotland) Act, 1892 (55 & 56 Vict. c. 55), referred to in the preceding sub-section are to be adopted therein. Such resolution shall be final, subject to the provisions of sub-section three of this section, and in the event of the district committee or county council, as the case may be, disapproving of the formation of a special district as proposed in a requisition, it shall not be competent to make another requisition to the same effect until after the expiration of twelve months. A copy of every such resolution shall be forthwith published in one or more newspapers circulating in the district and transmitted to the Board and to the county council. [45]

"(3) Where the proposed special district is co-extensive with or comprises the whole or part of the area of any special drainage or water supply district formed under the Public Health Acts, the consent of the county council shall be required to any resolution approving of the formation of a special district under this section, and in giving or refusing such consent the county council shall take into consideration the whole circumstances of the case, including the amount of the rates levied for the time being under the Public Health Acts and the Principal Act within the proposed special district, and the county council may consent to the resolution either with or without modifications.

"(4) On the adoption by a district committee or county council, as the case may be, of any of the provisions above mentioned, such provisions shall have effect within or in relation to the special district, subject to the provisions of the Fourth Schedule to this Act annexed.

"(5) The area of a special district formed under this section may be enlarged or altered, and two or more special districts may be combined, from time to time, by resolution of the district committee or county council, as the case may be, in terms of this section, with or without a requisition.

"(6) (*As amended by Schedule I. Public Health Act*, 1897.) Any expenditure attending the formation of a special district, or the carrying out within such special district of the purposes of this section or of any of them, shall be paid out of an assessment to be imposed by the county council within the special district, to be called the special district rate, and levied along with and as an addition to and in excess of the public health rate, and with the same remedies and modes of recovery: provided that such special district rate shall not exceed ninepence in the pound on the annual value of the lands and heritages within the special district, and a county council may borrow for such of the said purposes as the Secretary for Scotland may by order prescribe on the security of such special district rate.

"(7) The total amount required to be raised (so far as within a county) by a public health rate (including any special district rate) may be certified by the county council to the parish council, and may be collected by the parish collector along with the poor rate of the parish. The amount collected in such case shall be paid over to the county council without any deductions, but the expense of collection (including the reasonable remuneration of the collector) shall be a debt from the county council to the parish council.

"(8) Where a special district has been formed under this section, the district committee or the county council, as the case may be, may, subject to regulations to be from time to time made with the consent of the county council, appoint annually a sub-committee for carrying out the purposes for which such special district has been formed, and such sub-committees shall in whole or in part consist of parish councillors of the parish or parishes in which the special district is situated, whether members of the district committee or not.

"(9) From and after the first election in a county of parish councillors, sub-section one of section eighty-one of the Principal Act shall be read as if for the words 'shall in part consist of persons, whether members of the district committee or not, who are resident within the special drainage district or special water supply district,' there were substituted the words 'shall in whole or in part consist of parish councillors of the parish or parishes in which the special district is situated, whether members of the district committee or not,' and the number of a sub-committee appointed under the said section may, failing agreement between a district committee or county council and a town council or the commissioners of a police burgh, be determined by the Secretary for Scotland.

"(10) Upon the formation of a special lighting district under the provisions of this section it shall be lawful for the district committee to adopt the Burghs Gas Supply (Scotland) Act, 1876, and any Act amending the same, but in such case the provisions of the Principal Act with respect to capital, expenditure, borrowing, and audit of accounts shall apply in lieu of the corresponding provisions of the former Acts or of this section; and in the application of the former Acts the expression 'burgh' shall be construed to mean special lighting district, 'commissioners' 'town council' and 'commissioners of police' to mean district committee, and 'elector' and 'ratepayer' to mean a person registered as a county elector the subject of whose qualification is situated within the special lighting district."

54. "The expression 'parish' means a parish *quoad civilia*, which is at the passing of this Act, or may hereafter be constituted a separate parish for the purposes of settlement and relief of the poor."

ABSTRACT OF VACCINATION (SCOTLAND) ACT, 1863 (26 & 27 Vict. Ch. 108).

1. Makes it the duty of parish councils to appoint a vaccinator or vaccinators (qualified medically and registered) to every parish or combination of parishes.

2. Remuneration shall not be less than one shilling and sixpence for each successful vaccination performed by vaccinator within two miles by nearest road of his residence, and two shillings and sixpence beyond that distance.

4. The parish council must send to the Local Government Board names of vaccinators.

5. The parish council must conform to regulations made by the Local Government Board.

7. Vaccination, and medical or surgical treatment incidental to it, shall not be considered parochial relief.

8. Lays the duty of vaccination of children upon parents or guardians, and that within six months after a child's birth, and makes it the duty of the vaccinator to deliver to the parents or guardians a certificate of successful vaccination. When operation has been successful, this certificate to be transmitted (within three days of being granted) to the registrar of the district. [76]

9. If child is not in a fit state for vaccination, the medical practitioner must grant a certificate to that effect, which certificate shall be in force for not longer than two months, and which shall be renewed each two months, if need be, until such child has been successfully vaccinated, his granting meanwhile a fresh certificate of unfitness at each period.

10. If a child has been vaccinated three times unsuccessfully, the medical practitioner may grant a certificate of insusceptibility.

11. Registrar must furnish printed forms to parent or guardian.

12. In certain insular, Highland, and other districts, or portions of the same, the provisions of clauses 8, 9, 10, and 11 may be modified upon application of parish council to Local Government Board, who may from time to time frame such modifications as they think proper, and have them approved of by the Lord Advocate. Further, in such cases, if the parish council apply to the Local Government Board for a medical practitioner to travel through such districts to vaccinate, the Local Government Board may fix remuneration to medical practitioner, and allocate charges therefor to parishes, but remuneration shall in no case exceed three shillings and sixpence over and above travelling expenses.

15. The registrar must keep registers of "successful," "insusceptible," and "postponed" cases, with dates, etc.

17. This section attaches a penalty not exceeding twenty shillings (plus one shilling for registrar for notice) on parent or guardian for not transmitting a certificate, etc., to registrar within ten days after getting notice to do so. Failing payment there is liability to imprisonment.

18. Enacts that every six months the registrar must transmit to the inspector of poor of the parish or combination a list of names and addresses of those who have failed in transmitting a certificate in terms of this Act, and the inspector shall lay the same before the parish council, who shall then issue written notice to defaulters, and issue an order to vaccinator to vaccinate persons named, not less than ten nor more than twenty days after date of notice. Refusal to allow vaccination entails a penalty of twenty shillings, and failing payment, imprisonment not exceeding ten days. [76, 77, 78]

19. The registrar must yearly supply to the Principal Secretary of State a list of "successful," "insusceptible," and "postponed" cases.

21. Vaccinators must keep a book of persons vaccinated.

23. Vaccinators must transmit to the registrar particulars of certificates within forty-eight hours of their date, under penalty of twenty shillings for each omission.

24. "Any person who shall produce or attempt to produce in any person, by inoculation with variolous matter, or by wilful exposure to variolous matter, or to any matter, article, or thing impregnated with variolous matter, or wilfully by any other means whatever produce the disease of smallpox in Scotland, shall forfeit a sum of five pounds, which shall be recoverable, and shall be applied in the same manner as penalties are directed to be recovered and applied under the provisions of this Act."

25. Deals with recovery of penalties.

30. The expression "the district" shall mean and include the registration district for births, marriages, and deaths at the time existing. [77]

ABSTRACT OF THE HOUSING OF THE WORKING CLASSES ACT, 1890 (53 & 54 VICT. CH. 70).

(*The amending Acts of* 1893, 1894, 1900, *and* 1903 *do not apply to Scotland.*)

When this Act was put upon the statute book, the Board (then the Board of Supervision) issued a circular to local authorities giving a brief summary of the leading provisions of the Act. The sections so summarised are produced here, and are as follows:—

PART I.—UNHEALTHY AREAS.

3. "Refers to unhealthy areas or groups of buildings, and applies to *burghs* only.

4, 5. "Provides for representation being made to the local authorities *by the medical officer*, that within a certain area of the burgh, houses or groups of houses are unfit for human habitation, or are, from sanitary defects, dangerous to health, and that the evils cannot be effectually remedied, otherwise than by an improvement scheme for the rearrangement and reconstruction of the streets and houses within such area. On receiving such a representation, the local authority are required to take it into consideration and, if satisfied of the truth thereof and of the sufficiency of their resources, to proceed with an improvement scheme. Provision is made for such schemes being carried out under provisional orders, confirmed by Act of Parliament in the usual manner. (Sections 6 to 23.)

"The law as to the compensation payable in connection with such schemes has been amended with the view of preventing exorbitant claims in respect of insanitary or uninhabitable property. (Sections 21 and 22.)

"Provision is also made for meeting the necessary expenses and for borrowing on the security of the rates. (Sections 24 and 25.)

PART II.—UNHEALTHY DWELLING-HOUSES.

"Part II. applies both to *burghs* and to *rural districts*.

"This part of the Act declares that it shall be the duty of the local authority to cause inspection to be made of their district, with a view to ascertain whether any dwelling-house therein is in a state so dangerous or injurious to health as to be unfit for human habitation. It also makes it the duty of *the medical officer*, either on his own initiative, or on the complaint of four or more householders, to make a representation to the local authority with regard to any such house, and the local authority are required to take proceedings under the Public Health Act to have the house closed until it is rendered fit for habitation. If the house is not rendered habitable, the local authority are empowered to order its demolition, and if the owner fails to carry out the order, the local authority are themselves required to take down the building. When a building is demolished under the above provisions, no insanitary building is allowed to be erected on the site. (Sections 30, 31, 32, 33, and 34.)

"Extensive powers are also given with respect to *obstructive buildings*, *i.e.*, buildings which, though not themselves unfit for habitation, affect the sanitary condition of other buildings by stopping ventilation, or by preventing remedial measures being taken in respect of such other buildings. (Section 38.)

"Provision is further made for improvement schemes on a smaller scale than those provided for in Part I., and with a simpler procedure. Orders in connection with such schemes do not require to be confirmed by Parliament unless a petition has been presented against them. (Section 39.)

"It is provided by section 52 that a representation by the medical officer of the county, submitted to the county council, and forwarded by them to the local authority of any district in the county, shall have the like effect as a representation from the district medical officer. (Section 52.)

Part III.—Working Class Lodging-Houses.

"Part III. of the Act refers to 'Lodging-Houses for the Working Classes,' which expression includes 'separate houses or cottages for the working classes, whether containing one or several tenements.' The term 'cottage' may include 'a garden of not more than half an acre, provided that the estimated annual value of such garden shall not exceed three pounds.' (Section 53.)

"Part III. may be adopted by any local authority, but in the case of rural local authorities the adoption must be preceded by an enquiry and certificate by the Board of Supervision. When the adoption is completed the local authority may proceed to provide lodging-houses for the working classes, which they may do either by themselves building such houses, or by purchasing or leasing existing lodging-houses, or by converting other buildings into such houses. They are also empowered to fit up and furnish the lodging-houses which they provide. The management of the lodging-houses is vested in the local authority, who may make bye-laws for regulating them. (Sections 54, 55, 56 to 60, 61, 62, and 96.)

"Provision is made for meeting the expenses out of the public health assessment, and for borrowing on the security of that assessment; and in the case of rural districts it is further provided that the assessment is to be confined to the parish or parishes within which the expenses are incurred. (Sections 65, 66, and 96 (2)).''

ABSTRACT OF FACTORY AND WORKSHOPS ACT, 1901 (1 Edw. 7. Ch. 22).

(*As it applies to Scotland.*)

The Act consolidates with amendments the Factory and Workshops Acts.

The leading provisions of this Act given in a memorandum issued by the Home Office as to the duties of local authorities regarding it are as follows:—

DEFINITIONS.

Factories include (1) all places in which mechanical power is used in aid of the manufacturing processes; and (2) all places, whether mechanical power is used or not, in which the industries specified in Part I. of Schedule VI. to the Act are carried on (that is, print works, bleaching and dyeing works, earthenware works, lucifer match works, percussion cap works, cartridge works, paper staining works, fustian cutting works, blast furnaces, copper mills, iron mills, foundries, metal and india rubber works, paper mills, glass works, tobacco factories, letterpress printing works, bookbinding works, flax scutch mills, electrical stations).

Workshops include—

(1) The places specified in Part II. of Schedule VI. (that is, hatworks, ropeworks, bakehouses, lace warehouses, ship-building yards, quarries, pit banks of metalliferous mines, dry cleaning works, carpet beating works, and bottle washing works), unless mechanical power is used and they are in consequence factories within the meaning of the Act. (The definitions of these places should be consulted in the schedule of the Act.)

(2) Any other premises (not being factories) in which manual labour is exercised by way of trade or for purposes of gain in or incidental to the making, altering, repairing, ornamenting, finishing or adapting for sale of any article and to or over which the employer of the persons working there has the right of access or control.

(3) Any workplace (termed in the Act "tenement workshop") in which "with the permission of, or under agreement with, the owner or occupier, two or more persons carry on any work which would constitute the workplace a workshop if the persons working therein were in the employment of the owner or occupier." These are included for the first time by the Act of 1901. Previously they were partially or wholly excluded because some or all of the persons working there were not employed but worked on their own account. Instances of tenement workshops are (*a*) the Sheffield file-cutting shops where file-cutters work on their own account with or without other persons to help them, at stalls hired by them from the owner or occupier of the shop; (*b*) journeymen tailors' workshops where journeymen tailors work on their own account, with or without other persons to help them, each hiring a separate "sitting" or place to work at from the owner or occupier of the workshop. These will for the future be deemed to be workshops within the meaning of the Factory Act.

Laundries, except when on factory or workshop premises, when they then form part of the factory or workshop and are subject to all the provisions of the Act, do not come within the definitions of "factory" and "workshop"; but under sec. 108 of the Act, they are so far as sanitation and means of escape from fire are concerned to be treated as factories if mechanical power is used; if mechanical power is not used,

as workshops. Laundries however which are worked by inmates of a prison, reformatory school, industrial school or any institution subject to inspection under other Acts or by inmates of a *bona fide* religious or charitable institution or by members of the same family dwelling on the premises, are excluded from the Act, if the inmates of the prison, etc., or the members of the family work the laundry by themselves or with the assistance of not more than two persons from outside.

Factories and workshops belonging to or in the occupation of the Crown are excluded from the jurisdiction of the L.A., the powers of the L.A. being exercised in regard to them by the inspector of factories (sec. 150).

"*Workplace*" is not defined in the Act, but in a case under sec. 38 of the Public Health (London) Act, 1891, where the same phrase as in this Act occurs, viz., "factory, workshop, and workplace," it was held that the word is not to be limited to places where something is being manufactured or made, but includes any "place where work is done permanently, and where people assemble together to do work permanently of some kind or other." It is therefore a word of wider signification than the word "workshop." In the case in question a stable and stable-yard where men were employed as cab cleaners and horse keepers was held to be a workplace. Similarly the Secretary of State has been advised that the kitchens of restaurants, etc., though they are not workshops, come within the meaning of the term "workplace."

Factories.

In the case of factories the duties of a L.A. are few. The L.A. is charged with the duty of seeing that every factory in its district is provided with means of escape in case of fire; and also has special duties in regard to domestic factories and underground bakehouses. These duties, which apply also in the case of workshops, will be further referred to below. Another duty in regard to factories, though not arising under the Factory and Workshop Act, is the enforcement of the requirement in sec. 29 of the Public Health (Scotland) Act, as to the provision of suitable and sufficient sanitary conveniences.

Workshops and Workplaces.

In regard to workshops and workplaces, L.As. have important duties, which may be classified under four heads: (1) the sanitary condition of workshops and workplaces generally; (2) provision of means of escape from fire; (3) special sanitary regulations for bakehouses; (4) home-work.

(i.) *Sanitation.* (Secs. 2, 3, 7, and 8).

The L.A. is made the authority responsible for the sanitary condition of the workshops and workplaces in its district, while *the factory inspector is responsible for the sanitary condition of factories.* "Sanitary conditions" include (*a*) the cleanliness, (*b*) air space, (*c*) ventilation, and (*d*) drainage of the floors of workshops and workplaces. For these purposes the provisions of sec. 16 of the Public Health (Scotland) Act, 1897, apply

and are supplemented by additional provisions in the Factory Act. *It should be noted that the other sanitary provisions in Part I. of the Act, viz., with regard to temperature and sanitary conveniences* (secs. 6 and 9) *are not brought under the law relating to public health and will therefore be enforced by the factory inspectors.*

The requirements of the Act in the matters above-mentioned, which it is the duty of a L.A. to enforce, are as follows :—

(a) *Cleanliness* (sec. 2).—Every workshop and workplace must be kept in a cleanly state and free from effluvia, and if not so kept may be dealt with by the L.A. as a nuisance under sec. 16 of the Public Health (Scotland) Act, 1897.

If the medical officer of health, or the S.I. certifies that it is necessary for the health of the persons employed that a *workshop*, or any part of a workshop, should be limewashed, cleansed or purified, the L.A. may give notice to the owner or occupier of the workshop to carry out such limewashing, cleansing or purifying as the case may require, within a time specified in the notice. If the person to whom the notice is addressed fails to comply with it in the time specified, he will be liable to a penalty of ten shillings for each day during which the default continues, and the L.A. may themselves undertake the work and recover the expense from him in a summary manner.

(b) *Air space* (secs. 2, 3).—Workshops and workplaces must not be overcrowded while work is carried on so as to be dangerous or injurious to the health of the persons employed, and a workshop or workplace which is overcrowded may be dealt with as a nuisance under sec. 16 of the Public Health (Scotland) Act. A *workshop* is deemed to be overcrowded unless in each room at least 250 cubic feet of air space (or during overtime 400) are allowed for each person employed in the room, and the Act requires a notice to be affixed in the workshop specifying the number of persons who may be employed in each room of the workshop. (Under sec. 3 (3) of the Act the Secretary of State has power to alter this amount in the case of a workshop, not being a domestic workshop, which is occupied by night as a sleeping apartment. He proposes to make an order increasing the amount in such cases to 400 cubic feet.)

(c) *Ventilation* (secs. 2, 7).—Every workshop and workplace must be ventilated in such a manner as to render harmless as far as practicable any gases, vapours, dust or other impurities generated in the course of the work that are a nuisance or injurious to health. Any workshop or workplace not so ventilated may be dealt with as a nuisance under sec. 16 of the Public Health (Scotland) Act, 1897.

This general provision is supplemented in the case of workshops by a special requirement introduced for the first time by the Act of 1901, that in every room in a workshop sufficient means of ventilation must be provided and sufficient ventilation maintained, and where a standard of sufficient ventilation has been prescribed by the Secretary of State (as he has now power to do) for any class of workshops, that standard must be observed. Workshops, however, where men only are employed are

excluded from the operation of this requirement. Any workshop where this requirement is contravened may be dealt with as a nuisance.

In workshops where dust, gas, or other impurities are generated and inhaled by the workers to an injurious extent, the factory inspector has power to require the provision of a fan or other mechanical means for preventing such inhalation. If in any case the L.A. are of opinion that this power could be usefully employed, they should refer it to the inspector of the district.

(d) *Drainage of floors* (sec. 8).—A provision introduced for the first time by the Act of 1901, requires that in every workshop or part of a workshop in which any process is carried on which renders the floor liable to be wet to such an extent that the wet is capable of being removed by drainage, adequate means shall be provided for draining off the wet. A workshop not so drained may be dealt with as a nuisance under sec. 16 of the Public Health (Scotland) Act. This provision, however, does not apply to workshops in which men only are employed.

(e) *Sanitary accommodation.*—In all districts every building used as a workshop or manufactory, or where persons are employed or intended to be employed in any trade or business, must be provided with sufficient and suitable accommodation in the way of sanitary conveniences (Public Health Act, sec. 29). On a report from their surveyor that this requirement is not observed in the case of any building, the L.A. may serve a written notice on the owner or occupier requiring him to make such alterations or additions as may be required for the purpose.

(ii.) *Safety from Fire.* (Secs. 14 and 15.)

It is the duty of a L.A. to see that every factory and workshop in its district is provided with sufficient means of escape in case of fire.

Briefly, the provisions which are to be enforced by L.As. are now as follows:—

(1) Every factory of which the construction was commenced after 1st January 1892, and every workshop of which the construction was commenced on or after 1st January 1896, must, if more than 40 persons are employed, be furnished with a certificate from the L.A. that it is provided with such means of escape in case of fire for the persons employed therein as can reasonably be required in the circumstances of the case. (The provision in the previous Acts which limited the requirements to the storeys above the ground floor is now repealed.) Before giving the certificate the L.A. must have the factory or workshop examined, and must satisfy itself that means of escape are provided as required by the Act. Any such factory or workshop not furnished with a certificate will be deemed not to be kept in conformity with the Act. (The penalty in the case of a factory or workshop not kept in conformity with the Act is a fine not exceeding ten pounds, and in the case of a second or subsequent offence within two years from the last conviction for the same offence, not less than one pound. The Court may order means to be adopted to bring the factory or workshop into conformity with the Act.) If a case comes to the knowledge of the L.A. in which

any such factory or workshop is being used as a factory or workshop without the L.A's. certificate, it will be open to the L.A. either to take proceedings itself against the occupier or to report the matter to the district inspector of factories with a view to proceedings being taken by him.

As questions sometimes arose under the previous Acts as to what were the means of escape which had been passed by a L.A. as satisfactory, a new provision is inserted in the Act requiring that the certificate given by the L.A. must specify in detail the means of escape provided.

It will doubtless be convenient for the L.A. when considering the plans of any new building which is intended to be used as a factory or workshop to examine the means of escape proposed to be provided.

(2) In the case of all other factories and workshops in which more than 40 persons are employed, the L.A. is charged with the duty of ascertaining from time to time whether they are provided with such means of escape from fire as can reasonably be required. In the case of a factory or workshop not so provided, the L.A. is required to serve on the *owner* ("owner" has the same meaning as under the Public Health (Scotland) Act, 1897, sec. 3) a notice specifying the measures necessary to be taken for providing such means of escape, and requiring him to carry them out within a specified time. If the owner disagrees with the L.A. as to the measures required, the dispute is to be determined by arbitration in the manner provided by the Act (sec. 14 (3); Sch. I. (not given in this).

To meet a difficulty which arose under the previous Acts in cases where a building was divided up into a number of separate factories or workshops, each with a separate occupier (so that though more than 40 persons were employed in the building, each of the separate factories or workshops might be exempt from the provisions of the Act as to fire), it is provided in the Act that for the purposes of these provisions the whole of a tenement factory or workshop is in future to be counted as a single factory or workshop, and the owner is to be substituted for the occupier.

In addition to these powers, a new and important power is given to L.As. by sec. 15 of the Act to make bye-laws providing for means of escape from fire in the case of any factory or workshop. The provisions of the Public Health Act, 1897, with regard to the making of bye-laws are to apply to the making of these bye-laws, and they will accordingly require to be confirmed by the Local Government Board before they can come into operation. [82, 83]

(iii.) *Bakehouses.* (Secs. 97-102.)

Bakehouses are either factories or workshops within the meaning of the Act according as mechanical power is or is not used in aid of the processes carried on. They are, therefore, subject to the general provisions of the Act; and the same powers will be exercised by L.As. in regard to bakehouses that are exercised by them in regard to factories and workshops.

A general power is also given to the L.A. in the case of any bakehouse which is in such a state as to be on sanitary grounds unfit for use or occupation as a bakehouse to bring the case before a court of summary jurisdiction; and the Court may thereupon impose a fine of two pounds (if a first offence) or five pounds (if a subsequent offence), and, either in addition to or in lieu of imposing a fine, order means to be adopted for the purpose of removing the ground of complaint.

In addition to the general regulations of the Act, special sanitary regulations for bakehouses are contained in the Act. These regulations require that—

(1) A bakehouse must not contain or communicate directly with a water-closet, earth-closet, privy or ashpit; a cistern supplying water to a bakehouse must be separate from any cistern supplying water to a water-closet; and a sewage pipe or drain must not have any opening in the bakehouse. The penalty for any contravention is a fine not exceeding two pounds both on the occupier and on the person letting or suffering the bakehouse to be occupied, and a further fine not exceeding five shillings for each day occupation continues after conviction.

(2) All inside walls and ceilings of rooms and all passages and staircases must be limewashed every six months, or coated with three coats of paint or varnish every seven years and washed with hot water and soap every six months; if not, the bakehouse will be deemed not to be kept in conformity with the Act.

(3) Places on the same level with a bakehouse and forming part of the same building must not be used as sleeping places unless effectually separated from the bakehouse by a partition from floor to ceiling and provided with an external glazed window 9 square feet, of which 4½ feet must be made to open:—for a first offence a penalty of one pound, and for a second or subsequent offence a penalty of five pounds may be imposed both on the person occupying and on the person letting or knowingly suffering the place to be occupied.

These regulations will in the case of all *retail* bakehouses be enforced by the L.A.; a "retail bakehouse" meaning any bakehouse or place in which no mechanical power is used and the bread, biscuits, or confectionery baked in which are sold not wholesale, but by retail, in some shop or place occupied with the bakehouse. *The medical officer of health is, for the purpose, given all the powers of entry, inspection, taking legal proceedings, and otherwise of a factory inspector.*

Further, new duties of great importance are placed by sec. 101 of the Act on L.As. in regard to underground bakehouses:—

(i) The Act provides generally that no underground bakehouse shall be used as such unless it was so used on the 17th August 1901; this provision it will be the duty of the L.A. to enforce in the case of retail bakehouses.

(ii) Moreover, after 1st January 1904—that is, after a period of two years from the coming into force of the Act—it will not be lawful to use any underground bakehouse (whenever established) unless the L.A. are satisfied that it is suitable for the purpose in regard to construc-

tion, light, ventilation, and in all other respects, and have given it a certificate of suitability. This provision will apply to all bakehouses, whether wholesale or retail.

Every bakehouse will be deemed an underground bakehouse if any room used for baking, or for any process incidental thereto, is so situate that the surface of the floor is more than 3 feet below the surface of the footway of the adjoining street, or of the ground adjoining or nearest to the room.

An underground bakehouse used in contravention of these provisions will be deemed to be a workshop not kept in conformity with the Act. [84]

(iv.) *Home-Work.* (Secs. 107-115.)

Very important powers of controlling the conditions under which certain classes of work are done in the homes of the workers are for the first time given to L.As. by the Act of 1901. These powers aim at the prevention of home-work being done (1) in dwellings which are injurious or dangerous to the health of the workers themselves, *e.g.*, through overcrowding, want of ventilation, or other insanitary conditions; (2) in premises where there is dangerous infectious disease.

The provisions of the Act are as follows:—

(1) *Unwholesome dwellings.*—If any place in which home-work is being done in connection with the business of a factory or workshop is injurious or dangerous to the health of the persons working there, the L.A. may, by notice to the occupier of the factory or workshop, or to any contractor employed by such occupier, prohibit him from giving out work to be done in that place.

The power may be exercised also in the case of work given out from places other than factories or workshops, *e.g.*, laundries, warehouses, shops, etc.

The power does not apply to all classes of home-work, but only to those which may be specified by orders of the Secretary of State. The classes of work in regard to which the power may be exercised by the L.A. have been fixed as follows:—

The making, cleaning, washing, altering, ornamenting, finishing, and repairing of wearing apparel, and any work incidental thereto;

The making, ornamenting, mending, and finishing of lace, and of lace curtains and nets;

Cabinet and furniture making, and upholstery work;

The making of electro-plate;

The making of files; and

Fur-pulling.

(2) *Infected dwellings.*—If any inmate of a house in which home-work is done is suffering from any infectious disease which is required by law to be notified to the L.A., the L.A. may, whether such inmate has been removed from the house or not, by order served on the occupier of any factory, workshop, or other place from which work is given out, or on any contractor employed by such occupier, prohibit him from giving out such work to any person living or working in the house during such time as

the L.A. may fix. In an emergency, the power may be exercised by any two or more members of the L.A. acting on the advice of the medical officer of health.

This power, like the last, does not apply to all classes of work, but only to such as the Secretary of State may fix. The classes of work in regard to which the power may be exercised have been fixed as follows :—

The making, cleaning, washing, altering, ornamenting, finishing, and repairing of wearing apparel, and any work incidental thereto ;

The making, ornamenting, mending, and finishing of lace, and of lace curtains and nets ;

Upholstery work ; and

Fur-pulling.

In order that the L.A. may be kept fully informed as to the places in its district in which home-work is being done, occupiers of factories, workshops, or any place from which work is given out, and contractors employed by such occupiers are required, in regard to such classes of work as may be fixed by the Secretary of State, to keep lists showing the names and addresses of all persons employed by them, either as workmen or as contractors outside such factory, workshop or place, and the place where they are employed, and to send to the L.A. twice a year (viz., on or before the 1st February and the 1st August) copies of such lists.

In the event of any occupier failing to keep or to send such lists he will be liable to a fine of two pounds for the first offence, and to a fine of five pounds for a second or subsequent offence. Proceedings to recover the fine may be taken by the L.A.

It will be the duty of the L.A. to have the lists so sent to them examined, and if the place of employment of any outworker included in the list is in another district, to furnish his name and place of employment to the L.A. of that district.

The list required to be kept by the occupier or contractor will be open to inspection by any duly authorised officer of the L.A. ; and the copies sent to the L.A., and any particulars furnished to it by another L.A., will be open to inspection by any of the inspectors of factories and workshops.

The classes of work to which these provisions apply have been fixed by the Secretary of State so as to include all those which have been fixed by him in regard to (1) and (2) above, as follows :—

The making, cleaning, washing, altering, ornamenting, finishing, and repairing of wearing apparel, and any work incidental thereto ;

The making, ornamenting, mending, and finishing of lace, and of lace curtains and nets ;

Cabinet and furniture making and upholstery work ;

The making of electro-plate ;

The making of files ; and

Fur-pulling.

Domestic Factories and Workshops.

In some cases it will be found that dwellings in which home-work is done will constitute a factory or workshop, in consequence of the employment by the occupier of the dwelling, or some part of it, of persons on work which comes within the definitions in the Act. Such places will be subject to the ordinary provisions of the Act with regard to factories and workshops. An important exception, however, is made for dwellings in which no mechanical power is used and the only persons employed are members of the same family dwelling there. These places (termed in the Act "domestic factories" and "domestic workshops") are exempted from many of the provisions of the Act. (The only classes of factories which can come within the definition of "domestic factory" are those specified in Part I. of the sixth schedule to the Act.—*See* p. 170, "definitions.")

Domestic factories are exempted from the provisions in the Act as to the sanitation of factories, and are made subject only, so far as sanitary conditions are concerned, to the provisions in sec. 2 (1) and sec. 3; *i.e.*, if not kept in a cleanly state, or not ventilated in such a manner as to render harmless, as far as practicable, any gases, vapours, dust or other impurities generated in the course of the work that are a nuisance or injurious to health, or so overcrowded while work is carried on as to be dangerous or injurious to the health of the workers, it is liable to be dealt with as a nuisance under sec. 16 of the Public Health (Scotland) Act, 1897. A domestic factory will, for the purpose of this provision, be deemed to be overcrowded unless in each room at least 250 cubic feet of air space (or during overtime, 400) are allowed for each person employed in the room. These provisions will be enforced by the L.A.

Domestic workshops are exempted from the special provisions as to means of ventilation and the drainage of floors, but are otherwise, so far as sanitary conditions are concerned, to be treated as ordinary workshops. (Domestic workshops in which the work is only done at irregular intervals and does not furnish the whole or principal means of living to the family, or in which certain classes of work of a light character (viz. straw-plaiting, pillow-lace making and glove making) are carried on are wholly exempt, except so far as they come within the term "workplace.")

Any domestic factory and workshop, however, in which any work is carried on that has been certified by the Secretary of State as dangerous, is subject to all the provisions of the Act as though it were an ordinary factory or workshop.

Administration.

Powers of Local Authority.—For the purpose of their duties with respect to workshops and workplaces under the Act, and under the Public Health Acts, the L.A. and their officers are given the same powers of entry, inspection, taking legal proceedings, or otherwise as a factory inspector possesses. These powers in the case of workplaces are given for the first time by the Act of 1901. The powers of an inspector are contained in sec. 119 of the Act, and include the power to enter, inspect, and

examine, to take a constable in cases in which there is reason to apprehend any serious obstruction, to examine the persons found therein, to require the production of documents, etc. In cases where proceedings are taken under the Factory Act, and not under the Public Health Acts, special attention should be paid to the provisions of sec. 146 of the Act with respect to legal proceedings.

Register of Workshops.—The Act places a new duty on every L.A. to keep a register of all workshops situate within its district (sec. 131). To assist the L.A. in preparing such a register, instructions have been given to the factory inspectors to allow the L.A. to make copies of the register of workshops kept by the inspector, and the L.A. will also continue to receive (sec. 127) from the inspector any notices of occupation of a workshop which may be sent to him. The L.A. should not, however, depend exclusively on these sources of information for compiling their register, but should take steps, through their own officers, to ascertain what workshops are situate in their district, with a view to making the register as complete as possible.

Duties of Medical Officer of Health.—Under sec. 132 of the Act, the L.A's. medical officer of health is required for the future in his annual report to the L.A. to report specifically on the administration of the Act in workshops and workplaces so far as the matters under the charge of the L.A. are concerned, and to send a copy of his report on the subject to the Secretary of State. The matters which the report should specially deal with will be the provisions as to sanitation, bakehouses, and home-work.

It is also the duty of the medical officer, if he finds any woman, young person, or child employed in a workshop *in which no abstract of the Act is posted up*, to inform the district inspector of factories in writing. (The provisions of this Act relating to certificates of proficiency or of due attendance shall not apply, but a child of the age of thirteen years, who has obtained exemption from the obligation to attend school in the manner prescribed by section 3 of the Education Scotland Act, 1901, shall be deemed to be a young person for the purposes of this Act.)

Matters referred to L.A. by Factory Inspectors.—The factory inspector will, on finding in a factory or workshop, any act, neglect, or default in relation to a drain, water-closet, earth-closet, privy, ashpit, water supply, nuisance, or other matter which is punishable or remediable under the Public Health Acts but not under the Factory Act, give notice to the L.A. of such act, etc.; and it will then be the duty of the L.A. to make inquiry into the matter, take such action as may seem proper, and inform the inspector of the proceedings taken. If proceedings are not taken by the L.A. within one month, the inspector is authorised to take the same proceedings as the L.A. might have taken, and to recover from the L.A. the expenses incurred by him which have not been recovered from any other person, and have not been incurred in any unsuccessful proceedings (sec. 5).

The inspector may take similar action for the purpose of enforcing in a factory or workshop the provision of means of escape in case of fire.

In the event of a L.A. failing generally to carry out the provisions of the Act and the Public Health Acts with regard to factories, workshops, and workplaces, the Secretary of State may authorise a factory inspector during such time as he may fix to enforce those provisions. An inspector so authorised will be entitled to recover from the L.A. any expenses incurred by him which are not recovered from any other person (sec. 4).

General.—It is provided that the powers conferred by the Act on L.As. shall be in addition to and not in substitution for any other power which they may possess.

Circular and relative Order prescribing the Form of Requisition for Extract of Entry of Birth under the Factory and Workshop Act, 1901.

LOCAL GOVERNMENT BOARD,
EDINBURGH, 14*th February* 1902.

Sir,—I am directed by the Local Government Board for Scotland to transmit, for your information and guidance, the annexed copy of an Order issued by the Board in pursuance of their powers under the Factory and Workshop Act, 1901, prescribing the Form of Requisition for Extract of Entry of Birth for the purposes of the above-mentioned Act.—I am, Sir, your obedient servant,

G. FALCONAR-STEWART,
Secretary.

The Registrar of Births and Deaths.

TO ALL REGISTRARS OF BIRTHS AND DEATHS IN SCOTLAND:
And to all others whom it may concern.

WHEREAS by Section 134 of the Factory and Workshop Act, 1901, it is enacted as follows:—

"Where the age of any young person under the age of sixteen years, or child, is required to be ascertained or proved for the purposes of this Act, or for any purpose connected with the employment in labour or elementary education of the young person or child, any person shall, on presenting a written requisition in such form and containing such particulars as may be from time to time prescribed by the Local Government Board, and on payment of a fee of sixpence, be entitled to obtain a certified copy under the hand of a registrar or superintendent registrar of the entry in the register, under the Births and Deaths Registration Acts, 1836 to 1874, of the birth of that young person or child; and such form of requisition shall, on request, be supplied without charge by every superintendent registrar and registrar of births, deaths, and marriages";

AND WHEREAS by Section 159 of the aforesaid Act, it is enacted as follows:—

"In the application of this Act to Scotland"—

. . . . . .

"the expression 'Local Government Board' means the Local Government Board for Scotland";

NOW THEREFORE, We, the Local Government Board for Scotland, in pursuance of the powers given to Us by the Statutes in that behalf, hereby Order as follows:

Article I. The requisition to be made to entitle any person to obtain an extract under the hand of the Registrar of an entry of birth under the section above cited shall be in the Form set forth in the Schedule to this Order.

Article II. This Order shall come into operation on the twenty-first day of February, One thousand nine hundred and two.

SCHEDULE.

THE FACTORY AND WORKSHOP ACT, 1901.

Requisition for an Extract under the hand of the Registrar of an entry of Birth for the purposes of the above Act, or for any purpose connected with the employment in labour or elementary education of a Child or Young Person under the age of sixteen years.

To the Registrar having the custody of the Register in which the birth of the undermentioned Child or Young Person is registered.

I, the undersigned, hereby demand for the purposes above mentioned, or some or one of them, an Extract under your hand of the Entry of the Birth of the Child or Young Person named in the subjoined Schedule.

Christian Name and Surname of the Child or Young Person of whose Age a Certificate is required.	Names of the Parents of such Child or Young Person.		Where such Child or Young Person was born.	When such Child or Young Person was born.
	Father.	Mother.		

Dated this.....day of.....190 .

Signature.....

Address.....

Occupation.....

Given under the Seal of Office of the Local Government Board for Scotland, this fourteenth day of February, One thousand nine hundred and two.

(L.S.)

MALCOLM M'NEILL,
Vice-President.

G. FALCONAR-STEWART,
Secretary.

The following Appendix to the Memorandum was issued by the Local Government Board for Scotland at the request of the Secretary of State:—

(Scotland.)

Home Office,
December 1904.

This Table is enclosed, by request of the Secretary of State, for the guidance and convenience of Medical Officers of Health in preparing that part of their Annual Report which relates to factories, workshops, workplaces, and home-work. It is not intended to supersede the fuller statement which is desirable in the text of the Report, but to provide for uniformity in the presentation of such particulars as lend themselves to statistical treatment.—A Memorandum on the Duties of Local Authorities under the Factory and Workshop Act, 1901, is also enclosed.

Further copies can be supplied on application to the Chief Inspector of Factories, Home Office, London, S.W.

Annual Report of Medical Officer of Health for 1904, for the of*

* County, District, or Burgh.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOME-WORK.

1.—Inspection.

Including Inspections made by Sanitary Inspectors.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories . . . . . (Including Factory Laundries)			
Workshops . . . . . (Including Workshop Laundries)			
Workplaces			
Home-workers' Premises . .			
Total			

2.—Defects Found.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
*Nuisances under the Public Health Acts:—**				
Want of cleanliness				
Want of ventilation				
Overcrowding				
Want of drainage of floors				
Other nuisances				
Sanitary accommodation—insufficient				
Sanitary accommodation—unsuitable or defective				
Sanitary accommodation—not separate for sexes				
Offences under the Factory and Workshop Act:—				
Illegal occupation of underground bakehouse (S. 101)				
Breach of special sanitary requirements for bakehouses (SS. 97 to 100)				
Failure as regard lists of outworkers (S. 107)				
Giving out work to be done in premises which are unwholesome (S. 108)				
Giving out work to be done in premises which are infected (S. 110)				
Allowing wearing apparel to be made in premises infected by scarlet fever or smallpox (S. 109)				
Other offences				
Total				

3.—Other Matters.

Class.	Number.
Matters notified to H.M. Inspectors of Factories:—	
Failure to affix Abstract of the Factory and Workshop Act (S. 133)	
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)—Notified by H.M. Inspector	
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)—Reports (of action taken) sent to H.M. Inspectors	
Other	
Underground Bakehouses (S. 101):—	
In use during 1903	
Certificates granted—in 1903	
Certificates granted—in 1904	
In use at the end of 1904	

* Including those specified in Sections 2, 3, 7, and 8, of the Factory Act as remediable under the Public Health Acts.

3.—Other Matters.—*continued.*

Class.	Number of	
Home-work :—	Lists.	Outworkers.
Lists of Outworkers * (S. 107) :—		
Lists received		
Addresses of outworkers . . { forwarded to other Authorities / received from other Authorities		
Home-work in unwholesome or infected premises :—	Wearing Apparel.	Other.
Notices prohibiting home-work in unwholesome premises (S. 108)		
Cases of infectious disease notified in home-workers' premises		
Orders prohibiting home-work in infected premises (S. 110)		
Workshops on the Register (S. 131) at the end of 1904—		
Important classes of workshops, such as workshop bakehouses, may be enumerated here.		
Total number of workshops on Register .		

MARGARINE ACT, 1887 (50 & 51 Vict. Ch. 29).

(See amendments and extensions by Food and Drugs Act, 1899, p. 193. Also see Food and Drugs Act, 1875, p. 187, and Circular and Order at p. 202.)

1. "This Act may be cited as the Margarine Act, 1887."

2. "This Act shall come into operation on the first day of January, one thousand eight hundred and eighty-eight."

3. "The word 'butter' shall mean the substance usually known as butter, made exclusively from milk or cream, or both, with or without salt or other preservative, and with or without the addition of colouring matter."

* The Lists should be received twice in the year. The year's figures required in the Table are then obtained by adding together the two half-yearly totals.

"The word 'margarine' shall mean all substances, whether compounds or otherwise, prepared in imitation of butter, and whether mixed with butter or not, and no such substance shall be lawfully sold, except under the name of margarine, and under the conditions set forth in this Act." [113, 132]

4. "Every person dealing in margarine, whether wholesale or retail, whether a manufacturer, importer, or as consignor or consignee, or as commission agent or otherwise, who is found guilty of an offence under this Act, shall be liable on summary conviction for the first offence to a fine not exceeding twenty pounds, and for the second offence to a fine not exceeding fifty pounds, and for the third or any subsequent offence to a fine not exceeding one hundred pounds."

5. "Where an employer is charged with an offence against this Act he shall be entitled, upon information duly laid by him, to have any other person whom he charges as the actual offender brought before the Court at the time appointed for hearing the charge, and if, after the commission of the offence has been proved, the employer proves to the satisfaction of the Court that he had used due diligence to enforce the execution of this Act, and that the said other person had committed the offence in question without his knowledge, consent, or connivance, the said other person shall be summarily convicted of such offence, and the employer shall be exempt from any penalty."

6. (*As amended by Food and Drugs Act*, 1899.)—"Every person dealing in margarine in the manner described in the preceding section shall conform to the following regulations:— [85, 112, 117, 119]

"Every package, whether open or closed, and containing margarine, shall be branded or durably marked 'margarine' on the top, bottom, and sides, in printed capital letters, not less than three quarters of an inch square; and if such margarine be exposed for sale, by retail, there shall be attached to each parcel thereof so exposed, and in such manner as to be clearly visible to the purchaser, a label marked in printed capital letters not less than one and a half inches square, 'margarine'; and every person selling margarine by retail, save in a package duly branded or durably marked as aforesaid, shall in every case deliver the same to the purchaser in a paper wrapper, on which shall be printed in capital letters 'margarine.'"

7. "Every person dealing with, selling, or exposing, or offering for sale, or having in his possession for the purpose of sale, any quantity of margarine contrary to the provisions of this Act, shall be liable to conviction for an offence against this Act, unless he shows to the satisfaction of the Court before whom he is charged that he purchased the article in question as butter, and with a written warranty or invoice to that effect, that he had no reason to believe at the time when he sold it that the article was other than butter, and that he sold it in the same state as when he purchased it, and in such case he shall be discharged from the prosecution, but shall be liable to pay the costs incurred by the prosecutor unless he shall have given due notice to him that he will rely upon the above defence. (*See* section 20 (4) Food and Drugs Act, 1899, p. 198.)

8. "All margarine imported into the United Kingdom of Great Britain

and Ireland, and all margarine whether imported or manufactured within the United Kingdom of Great Britain and Ireland, shall, whenever forwarded by any public conveyance, be duly consigned as margarine; and it shall be lawful for any officer of Her Majesty's Customs or Inland Revenue, or any medical officer of health, sanitary inspector, or police constable, authorised under section thirteen of the Sale of Food and Drugs Act, 1875, to procure samples for analysis if he shall have reason to believe that the provisions of this Act are infringed on this behalf, to examine and take samples from any package, and ascertain, if necessary by submitting the same to be analysed, whether an offence against this Act has been committed."

9. (*For amendment*, see sections 7 and 23 of Food and Drugs Act, 1899.) —"Every manufactory of margarine within the United Kingdom of Great Britain and Ireland shall be registered by the owner or occupier thereof with the local authority from time to time in such manner as the Local Government Board may direct, and every such owner or occupier carrying on such manufacture in a manufactory not duly registered shall be guilty of an offence under this Act." *

10. "Any officer authorised to take samples under the Sale of Food and Drugs Act, 1875, may, without going through the form of purchase provided by that Act, but otherwise acting in all respects in accordance with the provisions of the said Act as to dealing with samples, take for the purposes of analysis samples of any butter, or substances purporting to be butter, which are exposed for sale, and are not marked margarine, as provided by this Act; and any such substance not being so marked shall be presumed to be exposed for sale as butter." (*See extension* by sec. 3, Food and Drugs Act, 1899.)

11. "Any part of any penalty recovered under this Act, may, if the court shall so direct, be paid to the person who proceeds for the same, to reimburse him for the legal costs of obtaining the analysis, and any other reasonable expenses to which the court shall consider him entitled."

12. "All proceedings under this Act shall, save as expressly varied by this Act, be the same as prescribed by sections twelve to twenty-eight inclusive of the Sale of Food and Drugs Act, 1875, and all officers employed under that Act are hereby empowered and required to carry out the provisions of this Act." [117, 119]

13. "The expression 'local authority' shall mean any local authority authorised to appoint a public analyst under the Sale of Food and Drugs Act, 1875."

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* (The L.As. in terms of the Margarine Act, 1887, the Local Government Act, 1889, the Burgh Police Acts, 1892, and the Food and Drugs Act, 1899, with whom manufactories and premises are to be registered are namely—the county councils for counties, and the Commissioners or town councils for burghs, including police burghs.)

ABSTRACT OF SALE OF FOOD AND DRUGS ACT, 1875 (38 & 39 VICT. CH. 63).

(*For amendments and extensions, see Food and Drugs Act*, 1879, *and Food and Drugs Act*, 1899, *pp.* 189, 191, 193, *respectively.*)

2. The term "food" is repealed by schedule of Food and Drugs Act, 1899. (For *new definition*, see section 26, Food and Drugs Act, 1899, p. 200.)

"The term 'drug' shall include medicine for internal or external use";

"The term 'county' shall include every county, and division, as well as every county of a city or town not being a burgh."

DESCRIPTION OF OFFENCES.

3. "No person shall mix, colour, stain, or powder, or order or permit any other person to mix, colour, stain, or powder, any article of food with any ingredient or material so as to render the article injurious to health, with intent that the same may be sold in that state, and no person shall sell any such article so mixed, coloured, stained, or powdered, under a penalty in each case not exceeding fifty pounds for the first offence; every offence, after a conviction for a first offence, shall be a misdemeanor, for which the person, on conviction, shall be imprisoned for a period not exceeding six months with hard labour." (*See extension and amendment* by section 17 (2), Food and Drugs Act, 1899, p. 198.) [100]

4. "No person shall, except for the purpose of compounding as hereinafter described, mix, colour, stain, or powder, or order or permit any other person to mix, colour, stain, or powder, any drug with any ingredient or material so as to affect injuriously the quality or potency of such drug, with intent that the same may be sold in that state, and no person shall sell any such drug so mixed, coloured, stained, or powdered, under the same penalty in each case respectively as in the preceding section for a first and subsequent offence."

5. "Provided that no person shall be liable to be convicted under either of the two last foregoing sections of this Act in respect of the sale of any article of food, or of any drug, if he shows to the satisfaction of the justice or court before whom he is charged that he did not know of the article of food or drug sold by him being so mixed, coloured, stained, or powdered as in either of those sections mentioned, and that he could not with reasonable diligence have obtained that knowledge."

6. "No person shall sell to the prejudice of the purchaser any article of food or any drug which is not of the nature, substance, and quality of the article demanded by such purchaser, under a penalty not exceeding twenty pounds; provided that an offence shall not be deemed to be committed under this section in the following cases; that is to say,—

"(1) Where any matter or ingredient not injurious to health has been added to the food or drug because the same is required for the production or preparation thereof as an article of commerce, in a state fit for carriage or consumption and not fraudulently to increase the bulk, weight, or measure of the food or drug, or conceal the inferior quality thereof; [86-94, 99, 101-113, 124]

"(2) Where the drug or food is a proprietary medicine, or is the subject of a patent in force, and is supplied in the state required by the specification of the patent;

"(3) Where the food or drug is compounded as in this Act mentioned;

"(4) Where the food or drug is unavoidably mixed with some extraneous matter in the process of collection or preparation."

7. "No person shall sell any compound article of food or compounded drug which is not composed of ingredients in accordance with the demand of the purchaser, under a penalty not exceeding twenty pounds." [108]

8. "Provided that no person shall be guilty of any such offence as aforesaid in respect of the sale of an article of food or a drug mixed with any matter or ingredient not injurious to health, and not intended fraudulently to increase its bulk, weight, or measure, or conceal its inferior quality, if at the time of delivering such article or drug he shall supply to the person receiving the same a notice, by a label distinctly and legibly written or printed on or with the article or drug, to the effect that the same is mixed." (*See* section 12 of 1899 Act, p. 197.) [93, 94, 109]

9. "No person shall, with the intent that the same may be sold in its altered state without notice, abstract from an article of food any part of it so as to affect injuriously its quality, substance, or nature, and no person shall sell any article so altered without making disclosure of the alteration, under a penalty in each case not exceeding twenty pounds." [114, 115, 126]

10. Relates to the appointment of an analyst.

11. The town council of a burgh may engage the analyst of another burgh or of the county.

12. "Any purchaser of an article of food or of a drug in any place being a district, county, city, or burgh where there is any analyst appointed under this or any Act hereby repealed shall be entitled, on payment to such analyst of a sum not exceeding ten shillings and sixpence, or if there be no such analyst then acting for such place, to the analyst of another place, of such sum as may be agreed upon between such person and the analyst, to have such article analysed by such analyst, and to receive from him a certificate of the result of his analysis." [123]

13. Any officer named and at the cost of the L.A. appointing him may procure any sample of food or drugs for analysis. [92, 123]

14. (*As amended by Food and Drugs Act*, 1899, p. 197.)—"The person purchasing any article with the intention of submitting the same to analysis shall, after the purchase shall have been completed, forthwith notify to the seller or his agent selling the article his intention to have the same analysed by the public analyst, and shall divide the article into three parts to be then and there separated, and each part to be marked and sealed or fastened up in such manner as its nature will permit, and shall, if required to do so, deliver one of the parts to the seller or his agent. (But into four parts by an officer of L.G.B. or B.A., § 2, 1899 Act.)

He shall afterwards retain one of the said parts for future comparison and submit the third part, if he deems it right to have the article

analysed, to the analyst." (For minimum quantities of foods, etc., that should be purchased for analysis, *v.* p. 212.) [92, 94, 116-119]

16. (*As amended by section* 15, *Food and Drugs Act*, 1899, p. 197.)—If analyst resides beyond two miles, the sample may be forwarded by post as a registered parcel subject to post office regulations.

17. Refusal to sell to an appointed officer entails a penalty not exceeding ten pounds. (*See extension and amendment* by section 18, Food and Drugs Act, 1899, p. 198.) [120]

18. Refers to analyst's form of certificate, and is extended by section 22, Food and Drugs Act, 1899. [121, 122]

PROCEEDINGS AGAINST OFFENDERS.

20. "When the analyst having analysed any article shall have given his certificate of the result, from which it may appear that an offence against some one of the provisions of this Act has been committed, the person causing the analysis to be made may take proceedings for the recovery of the penalty herein imposed for such offence, before a sheriff having jurisdiction in the place where the article or drug sold was actually delivered to the purchaser, in a summary manner." (*See extension and amendment* by section 19, Food and Drugs Act, 1899.) [124]

. . . . . .

21. The analyst's certificate is *primâ facie* evidence for the prosecution, but the analyst may be called if required. The defender if he think fit can tender himself and his wife to be examined. [94, 96, 99, 112, 125]

22. "The sheriff before whom any complaint may be made, or the court before whom any appeal may be heard, under this Act, may, upon the request of either party, in their discretion cause any article of food or drug to be sent to the Commissioners of Inland Revenue, who shall thereupon direct the chemical officers of their department at Somerset House to make the analysis, and give a certificate to such justices of the result of the analysis; and the expense of such analysis shall be paid by the complainant or the defendant as the justices may by order direct." (*See extension and amendment*, section 21, Food and Drugs Act, 1899.) [94, 95]

24. In any prosecution defendant has to prove that he is protected by any exception or provision contained in this Act.

25. The defendant is to be discharged if he prove that he bought the article in the same state as sold, and with a warranty. No costs except on issues proved against him. (*For extension and amendment*, *v.* section 20, Food and Drugs Act, 1899, p 198.) [99, 126-129]

27. Enacts imprisonment not exceeding two years for anyone forging or uttering a warranty known to be forged; a penalty not exceeding twenty pounds for wilful misapplication of warranty or for false warranty, and a similar penalty for wilfully giving a label with any article sold by him which falsely describes the article sold. (*See extension* by section 17 (1), Food and Drugs Act, 1899, p. 197.)

28. "Nothing in this Act contained shall affect the power of proceeding by indictment, or take away any other remedy against any offender under this Act, or in any way interfere with contracts and bargains between individuals, and the rights and remedies belonging thereto.

"Provided that in any action brought by any person for a breach of contract on the sale of any article of food or of any drug, such person may recover alone or in addition to any other damages recoverable by him the amount of any penalty in which he may have been convicted under this Act, together with the costs paid by him upon such conviction and those incurred by him in and about his defence thereto, if he prove that the article or drug the subject of such conviction was sold to him as and for an article or drug of the same nature, substance, and quality as that which was demanded of him, and that he purchased it not knowing it to be otherwise, and afterwards sold it in the same state in which he purchased it; the defendant in such action being nevertheless at liberty to prove that the conviction was wrongful, or that the amount of costs awarded or claimed was unreasonable."

SPECIAL PROVISIONS AS TO TEA.

30. "From and after the first day of January, one thousand eight hundred and seventy-six, all tea imported as merchandise into and landed at any port in Great Britain or Ireland shall be subject to examination by persons to be appointed by the Commissioners of Customs, subject to the approval of the Treasury, for the inspection and analysis thereof, for which purpose samples may, when deemed necessary by such inspectors, be taken and with all convenient speed be examined by the analysts to be so appointed; and if upon such analysis the same shall be found to be mixed with other substances or exhausted tea, the same shall not be delivered unless with the sanction of the said commissioners, and on such terms and conditions as they shall see fit to direct, either for home consumption or for use as ships' stores or for exportation; but if on such inspection and analysis it shall appear that such tea is in the opinion of the analyst unfit for human food, the same shall be forfeited and destroyed or otherwise disposed of in such manner as the said commissioners may direct."

31. "Tea to which the term 'exhausted' is applied in this Act shall mean and include any tea which has been deprived of its proper quality, strength, or virtue by steeping, infusion, decoction, or other means."

33. "In the application of this Act to Scotland the following provisions shall have effect:

1. The term 'misdemeanour' shall mean 'a crime or offence':
2. The term 'defendant' shall mean 'defender' and include 'respondent':
3. The term 'information' shall include 'complaint':
4. This Act shall be read and construed as if for the term 'justices,' wherever it occurs therein, the term 'sheriff' were substituted:
5. The term 'sheriff' shall include 'sheriff-substitute':
6. The term 'burgh' shall mean any royal burgh and any burgh returning or contributing to return a member to Parliament:
7. The expenses of executing this Act shall be borne in Scotland, in counties by the county general assessment, and in burghs by the police assessment:

8. This Act shall be read and construed as if for the expression 'the Local Government Board,' wherever it occurs therein, the expression 'one of Her Majesty's Principal Secretaries of State' were substituted:

9. All penalties provided by this Act to be recovered in a summary manner shall be recovered before the sheriff of the county in the sheriff court, or at the option of the person seeking to recover the same in the police court, in any place where a sheriff officiates as a police magistrate under the provisions of 'The Summary Procedure Act, 1864,' or of the Police Act in force for the time in any place in which a sheriff officiates as aforesaid, and all the jurisdiction, powers, and authorities necessary for this purpose are hereby conferred on sheriffs:

Every such penalty may be recovered at the instance of the procurator fiscal of the jurisdiction, or of the person who caused the analysis to be made from which it appeared that an offence had been committed against some one of the provisions of this Act:

Every penalty imposed and recovered under this Act shall be paid to the clerk of court, and by him shall be accounted for and paid to the treasurer of the county general assessment, or the police assessment of the burgh, as the sheriff shall direct:

10. Every penalty imposed by this Act may be reduced or mitigated according to the judgment of the sheriff:

11. It shall be competent to any person aggrieved by any conviction by a sheriff in any summary proceeding under this Act to appeal against the same to the next circuit court, or where there are no circuit courts to the High Court of Justiciary at Edinburgh, in the manner prescribed by such of the provisions of the Act of the twentieth year of the reign of King George the Second, chapter forty-three, and any Acts amending the same, as relate to appeals in matters criminal, and by and under the rules, limitations, conditions, and restrictions contained in the said provisions."

SALE OF FOOD AND DRUGS ACT AMENDMENT ACT, 1879 (42 & 43 Vict. Ch. 30).

1. "This Act may be cited for all purposes as the Sale of Food and Drugs Act Amendment Act, 1879."

2. "In any prosecution under the provisions of the Principal Act for selling to the prejudice of the purchaser any article of food or any drug which is not of the nature, substance, and quality of the article demanded by such purchaser, it shall be no defence to any such prosecution to allege that the purchaser, having bought only for analysis, was not prejudiced by such sale. Neither shall it be a good defence to prove that the article of food or drug in question, though defective in nature or in substance or in quality, was not defective in all three respects."
[87-89, 110.]

3. "Any medical officer of health, sanitary inspector of nuisances, or inspector of weights and measures, or any inspector of a market, or any police constable under the direction and at the cost of the L.A. appointing such officer, inspector, or constable, or charged with the execution of this Act, may procure at the place of delivery any sample of any milk in course of delivery to the purchaser or consignee in pursuance of any contract for the sale to such purchaser or consignee of such milk; and such officer, inspector, or constable, if he suspect the same to have been sold contrary to any of the provisions of the Principal Act, shall submit the same to be analysed, and the same shall be analysed, and proceedings shall be taken, and penalties on conviction be enforced in like manner in all respects as if such officer, inspector, or constable had purchased the same from the seller or consignor under section thirteen of the Principal Act." (*See extension* by section 14, Food and Drugs Act, 1899.) [92, 97, 111, 123, 130, 131]

4. "The seller or consignor or any person or persons entrusted by him for the time being with the charge of such milk, if he shall refuse to allow such officer, inspector, or constable to take the quantity which such officer, inspector, or constable shall require for the purpose of analysis, shall be liable to a penalty not exceeding ten pounds." (*See extension* by section 14, Food and Drugs Act, 1899.)

5. "Any street or open place of public resort shall be held to come within the meaning of section seventeen of the Principal Act."

6. "In determining whether an offence has been committed under section six of the said Act by selling, to the prejudice of the purchaser, spirits not adulterated otherwise than by the admixture of water, it shall be a good defence to prove that such admixture has not reduced the spirit more than twenty-five degrees under proof for brandy, whisky, or rum, or thirty-five degrees under proof for gin." [124]

7. "Every liberty having a separate court of quarter sessions, except a liberty of a cinque port, shall be deemed to be a county within the meaning of the said Act."

8. "The town council of any burgh having a separate court of quarter sessions shall be exempt from contributing towards the expenses incurred in the execution of the Principal Act in respect to the county within which such burgh is situate, and the treasurer of the county shall exclude the expenses so incurred from the account required by section one hundred and seventeen of the Municipal Corporation Act, 1835, to be sent by him to such town council." [Repealed]

9. "The town council of any burgh having under any general or local Act of Parliament, or otherwise, a separate police establishment, and being liable to be assessed to the county rate of the county within which the burgh is situate, shall be paid by the justices of such county the proportionate amount contributed towards the expenses incurred by the county in the execution of the Principal Act by the several parishes and parts of parishes within such burgh in respect of the rateable value of the property assessable therein, as ascertained by the valuation lists for the time being in force."

10. "In all prosecutions under the Principal Act, and notwithstanding the provisions of section twenty of the said Act, the summons to appear before the magistrates shall be served upon the person charged with violating the provisions of the said Act within a reasonable time, and in the case of a perishable article not exceeding twenty-eight days from the time of the purchase from such person for test purposes of the food or drug, for the sale of which in contravention to the terms of the Principal Act the seller is rendered liable to prosecution, and particulars of the offence or offences against the said Act of which the seller is accused, and also the name of the prosecutor, shall be stated on the summons, and the summons shall not be made returnable in a less time than seven days from the day it is served upon the person summoned." [Repealed by F. and D. A. 1899, sec. 27, but re-enacted with alterations by sec. 19 of same Act.]

ABSTRACT OF SALE OF FOOD AND DRUGS ACT, 1899,

Applying to Scotland.

(*Amending and extending Food and Drugs Acts*, 1875 *and* 1879; *and Margarine Act*, 1887.)

1. "(1) If there is imported into the United Kingdom any of the following articles, namely:—

(*a*) Margarine or margarine-cheese, except in packages conspicuously marked 'margarine' or 'margarine-cheese,' as the case may require; or

(*b*) Adulterated or impoverished butter (other than margarine) or adulterated or impoverished milk or cream, except in packages or cans conspicuously marked with a name or description indicating that the butter or milk or cream has been so treated; or

(*c*) Condensed separated or skimmed milk, except in tins or other receptacles which bear a label whereon the words 'machine-skimmed milk' or 'skimmed milk' as the case may require, are printed in large and legible type; or

(*d*) Any adulterated or impoverished article of food to which Her Majesty may by Order in Council direct that this section shall be applied, unless the same be imported in packages or receptacles conspicuously marked with a name or description indicating that the article has been so treated;

the importer shall be liable, on summary conviction, for the first offence to a fine not exceeding twenty pounds, for the second offence to a fine not exceeding fifty pounds, and for any subsequent offence to a fine not exceeding one hundred pounds.

(2) The word 'importer' shall include any person who, whether as owner, consignor, or consignee, agent, or broker, is in possession of, or in anywise entitled to the custody or control of, the article; prosecutions for offences under this section shall be undertaken by the Commissioners

of Customs; and subject to the provisions of this Act this section shall have effect as if it were part of the Customs Consolidation Act, 1876.

(3) The Commissioners of Customs shall, in accordance with directions given by the Treasury after consultation with the Board of Agriculture, take such samples of consignments of imported articles of food as may be necessary for the enforcement of the foregoing provisions of this section.

(4) Where the Commissioners of Customs take a sample of any consignment in pursuance of such directions they shall divide it into not less than three parts, and send one part to the importer and one part to the principal chemist of the Government laboratories, and retain one part.

(5) In any proceeding under this section the certificate of the principal chemist of the result of the analysis shall be sufficient evidence of the facts therein stated, unless the defendant require that the person who made the analysis be called as a witness.

(6) If, in any case, the Commissioners of Customs are of opinion that an offence against this section has been committed, they shall communicate to the Board of Agriculture for their information the name of the importer and such other facts as they possess or may obtain as to the destination of the consignment.

(7) For the purposes of this section an article of food shall be deemed to be adulterated or impoverished if it has been mixed with any other substance, or if any part of it has been abstracted so as in either case to affect injuriously its quality, substance, or nature.

Provided that an article of food shall not be deemed to be adulterated by reason only of the addition of any preservative or colouring matter of such a nature and in such quantity as not to render the article injurious to health."

2. "(1) The Local Government Board, may, in relation to any matter appearing to that Board to affect the general interest of the consumer, and the Board of Agriculture may, in relation to any matter appearing to that Board to affect the general interests of agriculture in the United Kingdom, direct an officer of the Board to procure for analysis samples of any article of food, and thereupon the officer shall have all the powers of procuring samples conferred by the Sale of Food and Drugs Acts, and those Acts shall apply as if the officer were an officer authorised to procure samples under the Sale of Food and Drugs Act, 1875, except that—

(*a*) The officer procuring the sample shall divide the same into four parts, and shall deal with three of such parts in the manner directed by section fourteen of the Sale of Food and Drugs Act, 1875, as amended by this Act, and shall send the fourth part to the Board, and

(*b*) The fee for analysis shall be payable to the analyst by the L.A. of the place where the sample is procured.

(2) The Board shall communicate the result of the analysis of any such sample to the L.A., and thereupon there shall be the like duty and power on the part of the L.A. to cause proceedings to be taken as if the L.A. had caused the analysis to be made."

3. "(1) It *shall be the duty of every L.A.* entrusted with the execution of the laws relating to the sale of food and drugs *to appoint a public analyst*, and put in force from time to time, as occasion may arise, the powers with which they are invested, so as to provide proper securities for the sale of food and drugs in a pure and genuine condition, and in particular to direct their officers to take samples for analysis.

(2) If the Local Government Board or Board of Agriculture, after communication with a L.A., are of opinion that the L.A. have failed to execute or enforce any of the provisions of the Sale of Food and Drugs Acts in relation to any article of food, and that their failure affects the general interest of the consumer or the general interests of agriculture in the United Kingdom, as the case may be, the Board concerned may, by order, empower an officer of the Board to execute and enforce those provisions or to procure the execution and enforcement thereof in relation to any article of food mentioned in the order.

(3) The expenses incurred by the Board or their officer under any such order shall be treated as expenses incurred by the L.A. in the execution of the said Acts, and shall be paid by the L.A. to the Board on demand, and in default the Board may recover the amount of the expenses with costs from the L.A.

(4) For the purposes of this section an order of the Board shall be conclusive in respect of any default, amount of expenses, or other matter therein stated or appearing.

(5) Any public analyst appointed under the Sale of Food and Drugs Acts shall furnish such proof of competency as may from time to time be required by regulation framed by the Local Government Board."

4. "(1) The Board of Agriculture may, after such inquiry as they deem necessary, make regulations for determining what deficiency in any of the normal constituents of genuine milk, cream, butter, or cheese, or what addition of extraneous matter or proportion of water, in any sample of milk (including condensed milk), cream, butter, or cheese, shall for the purposes of the Sale of Food and Drugs Acts raise a presumption, until the contrary is proved, that the milk, cream, butter, or cheese is not genuine or is injurious to health, and an analyst shall have regard to such regulations in certifying the result of an analysis under those Acts.

(2) Any regulations made under this section shall be notified in the London and Edinburgh Gazettes, and shall also be made known in such other manner as the Board of Agriculture may direct." [93, 96]

5. "The provisions of the Margarine Act, 1887, as amended by this Act, shall extend to margarine-cheese, and shall apply accordingly, with the substitution of 'margarine-cheese' and 'cheese' for 'margarine' and 'butter,' and provided that all margarine-cheese sold or dealt in otherwise than by retail shall either be inclosed in packages marked in accordance with the Margarine Act, 1887, as amended by this Act, or be itself conspicuously branded with the words 'margarine-cheese.'"

6 "(1) Where under this Act or the Margarine Act, 1887, it is required that any package containing margarine or margarine-cheese shall be

branded or marked, the brand or mark shall be on the package itself and not solely on a label, ticket, or other thing attached thereto.

(2) The letters required to be printed on the paper wrapper in which margarine or margarine-cheese is sold shall be capital block letters not less than half an inch long and distinctly legible, and no other printed matter shall appear on the wrapper.

(3) The words 'or with' in section six of the Margarine Act, 1887, shall be repealed."

7. "(1) Every occupier of a manufactory of margarine or margarine-cheese, and every wholesale dealer in such substances, shall keep a register showing the quantity and destination of each consignment of such substances sent out from his manufactory or place of business, and this register shall be open to the inspection of any officer of the Board of Agriculture.

(2) Any officer of the Board of Agriculture shall have power to enter at all reasonable times any manufactory of margarine or margarine-cheese, and to inspect any process of manufacture therein, and to take samples for analysis.

(3) If any such occupier or dealer—

(*a*) fails to keep such a register, or

(*b*) refuses to produce the register when required to do so by an officer of the Board of Agriculture, or

(*c*) fails to keep the register posted up to date, or

(*d*) wilfully makes any entry in the register which is false in any particular, or

(*e*) fraudulently omits to enter any particular which ought to be entered in the register,

he shall be liable on summary conviction for the first offence to a fine not exceeding ten pounds, and for any subsequent offence to a fine not exceeding fifty pounds. [98]

(4) The provisions of section nine of the Margarine Act, 1887, relating to registration of manufactories shall extend to any premises wherein the business of a wholesale dealer in margarine or margarine-cheese is carried on.

(5) The registration of a manufactory or other premises shall be forthwith notified by the L.A. to the Board of Agriculture."

8. "It shall be unlawful to manufacture, sell, expose for sale, or import any margarine, the fat of which contains more than ten per cent. of butter fat, and every person who manufactures, sells, exposes for sale, or imports any margarine which contains more than that percentage, shall be guilty of an offence under the Margarine Act, 1887, and any defence which would be a defence under section seven of that Act shall be a defence under this section, and the provisions of the former section shall apply accordingly. [132]

Provided that nothing in this section shall apply to any margarine manufactured or imported in fulfilment of any contract made before the twentieth day of July, one thousand eight hundred and ninety-nine."

9. "Every person who, himself or by his servant, in any highway or

place of public resort sells milk or cream from a vehicle or from a can or other receptacle shall have conspicuously inscribed on the vehicle or receptacle his name and address, and in default shall be liable on summary conviction to a fine not exceeding two pounds." [133]

10. "In the case of a sample taken of milk in course of delivery, or of margarine or margarine-cheese forwarded by a public conveyance, the person taking the sample shall forward by registered parcel or otherwise a portion of the sample marked, and sealed, or fastened up, to the consignor if his name and address appear on the can or package containing the article sampled."

11. "Every tin or other receptacle containing condensed, separated, or skimmed milk must bear a label clearly visible to the purchaser on which the words 'machine-skimmed milk,' or 'skimmed milk,' as the case may require, are printed in large and legible type, and if any person sells or exposes or offers for sale condensed, separated, or skimmed milk in contravention of this section he shall be liable on summary conviction to a fine not exceeding ten pounds."

12. "The label referred to in section eight of the Sale of Food and Drugs Act, 1875, shall not be deemed to be distinctly and legibly written or printed within the meaning of that section unless it is so written or printed that the notice of mixture given by the label is not obscured by other matter on the label: Provided that nothing in this enactment shall hinder or affect the use of any registered trade-mark, or of any label which has been continuously in use for at least seven years before the commencement of this Act; but the Comptroller-General of Patents, Designs, and Trade-Marks shall not register any trade-mark purporting to describe a mixture unless it complies with the requirements of this enactment."

13. "In section fourteen of the Sale of Food and Drugs Act, 1875, the words 'offer to' and the words 'proceed accordingly and shall' shall be repealed."

14. "The provisions of section three and section four of the Sale of Food and Drugs Act Amendment Act, 1879 (relating to the taking of samples of milk in course of delivery), shall apply to every other article of food: Provided that no samples shall be taken under this section except upon the request or with the consent of the purchaser or consignee."

15. "In section sixteen of the Sale of Food and Drugs Act, 1875, the words 'registered parcel' shall be substituted for the words 'registered letter.'"

16. "Any person who wilfully obstructs or impedes any inspector or other officer in the course of his duties under the Sale of Food and Drugs Acts, or by any gratuity, bribe, promise, or other inducement prevents, or attempts to prevent, the due execution by such inspector or officer of his duty under those Acts, shall be liable, on summary conviction, for the first offence to a fine not exceeding twenty pounds, for the second offence to a fine not exceeding fifty pounds, and for any subsequent offence to a fine not exceeding one hundred pounds."

17 "(1) Where, under any provision of the Sale of Food and Drugs Act, 1875, a person guilty of an offence is liable to a fine which may

extend to twenty pounds as a maximum, he shall be liable for a second offence under the same provision to a fine not exceeding fifty pounds, and for any subsequent offence to a fine not exceeding one hundred pounds.

(2) Where, under any provision of the Sale of Food and Drugs Acts, a person guilty of an offence is liable to a fine exceeding fifty pounds, and the offence, in the opinion of the court, was committed by the personal act, default, or culpable negligence of the person accused, that person shall be liable (if the court is of opinion that a fine will not meet the circumstances of the case) to imprisonment, with or without hard labour, for a period not exceeding three months."

18. "Notwithstanding anything in section seventeen of the Sale of Food and Drugs Act, 1875, where any article of food or drug is exposed for sale in an unopened tin or packet duly labelled, no person shall be required to sell it except in the unopened tin or packet in which it is contained."

19. "(1) When any article of food or drug has been purchased from any person for test purposes, any prosecution under the Sale of Food and Drugs Acts in respect of the sale thereof, notwithstanding anything contained in section twenty of the Sale of Food and Drugs Act, 1875, shall not be instituted after the expiration of twenty-eight days from the time of the purchase.

(2) In any prosecution under the Sale of Food and Drugs Acts the summons shall state particulars of the offence or offences alleged, and also the name of the prosecutor, and shall not be made returnable in less time than fourteen days from the day on which it is served, and there must be served therewith a copy of any analyst's certificate obtained on behalf of the prosecutor."

20. "(1) A warranty or invoice shall not be available as a defence to any proceeding under the Sale of Food and Drugs Acts unless the defendant has, within seven days after service of the summons, sent to the purchaser a copy of such warranty or invoice with a written notice stating that he intends to rely on the warranty or invoice, and specifying the name and address of the person from whom he received it, and has also sent a like notice of his intention to such person. [127]

(2) The person by whom such warranty or invoice is alleged to have been given shall be entitled to appear at the hearing and to give evidence, and the court may, if it thinks fit, adjourn the hearing to enable him to do so.

(3) A warranty or invoice given by a person resident outside the United Kingdom shall not be available as a defence to any proceeding under the Sale of Food and Drugs Acts, unless the defendant proves that he had taken reasonable steps to ascertain and did in fact believe in the accuracy of the statement contained in the warranty or invoice.

(4) Where the defendant is a servant of the person who purchased the article under a warranty or invoice he shall, subject to the provisions of this section, be entitled to rely on section twenty-five of the Sale of Food and Drugs Act, 1875, and section seven of the Margarine Act, 1887, in the same way as his employer or master would have been entitled to do if he had been the defendant, provided that the servant further proves that he

had no reason to believe that the article was otherwise than that demanded by the prosecutor.

(5) Where the defendant in a prosecution under the Sale of Food and Drugs Acts has been discharged under the provisions of section twenty-five of the Sale of Food and Drugs Act, 1875, as amended by this Act, any proceedings under the Sale of Food and Drugs Acts for giving the warranty relied on by the defendant in such prosecution, may be taken as well before a court having jurisdiction in the place where the article of food or drug to which the warranty relates was purchased for analysis as before a court having jurisdiction in the place where the warranty was given.

(6) Every person who, in respect of an article of food or drug sold by him as principal or agent, gives to the purchaser a false warranty in writing, shall be liable on summary conviction, for the first offence, to a fine not exceeding twenty pounds, for the second offence to a fine not exceeding fifty pounds, and for any subsequent offence to a fine not exceeding one hundred pounds, unless he proves to the satisfaction of the court that when he gave the warranty he had reason to believe that the statements or descriptions contained therein were true."

21. "The justices or court referred to in section twenty-two of the Sale of Food and Drugs Act, 1875, shall on the request of either party under that section cause an article of food or drug to be sent to the Commissioners of Inland Revenue for analysis, and may, if they think fit, do so without any such request." [94]

22. "(1) At the hearing of the information in any proceeding under the Sale of Food and Drugs Acts, the production by the defendant of a certificate of analysis by a public analyst in the form prescribed in section eighteen of the Sale of Food and Drugs Act, 1875, shall be sufficient evidence of the facts therein stated, unless the prosecutor requires that the analyst be called as a witness. [96]

(2) A copy of every such certificate shall be sent to the prosecutor at least three clear days before the return day, and if it be not so sent the court may, if it thinks fit, adjourn the hearing on such terms as may seem proper."

23. "This Act shall apply to Scotland with the substitution for 'the Local Government Board' of 'the Local Government Board for Scotland,' *and all powers and duties vested in or imposed on the Secretary for Scotland in relation to the Sale of Food and Drugs Acts shall be transferred to, vested in, or imposed on the Local Government Board for Scotland.*"

25. "In this Act, unless the context otherwise requires—

The expression 'margarine-cheese' means any substance, whether compound or otherwise, which is prepared in imitation of cheese, and which contains fat not derived from milk:

The expression 'cheese' means the substance usually known as cheese, containing no fat derived otherwise than from milk:

The expression 'local authority' means any local authority authorised to appoint an analyst for the purposes of the Sale of Food and Drugs

Acts, and the expression 'public analyst' means an analyst so appointed.

Other expressions have the same meaning as in the Sale of Food and Drugs Acts, and an offence under this Act shall be treated as an offence under those Acts."

26. "For the purposes of the Sale of Food and Drugs Acts the expression 'food' shall include every article used for food or drink by man, other than drugs or water, and any article which ordinarily enters into or is used in the composition or preparation of human food; and shall also include flavouring matters and condiments."

28. "(1) This Act may be cited as the Sale of Food and Drugs Act, 1899, and the Sale of Food and Drugs Act, 1875, and the Sale of Food and Drugs Act Amendment Act, 1879, and the Margarine Act, 1887, and this Act may be cited collectively as the Sale of Food and Drugs Acts, 1875 to 1899, and are in this Act referred to as the Sale of Food and Drugs Acts.

(2) This Act shall come into operation on the first day of January, one thousand nine hundred."

In connection with the Margarine and the Sale of Food and Drugs Acts, the Local Government Board issued the following important Circulars and Orders:—

SALE OF FOOD AND DRUGS.

Circular addressed to the Local Authorities under the Sale of Food and Drugs Acts, directing attention to the provisions of these Acts.

LOCAL GOVERNMENT BOARD,
EDINBURGH, 25*th January* 1900.

Sir,—The Local Government Board desire to draw the attention of the county councils in Scotland to the provisions of the Sale of Food and Drugs Act, 1899 (62 & 63 Vict. ch. 51), which came into operation on the first day of January 1900.

The general effect of the amending Act is to extend and to render more stringent the provisions of the earlier Acts, viz.:—The Sale of Food and Drugs Act, 1875 (38 & 39 Vict. ch. 63); The Sale of Food and Drugs Act Amendment Act, 1879 (42 & 43 Vict. ch. 30); and the Margarine Act, 1887 (50 & 51 Vict. ch. 29).

By section 23 of the Act of 1899 all the powers and duties vested in or imposed on the Secretary for Scotland in relation to the Sale of Food and Drugs Acts are transferred to this Board.

The Board are also invested with further powers of securing the execution and enforcement of the Acts, particularly in relation to matters affecting the general interest of the consumer as distinguished from the interests of agriculture. Under section 2 the Board may direct one of their officers to procure samples of food for analysis, the analyst's fee to

be payable by the L.A., and the subsequent proceedings to be carried out by them. And under section 3, if the L.A. have failed to execute and enforce any provision of the Acts, the Board through their officers may proceed to do so at the expense of the defaulting L.A.

Under section 10 of the Act of 1875 power was given to L.As. to appoint public analysts, but they were under no obligation to exercise this power save when a vacancy occurred or when required by the central authority. Section 3 of the Act of 1899 makes it imperative on every such L.A. now to appoint a public analyst.

In this connection the Board are advised that the power and duty to appoint analysts for police burghs devolve upon the burgh commissioners.

By the Sale of Food and Drugs Act, 1899, the provisions of the Margarine Act, 1887, are extended to "margarine-cheese," which expression is defined as meaning "any substance, whether compound or otherwise, which is prepared in imitation of cheese, and which contains fat not derived from milk."

The requirement of the Margarine Act as to the registration of manufactories is extended by the Act of 1899 to any premises wherein the business of a wholesale dealer in margarine or margarine-cheese is carried on. The Board have therefore found it necessary in substitution for the Order of the Secretary for Scotland of 27th December 1887 to issue a new Order directing the manner in which such registration is to be made and including the registration of manufactories of margarine-cheese as well as margarine, and of premises wherein the business of a wholesale dealer in margarine or margarine-cheese is carried on in Scotland. A copy of this Order is enclosed. (*See* p. 202.)

The Act of 1899 also contains other amendments relative to the sale of milk, labelling and branding of articles, restriction on amount of butter-fat in margarine, the definition of food, and other minor matters, to which the attention of L.As. is specially directed, and regarding which the Board would refer L.As. to the Act itself.

It will be observed that section 3 (1) of the Act of 1899 makes it the duty of the county council as L.A. under the Acts to put in force from time to time, as occasion may arise, the powers with which they are invested, so as to provide proper securities for the sale of food and drugs in a pure and genuine condition, and in particular to direct their officers to take samples for analysis; and accordingly the Board would impress upon the county council the necessity for vigorously executing their administrative duties under the Sale of Food and Drugs Acts.

Meanwhile the Board would point out that, as a first step towards carrying out their statutory duties under these Acts, all L.As. who have not hitherto appointed public analysts must now proceed to do so at once in terms of the statute.—I am, Sir, your obedient servant,

G. Falconar-Stewart,
Secretary.

The Clerk to the County Council,
The Town Clerk, or Clerk to the Burgh Commissioners.

Circular addressed to District Local Authorities reminding them of the provisions of Section 13 of the Sale of Food and Drugs Act, 1875.

LOCAL GOVERNMENT BOARD,
EDINBURGH, *25th January* 1900.

Sir,—The Local Government Board have issued circular-letters to county councils and burgh L.As., drawing attention to the Sale of Food and Drugs Act, 1899 (62 and 63 Vict. ch. 51), which came into operation on the first day of January 1900.

By section 23 of this Act all the powers and duties vested in or imposed on the Secretary for Scotland in relation to the Sale of Food and Drugs Acts are transferred to this Board.

The amending Act does not directly affect district committees. The appointment of analysts remains with the county council, and the Board have accordingly merely to remind district L.As. of the provisions of section 13 of the Act of 1875, under which the medical officer and sanitary inspector are authorised to take samples under the direction and at the cost of the L.A.

In terms of that enactment, it falls to the district committee to set in motion the executive proceedings whereby the purposes of the Acts are to be carried out, by giving directions to their officers to take samples and by causing action to be taken against all offenders.—I am, Sir, your obedient servant,

G. FALCONAR-STEWART,
Secretary.

The Clerk to the District Committee.

Margarine Act, 1887.
Sale of Food and Drugs Act, 1899.

ORDER FOR REGISTRATION.

To the OWNERS and OCCUPIERS for the time being of MANUFACTORIES of MARGARINE and MARGARINE-CHEESE and of premises, wherein the business of a WHOLESALE DEALER in MARGARINE or MARGARINE-CHEESE is carried on in SCOTLAND, to which the Margarine Act, 1887, as amended by the Sale of Food and Drugs Act, 1899, applies:—

To the several L.As. under the said Acts for the time being in Scotland:

And to all others whom it may concern:—

Whereas by section 23 of the Sale of Food and Drugs Act, 1899, all the powers and duties vested in or imposed on the Secretary for Scotland in relation to the Sale of Food and Drugs Acts are transferred to, vested in, and imposed on us, the Local Government Board for Scotland;

And whereas by section 9 of the Margarine Act, 1887, as amended by sections 7 and 23 of the Sale of Food and Drugs Act, 1899, provision is made for the registration with the L.A. of every manufactory of

margarine or margarine-cheese (as defined respectively by the said Acts) and of the premises wherein the business of a wholesale dealer in margarine or margarine-cheese is carried on in Scotland from time to time in such manner as we may direct;

And whereas in terms of the provisions of the Margarine Act, 1887, the Local Government (Scotland) Act, 1889, the Burgh Police (Scotland) Act, 1892, and the Sale of Food and Drugs Act, 1899, the L.As. with whom such manufactories and premises are to be registered are as follows, namely—The county council for counties, and the commissioners or town council for burghs, including police burghs;

Now therefore we, the Local Government Board for Scotland, in substitution for the Order of the Secretary for Scotland of the twenty-seventh day of December in the year One thousand eight hundred and eighty-seven, which is hereby revoked, do hereby order and direct as follows:—

Article 1.—Every owner or occupier of a manufactory of margarine or margarine-cheese, or of premises wherein the business of a wholesale dealer in margarine or margarine-cheese is carried on in Scotland, who shall make application to the L.A. for a certificate of registration under the aforesaid Acts, shall, in his application, state the following particulars:

(*a*) The name and address of the owner or occupier making the application.

(*b*) The situation of the manufactory or premises.

(*c*) The name and address, or names and addresses, of the owner or owners, or occupier or occupiers, carrying on the manufacture or business.

Every such application shall be signed by the person making the same, or by someone acting on his behalf.

Article 2.—If the application is in due form, the L.A. shall cause the manufactory or premises, as the case may be, to be registered by entering in a book the particulars of the application for registration; and thereupon a certificate, in the Form A. set forth in the Schedule hereto, shall be issued by the L.A. to the person applying for the same.

Article 3.—Where any change occurs in the persons carrying on the manufacture or business, written notice thereof shall be given by the owner or occupier of the manufactory or premises to the L.A., and the Register shall thereupon be amended by making therein the requisite alteration, and an endorsement shall be made by the L.A. on the certificate in accordance with the Form B. set forth in the said Schedule.

Article 4.—This Order shall come into operation on the date hereof.

Given under the Seal of Office of the Local Government Board for Scotland, this twenty-second day of January, One thousand nine hundred.

(L.S.)

MALCOLM M'NEILL,
Vice-President.

G. FALCONAR-STEWART,
Secretary.

SCHEDULE.

Form (A).

Certificate under the Margarine Act, 1887, as amended by the Sale of Food and Drugs Act, 1899.

(50 & 51 Vict. c. 29, and 62 & 63 Vict. c. 51.)

This is to certify that the Manufactory[1] known as the .....
situate at .....
at which the manufacture of Margarine or Margarine-Cheese[2] is at present carried on by .....
the owner [*or* occupier] thereof, has been duly registered by[3] .....
in accordance with the provisions of the aforesaid Acts in that behalf, on the application of .....

Dated this day of , in the year One thousand nine hundred

Signed .....

Clerk to the[4] .....

[1] Or "premises," as the case may be.

[2] Or "Wherein the business of a Wholesale Dealer in Margarine or Margarine-Cheese," as the case may be.

[3] Here insert the name of the Local Authority within whose District the Manufactory or Premises, as the case may be, are situate.

[4] Here insert the name of the Local Authority.

Form (B).

Endorsement on Certificate in case of change in Persons carrying on the Manufacture or Business.

This is to certify that .....
has been duly registered as the owner [*or* occupier] carrying on the manufacture of Margarine or Margarine-Cheese[5] in the within named manufactory[6] in the place of .....

Dated this day of , in the year One thousand nine hundred

Signed .....

Clerk to the .....

[5] Or "the business of a Wholesale Dealer in Margarine or Margarine-Cheese," as the case may be.

[6] Or "premises."

Circular as to the proof of Competency of the Person appointed to the Office of Public Analyst.

LOCAL GOVERNMENT BOARD,
EDINBURGH, 17*th April* 1900.

Sir,—I am directed by the Local Government Board to draw attention to the provisions of sub-sections (1) and (5) of section 3 of the Sale of Food and Drugs Act, 1899 (62 and 63 Vict. c. 51). The former sub-section provides that it shall be the duty of every L.A. entrusted with the execution of the laws relating to the sale of food and drugs to appoint a public analyst, and the latter that any public analyst appointed under the Sale of Food and Drugs Acts shall furnish such proof of competency as may from time to time be required by regulation framed by the Board.

The Board have issued an Order, of which two copies are enclosed, prescribing the regulation which they have framed under the above enactment.

The regulation requires that every person appointed on or after the first day of January, 1900, to the office of public analyst shall furnish such proof as the Board may deem sufficient of his competent skill in and knowledge of (*a*) analytical chemistry, (*b*) therapeutics, and (*c*) microscopy; and the Order proceeds to indicate the nature of the documentary evidence to be comprised in such proof. Such evidence of competency is to be furnished by the public analyst to the L.A. by whom he is appointed; and to be transmitted to the Board, together with a copy of his application, by that authority when applying for the Board's approval of the appointment.

In the case, however, of any person who was appointed to the office of public analyst with the approval of the Secretary for Scotland between 1st January 1891, and 31st December 1899, or who has been or may be appointed to that office with the approval of the Board for the first time after the last-mentioned date, the regulation will not apply in the event of his subsequent appointment as public analyst.

Before approving an appointment the Board, in view of the proviso to section 10 of the Principal Act, must be satisfied that the analyst is not engaged directly or indirectly in any trade or business connected with the sale of food or drugs in the place for which he is appointed.

As regards the reference in the Order to a person or body of persons whom the Board may from time to time recognise as competent to confer the requisite qualification or to test the skill or knowledge of which proof is required by the Order, the Board are prepared to accept as sufficient documentary evidence of the requisite qualification under the Acts, the Diploma of Fellowship or Associateship of the Institute of Chemistry of Great Britain and Ireland, together with the certificate granted by the Institute after an examination, conducted by them on lines approved by the Board, in therapeutics, pharmacology, and microscopy.

The possession of a diploma registrable under the Medical Acts is accepted as sufficient proof of competency in microscopy and therapeutics,

and, in addition to this, a person so qualified, if appointed as a public analyst, will only be required to furnish evidence of competent skill in and knowledge of analytical chemistry.

Evidence of skill or knowledge on the part of a candidate in respect of any of the qualifications referred to as requisite, which is tendered by an individual, must be from a person recognised as entitled to speak with authority as to proficiency in the particular qualification in question.

I am to add that the Board favour the appointment in the smaller burghs of the county public analyst in the interests both of economy and uniform action.—I am, Sir, your obedient servant,

G. FALCONAR-STEWART,
Secretary.

The Clerk to the County Council.
The Town Clerk or Clerk to the Burgh Commissioners.

General Order—Appointment of Public Analyst—Regulation as to Competency.

To the SEVERAL LOCAL AUTHORITIES for the time being required by law to appoint a Public Analyst:—
And to all others whom it may concern.

Whereas by section 23 of the Sale of Food and Drugs Act, 1899, all the powers and duties vested in or imposed on the Secretary for Scotland in relation to the Sale of Food and Drugs Acts are transferred to, vested in, and imposed on us, the Local Government Board for Scotland;

And whereas by the Sale of Food and Drugs Acts provision is made for the appointment by certain L.As. of persons to act as analysts of all articles of Food and Drugs, and every such appointment is made subject to the approval of the Local Government Board:

And whereas by sub-sections (1) and (5) of section 3 of the Sale of Food and Drugs Act, 1899 (hereinafter referred to as "the Act"), it is enacted as follows:—

"(1) It shall be the duty of every L.A. entrusted with the execution of the laws relating to the sale of food and drugs to appoint a public analyst . . . . . ."

"(5) Any public analyst appointed under the Sale of Food and Drugs Acts shall furnish such proof of competency as may from time to time be required by regulation framed by the Local Government Board."

And whereas by section 25 of the Act it is enacted as follows:—

"In this Act unless the context otherwise requires—

. . . . . .

"The expression 'local authority' means any local authority authorised to appoint an analyst for the purposes of the Sale of Food and Drugs Acts, and the expression 'public analyst' means an analyst so appointed."

And whereas in terms of the provisions of the Local Government (Scotland) Act, 1889, the Burgh Police (Scotland) Act, 1892, and the Sale of Food and Drugs Act, 1899, the L.As. authorised to appoint an analyst are as follows, namely—The county council for counties, and the commissioners or town council for burghs, iucluding police burghs;

Now therefore we, the Local Government Board for Scotland, in pursuance of the powers given to us by sub-section (5) of section 3 of the Act, do hereby order that the following regulation shall have effect; that is to say,—

Every person appointed on or after the first day of January, One thousand nine hundred, to the office of public analyst shall furnish such proof as we may deem sufficient of his competent skill in and knowledge of (*a*) analytical chemistry, (*b*) therapeutics, and (c) microscopy.

Such proof shall in every case comprise documentary evidence that such person holds the requisite certificate, diploma, licence, or document conferring the qualification or attesting his possession of the skill or knowledge to which the same applies, and granted or issued by any person or body of persons for the time being recognised by us as competent to confer such qualification or to test such skill or knowledge. Such proof shall also comprise such further evidence as we may in any particular case require.

All such documentary evidence as is hereinbefore mentioned shall be furnished by such person to the L.A. by whom he is appointed and shall be transmitted to us by the L.A. when applying for our approval of the appointment.

Provided that nothing in this regulation contained shall, in the case of any person who was appointed to the office of public analyst with the approval of the Secretary for Scotland between the first day of January, One thousand eight hundred and ninety-one, and the thirty-first day of December, One thousand eight hundred and ninety-nine, or who has been or may be appointed to that office with our approval for the first time after such last-mentioned date, apply upon any subsequent appointment of such person to the said office.

Given under the Seal of Office of the Local Government Board for Scotland, this seventeenth day of April, One thousand nine hundred.

(L.S.) MALCOLM M'NEILL,
Vice-President.

G. FALCONAR-STEWART,
Secretary.

Circular prescribing Regulations as to Form, Etc., of Quarterly Reports.

LOCAL GOVERNMENT BOARD,
EDINBURGH, *5th June* 1900.

Sir,—With reference to section 19 of the Sale of Food and Drugs Act, 1875, I am directed to inform you that the Board have determined that

certified copies of the quarterly reports of the analysts shall be transmitted in the form prepared by them—copies of which are enclosed.

The Act prescribes that the certified copies of the reports shall be transmitted *annually;* but it would be much more convenient to the Board that they should be forwarded *quarterly*, as soon as possible after the report has been submitted to the L.A. in terms of the Act. The portion of the form "to be filled up by the Clerk to the L.A." should also be completed before transmission to the Board.

In order that uniformity may be secured, the Board recommend that the reports by the analysts should be made for the quarters ending 31st March, 30th June, 30th September, and 31st December.

The reports for the quarter ending 31st March last might be prepared and transmitted to this department at once. Those for the quarter ending 30th June should be forwarded as soon as convenient after that date.—I am, Sir, your obedient servant,

G. Falconar-Stewart,
Secretary.

The Clerk of the Local Authority.

Circular as to the Necessity for submitting for Analysis Samples of Food or Drugs for the Purpose of ascertaining whether or not they contain Arsenic.

Arsenic in Beer, Etc.

Local Government Board,
Edinburgh, *27th December* 1900.

Sir,—I am instructed by the Board to state that they have had under consideration the circumstances under which arsenic has been detected in certain beers produced and sold in England, through the appearance of serious forms of disease in districts where those beers are consumed.

Whatever may be the conclusion of the inquiry now being carried out as to the connection between the arsenic present in some qualities and makes of beer and illness among the consumers, there is no doubt that arsenic has been found in beer and porter, in glucose and "invert" sugar used in brewing, and in the sulphuric acid used in the preparation of those sugar substitutes.

No facts have come to the knowledge of the Board either as to the occurrence of similar illnesses or the detection of arsenic in beer in Scotland. Indeed they are aware that analyses instituted in some of the larger burghs have yielded negative results.

The detection of arsenic in sugar substitutes, and especially in glucose, opens up a wider area of risk. Glucose is frequently used in the manufacture of preserves, syrups, sweetmeats, and the like. Sulphuric acid is used in the manufacture of other articles intended for human consumption. The possible presence of arsenic has therefore to be remembered, and arsenic has to be looked for in hitherto unsuspected articles.

On these grounds I am to remind your L.A. of their powers under "The Sale of Food and Drugs Acts," and to suggest that while it would be prudent to submit to analysis samples of beer taken in the district, it is even more necessary to take steps to test the purity of those other articles of food or drugs which in the circumstances described may contain arsenic and prove injurious to public health.—I am, Sir, your obedient servant,

G. FALCONAR-STEWART,
Secretary.

The Clerk to the Local Authority.

Circular as to the Transmission of Samples to Analysts.

LOCAL GOVERNMENT BOARD,
EDINBURGH, 13*th December* 1901.

Sir,—It appears from information received by the Board that it is the practice of some sampling officers to transmit samples to the analyst for analysis under the Food and Drug Acts without furnishing any information as to the circumstances under which the samples were taken, and in some instances, indeed, it seems even to be customary to refuse to inform the analyst of the name under which the article was purchased or offered for sale.

The result is that, in some cases, it is impossible for the analyst to grant a proper certificate showing whether, in his opinion, the sample is genuine or adulterated. Quarterly reports have been received by the Board in which articles sold as a mixture (*e.g.*, coffee and chicory) have been reported adulterated *because they were a mixture*—the analyst having been kept in ignorance that the articles were sold as a mixture, and having dealt with them on the understanding that they were "pure."

In the interests of sound and efficient administration, and in order to avoid the risk of fruitless prosecutions being undertaken under misapprehension, it is essential that the L.As., their analysts, and sampling officers should work together harmoniously. In the view of the Board, all the aid possible ought to be given by L.As. and the sampling officers to the analysts in their important and delicate work. They accordingly suggest that L.As. should instruct their sampling officers:—

(1) To confine themselves to articles *sold* or *offered for sale*, when taking samples for the purpose of analysis, and

(2) When transmitting samples, to make known to the analyst all marks, statements, or declarations on labels, packages, tins, bottles, or wrapping paper, and also any statement made by the vendor at the time of sale bearing on the quality of the article.

I have to request that you will submit this communication to the L.A. at their first meeting.—I am, Sir, your obedient servant,

G. FALCONAR-STEWART,
Secretary.

The Clerk to the Local Authority.

Circular issued by the Board of Agriculture to Local Authorities in Great Britain as to the Regulations made by that Board relating to the Sale of Milk.

BOARD OF AGRICULTURE,
4 WHITEHALL PLACE,
LONDON, S.W., *28th December* 1901.

Sir,—I am directed by the Board of Agriculture to bring under the notice of your L.A. the following observations with reference to the regulations relating to the sale of milk in Great Britain, which, in pursuance of the powers conferred upon the Board by section 4 of the Sale of Food and Drugs Act, 1899, were made by the Board on the 5th August, and came into operation on the 1st September 1901.

The Regulations were as follows :—

MILK.

1. Where a sample of milk (not being milk sold as skimmed, or separated, or condensed, milk) contains less than 3 per cent. of milk-fat, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine, by reason of the abstraction therefrom of milk-fat, or the addition thereto of water.

2. Where a sample of milk (not being milk sold as skimmed, or separated, or condensed, milk) contains less than 8·5 per cent. of milk-solids other than milk-fat, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine, by reason of the abstraction therefrom of milk-solids other than milk-fat, or the addition thereto of water.

SKIMMED OR SEPARATED MILK.

3. Where a sample of skimmed or separated milk (not being condensed milk) contains less than 9 per cent. of milk-solids, it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine, by reason of the abstraction therefrom of milk-solids other than milk-fat, or the addition thereto of water.

In the Regulations the limits below which a presumption is raised that the milk is not genuine were necessarily fixed at figures lower than those which are usually afforded by genuine milk, in which the proportion of milk-fat and non-fatty solids very frequently exceeds the percentages specified above. It is therefore important that L.As. should keep steadily in view the possibility of the artificial reduction of the quality of natural milk to the official limits by the abstraction of cream, or the addition of separated milk, or of water, and arrangements should be made for the taking of samples and the submission of the same for analysis whenever the existence of malpractices of the kind is suspected. In this connection it may be observed that the evidence given before the Milk Regulations

Committee [Cd. 491] tended to show that the practice of fraudulently mixing separated milk with new milk has become increasingly prevalent, particularly in some of the larger towns.

Although the quality of genuine milk offered for sale will usually be well above the official limits of milk-fat and non-fatty solids, there may occasionally, and especially in certain seasons of the year, be cases in which a sample of genuine milk may fall below those limits. To meet cases of this kind it is suggested that in the absence of any special circumstances indicating that the case is a fraudulent one, the L.A. might, in the first instance, call the vendor's attention to the analyst's report, and ask him whether he desires to offer any explanation, and if the explanation is one they are able to accept, they might, in the exercise of their discretion, refrain from the institution of proceedings or withdraw any summons which, in order to prevent the failure of proceedings, by reason of the time-limit imposed by the Act, it may have been necessary to take out. But it may be desirable that further samples of milk should be taken in such cases, in order that a satisfactory conclusion as to the character of the milk supplied may be arrived at.

Cream.

The Milk Regulations Committee reported that the evidence submitted to them went to show that it was a common practice to add gelatin to cream for the purpose of giving it a fictitious appearance of richness or thickness. L.As. are urged to take steps to ascertain whether this form of adulteration is practised within their districts, and if a public analyst reports the presence of gelatin or other similar substance in a sample of cream, the L.A. concerned should consider whether the case is one in which proceedings might not with advantage be instituted under section 6 of the Sale of Food and Drugs Act, 1875.

Collection and Retention of Samples.

It is desirable that, so far as may be found practicable, there should be uniformity of procedure in collecting and retaining samples of milk procured under the provisions of the Sale of Food and Drugs Acts, and the following recommendations have been drawn up for the guidance of the local officials employed in this work:—

(1) The quantity to be purchased should not be less than one pint, except that it may be expedient to purchase only half-a-pint, in cases where there is reason to believe that the object of the purchase would be defeated if a greater quantity were demanded.

(2) The division of the sample under section 14 of the Act of 1875, as amended by section 13 of the Act of 1899, should be made as equally as possible, so that the portion reserved by the purchaser may be not less than one-third of the whole.

(3) The bottle used for each divided part should have a narrow neck, and be of such capacity that the milk may nearly or quite fill it. The shape of bottle known as "Winchester" is strongly recommended, but in any case the bottles should have rounded sides in order to give security to the sample during transit by post or otherwise.

(4) Corks only should be used, and these should always be new and sound, and fitting so tightly as to secure the contents without any aid from the wax which is subsequently used for sealing the sample. It is most desirable that the sealing should be carried out in such a way as to prevent any attempt to remove the cork. It is therefore recommended that the cork should be slit down to one-fourth of its length and the string drawn through and securely fastened round the neck, the ends being afterwards carried to the top of the cork and sealed thereon.

(5) Special attention should be given that the reserved portion of milk be kept in as equable and cool a temperature as possible, pending its production in Court in instances where proceedings are taken; and, if directed by the justices to be referred to the Government laboratory, it should be carefully packed so as to secure its safe transmission.

The Board would be obliged if you would take steps to bring this Circular under the notice of your L.A., and they will be glad to forward you additional copies for distribution amongst the members of your L.A. and the officers concerned, upon being informed of the number you require.—I am, Sir, your obedient servant,

T. H. ELLIOTT,
Secretary.

PROSECUTIONS UNDER THE SALE OF FOOD AND DRUGS ACTS.

In answer to an enquiry by a sampling officer as to whether he should obtain the sanction of the L.A. before instituting proceedings under the Sale of Food and Drugs Acts, we stated that in our opinion a prosecution under these Acts should not be entered upon without the express instructions of the L.A. or a committee duly authorised.

SALE OF BUTTER REGULATIONS, 1902.

In exercise of the powers conferred on them by section 4 of the Sale of Food and Drugs Act, 1899, the Board of Agriculture on 22nd April, 1902, made a regulation as to the proportion of water in butter. This regulation, which applies to Great Britain, and came into operation on 15th May 1902, is here produced for the convenience of L.As.:—

"Where the proportion of water in a sample of butter exceeds 16 per cent. it shall be presumed for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the butter is not genuine by reason of the excessive amount of water therein."

MINIMUM QUANTITIES OF OTHER FOODS BESIDES ABOVE, NECESSARY TO PURCHASE FOR ANALYSIS.

Aerated Waters, 3 bottles; Beer, 1 gallon; Bread, 4 lbs.; Butter, 1 lb.; Cheese, ½ lb.; Chocolate, 4 oz.; Cocoa, 4 oz.; Coffee, ¾ lb.; Chicory, ½ lb.; Cream, ½ pint; Flour, 2 lbs.; Honey, ½ lb.; Jam, 1 pot; Lard, ¾ lb.; mustard, ¼ can; Oatmeal, 1 lb.; Pepper, 2 oz.; Tea, ¼ lb.; Vinegar, 1 pint.

ABSTRACT OF CONTAGIOUS DISEASES (ANIMALS) ACT, 1878 (41 & 42 VICT. CH. 74) AND 1886 (49 & 50 VICT. CH. 32).

The sections of importance as regards the public health are section 34 of the 1878 Act and section 9 of the 1886 Act, and these are given in the preface to the Dairies, Cow-sheds, and Milk-shops Orders, issued by the Board in their "Instructions, Forms, and Recommendations."

And these sections and the Orders are as follows:—

DAIRIES, COW-SHEDS, AND MILK-SHOPS.

Enactments as to Dairies, Cow-Sheds, and Milk-Shops.

In pursuance of their powers under the Contagious Diseases (Animals) Act of 1878 the Privy Council were empowered from time to time to make general or special Orders relating to the regulation of dairies, cow-sheds, and milk-shops.

Section 34 of the said Act conferring these powers is as follows:—

34. The Privy Council may from time to time make such general or special Orders as they think fit, subject and according to the provisions of this Act, for the following purposes or any of them:—

(i.) For the registration with the L.A. of all persons carrying on the trade of cow-keepers, dairymen, or purveyors of milk.

(ii.) For the inspection of cattle in dairies, and for prescribing and regulating the lighting, ventilation, cleansing, drainage, and water-supply of dairies and cow-sheds in the occupation of persons following the trade of cow-keepers or dairymen.

(iii.) For securing the cleanliness of milk-stores, milk-shops, and of milk-vessels used for containing milk for sale by such persons.

(iv.) For prescribing precautions to be taken for protecting milk against infection or contamination.

(v.) For authorising a L.A. to make regulations for the purposes aforesaid, or any of them, subject to such conditions, if any, as the Privy Council prescribe.

By the Contagious Diseases (Animals) Act of 1886, the powers vested in the Privy Council and L.As. acting under the Contagious Diseases (Animals) Act of 1878 (in so far as regards the regulation of dairies, cow-sheds, and milk-shops, in terms of the above quoted section) were transferred in Scotland to the Board of Supervision and L.As. acting under the Public Health Act of 1867. **[136]**

The text of section 9 of the aforesaid Act which, *inter alia*, provided for this transfer is as follows:—

9. (1) The powers vested in the Privy Council of making general or special Orders under section 34 of the Principal Act, for the purposes in that section mentioned, are hereby transferred to and shall henceforth

be exerciseable by the Local Government Board; every such Order shall have effect as if enacted in this section, and shall be published in such manner as the Local Government Board may direct, and the said Board may from time to time alter or revoke any such Order.

(2) For the purposes of the said section and this section, and of any Order in force thereunder, the expression "local authority," unless the context otherwise requires, in the metropolis has the same meanings as in the Principal Act, and elsewhere has the same meanings as in the Public Health Act, 1875.

(3) Any expenses incurred by a L.A. in the metropolis in pursuance of section 34 of the Principal Act, as amended by this section, shall be defrayed out of the local rate applicable to their expenses under the Principal Act; and any expenses so incurred by any other L.A. shall be defrayed as if they were incurred in the execution of the Public Health Act, 1875, and in the case of a rural sanitary authority shall be deemed to be general expenses.

(4) The L.A. and their officers, for the purpose of enforcing the said Orders and any regulations made thereunder, shall have the same right to be admitted to any premises as the L.A., within the meaning of the Public Health Act, 1875, and their officers have, under section 102 of that Act, for the purpose of examining as to the existence of any nuisance thereon; and if such admission is refused the like proceedings may be taken, with the like incidents and consequences as to Orders for admission, penalties, costs, expenses, and otherwise, as in the case of a refusal to admit to premises for any of the purposes of the said section 102, and as if the L.A. mentioned in the said Act included a L.A. in the metropolis as defined in this section.

Provided that nothing in this section shall authorise any person, except with the permission of the L.A. under the Principal Act, to enter any cow-shed or other place in which an animal affected with any disease is kept, and which is situate in a place declared to be infected with such disease.

(5) The like penalties for offences against Orders or regulations made for the purposes of section 34 of the Principal Act as amended by this section may be imposed by the Local Government Board or L.A. making the same, and such offences may be prosecuted and penalties recovered in a summary manner, and subject to the like provisions, as if such Orders or regulations were bye-laws of a L.A. under the Public Health Act, 1875, and as if the L.A. mentioned in that Act included a L.A. in the metropolis as defined in this section.

(6) Whereas under the powers of the Principal Act the Privy Council have made an Order known as the Dairies, Cow-sheds, and Milk-shops Order of 1885 (*see* p. 216), and certain authorities have made regulations under that Order, or having effect in pursuance thereof; and it is expedient by reason of the foregoing provisions of this section to make provision respecting such Order and regulations: Be it therefore enacted as follows:—

(*a*) The Dairies, Cow-sheds, and Milk-shops Order of 1885, and any

regulations thereunder, or having effect in pursuance thereof, made by any L.A. under the Principal Act, other than the L.A. of a county, shall be deemed to have been made respectively by the Local Government Board and by a L.A. under this section: and any such regulations made by the L.A. of a county, within the meaning of the Principal Act, shall, so far as they extend to the district of any L.A. as defined in this section, be deemed to have been made by such L.A.

(*b*) So much of any register kept by the L.A. of any county under the said Order as relates to the district of any L.A. as defined in this section, or a copy thereof, shall, as soon as may be after the passing of this Act, be delivered to the L.A. by the L.A. of the county.

(7) In the application of this section to Scotland, the expression "Local Government Board" shall mean the Board of Supervision for relief of the poor and for public health; the expression "local authority" shall mean the local authority under the Public Health (Scotland) Act, 1867; the expressions "Public Health Act, 1875," and "section 102 of the said Act" shall mean respectively the Public Health (Scotland) Act, 1867, and section 17 of the said Act; the expression "bye-laws of a local authority" shall mean rules and regulations made by a local authority under the Public Health (Scotland) Act, 1867; and generally the Board of Supervision and the L.A. under the Public Health (Scotland) Act, 1867, shall have all the powers of the Privy Council, and the L.A. under section 34 of the Contagious Diseases (Animals) Act, 1878, with regard to the regulation of dairies, cow-sheds, and milk-shops: Provided always, that no general or special Order made by the Board of Supervision under this section shall be binding until it has been confirmed by the Secretary for Scotland, subject to such conditions, if any, as the Secretary for Scotland shall think fit.

In 1887 the Board of Supervision issued "The Dairies, Cow-sheds, and Milk-shops Amending Order, 1887" (*see* p. 219), giving effect to the amendment of the statute and prescribing penalties to be imposed for offences against the Order of 1885. The Board also issued an explanatory circular, dated 27th January 1887 (*see* p. 221), and prepared for the guidance of L.As. the following forms:—

(*a*) A form of Application for Registration; (*b*) a form of Certificate of Registration; and (*c*) a form of Register.

The effect of subsequent legislation was to transfer the administration of the above-quoted sections of the Contagious Diseases (Animals) Acts to the Local Government Board and L.As. under the Public Health (Scotland) Act, 1897.

Following up the conclusions of the Royal Commissions on tuberculosis which reported in 1895 and 1898, the Board issued on 19th October a Dairies, Cow-sheds, and Milk-shops Order, 1899 (*see* p. 229), the effect of which is to extend the meaning of the word "disease" in Article 15 of the Order of 1885 so as to include such disease of the udder of the cow as shall be certified by a veterinary surgeon to be tubercular. The Board

also revoked Article 14 of the aforesaid Order and substituted for it a provision assimilating the procedure regarding regulations under the Order to the procedure laid down in the Public Health Act of 1897 with respect to bye-laws under that Act. (*See* also explanatory covering circular, page 229, *post*.)

The Dairies, Cow-Sheds, and Milk-Shops Order of 1885.

At the Council Chamber, Whitehall, the 15th day of June 1885.

By Her Majesty's Most Honourable Privy Council.

Present—Lord President, Mr Trevelyan.

The Lords and others of Her Majesty's Most Honourable Privy Council, by virtue and in exercise of the powers in them vested under The Contagious Diseases (Animals) Act, 1878, and of every other power enabling them in this behalf, do order, and it is hereby ordered, as follows :—

SHORT TITLE.

1. This Order may be cited as The Dairies, Cow-sheds, and Milk-shops Order of 1885.

EXTENT.

2. This Order extends to England and Wales and Scotland only.

COMMENCEMENT.

3. This Order shall commence and take effect from and immediately after the thirtieth day of June, One thousand eight hundred and eighty five.

INTERPRETATION.

4. In this Order—

The Act of 1878 means The Contagious Diseases (Animals) Act, 1878.

Other terms have the same meaning as in the Act of 1878.

REVOCATION OF FORMER ORDERS.

5. The Dairies, Cow-sheds, and Milk-shops Order of July 1879 is hereby revoked : Provided that nothing in this Order shall be deemed to revive any Order of Council thereby revoked or to invalidate or make unlawful anything done before the commencement of this Order, or interfere with the institution or prosecution of any proceeding in respect of any offence committed against, or any penalty incurred under, the said Order hereby revoked.

REGISTRATION OF DAIRYMEN AND OTHERS.

6. (1) It shall not be lawful for any person to carry on in the district of any L.A. the trade of cow-keeper, dairyman, or purveyor of milk unless he is registered as such therein in accordance with this Article.

(2) Every L.A. shall keep a register of persons from time to time carrying on in their district the trade of cow-keepers, dairymen, or purveyors of milk, and shall from time to time revise and correct the register.

(3) The L.A. shall register every such person, but the fact of such

registration shall not be deemed to authorise such person to occupy as a dairy or cow-shed any particular building or in any way preclude any proceedings being taken against such person for non-compliance with or infringement of any of the provisions of this Order or any regulation made thereunder.

(4) The L.A. shall from time to time give public notice by advertisement in a newspaper circulating in their district, and, if they think fit, by placards, hand-bills, or otherwise, of registration being required, and of the mode of registration.

(5) A person who carries on the trade of cow-keeper or dairyman for the purpose only of making and selling butter or cheese or both, and who does not carry on the trade of purveyor of milk, shall not, for the purposes of registration, be deemed to be a person carrying on the trade of cow-keeper or dairyman, and need not be registered.

(6) A person who sells milk of his own cows in small quantities to his workmen or neighbours, for their accommodation, shall not, for the purposes of registration, be deemed, by reason only of such selling, to be a person carrying on the trade of cow-keeper, dairyman, or purveyor of milk, and need not, by reason thereof, be registered. [134]

CONSTRUCTION AND WATER-SUPPLY OF NEW DAIRIES AND COW-SHEDS.

7. (1) It shall not be lawful for any person following the trade of cow-keeper or dairyman to begin to occupy as a dairy or cow-shed any building not so occupied at the commencement of this Order, unless and until he firstmakes provision, to the reasonable satisfaction of the L.A., for the lighting, and the ventilation including air-space, and the cleansing, drainage, and water-supply, of the same, while occupied as a dairy or cow-shed. [136]

(2) It shall not be lawful for any such person to begin so to occupy any such building without first giving one month's notice in writing to the L.A. of his intention so to do.

SANITARY STATE OF ALL DAIRIES AND COW-SHEDS.

8. It shall not be lawful for any person following the trade of cow-keeper or dairyman to occupy as a dairy or cow-shed any building, whether so occupied at the commencement of this Order or not, if and as long as the lighting, and the ventilation including air-space, and the cleansing, drainage, and water-supply thereof are not such as are necessary or proper—

(*a*) For the health and good condition of the cattle therein; and

(*b*) For the cleanliness of milk-vessels used therein for containing milk for sale; and

(*c*) For the protection of the milk therein against infection or contamination. [136]

CONTAMINATION OF MILK.

9. It shall not be lawful for any person following the trade of cow-keeper or dairyman or purveyor of milk, or being the occupier of a milk-store or milk-shop—

(*a*) To allow any person suffering from a dangerous infectious disorder,

or having recently been in contact with a person so suffering, to milk cows or to handle vessels used for containing milk for sale, or in any way to take part or assist in the conduct of the trade or business of the cow-keeper or dairyman, purveyor of milk, or occupier of a milk-store or milk-shop, so far as regards the production, distribution, or storage of milk; or

(*b*) If himself so suffering or having recently been in contact as aforesaid, to milk cows, or handle vessels used for containing milk for sale, or in any way to take part in the conduct of his trade or business, as far as regards the production, distribution, or storage of milk—

until in each case all danger therefrom of the communication of infection to the milk or of its contamination has ceased.

10. It shall not be lawful for any person following the trade of cow-keeper or dairyman or purveyor of milk, or being the occupier of a milk-store or milk-shop, after the receipt of notice of not less than one month from the L.A. calling attention to the provisions of this Article, to permit any water-closet, earth-closet, privy, cesspool, or urinal to be within, communicate directly with, or ventilate into, any dairy or any room used as a milk-store or milk-shop.

11. It shall not be lawful for any person following the trade of cow-keeper or dairyman or purveyor of milk, or being the occupier of a milk-store or milk-shop to use a milk-store or milk-shop in his occupation, or permit the same to be used, as a sleeping apartment, or for any purpose incompatible with the proper preservation of the cleanliness of the milk-store or milk-shop, and of the milk-vessels and milk therein, or in any manner likely to cause contamination of the milk therein. [135]

12. It shall not be lawful for any person following the trade of cow-keeper or dairyman or purveyor of milk to keep any swine in any cow-shed or other building used by him for keeping cows, or in any milk-store or other place used by him for keeping milk for sale.

Regulations of Local Authority.

(*See also Circular* 27 (1), 1887, *p.* 221.)

13. A L.A. may from time to time make regulations for the following purposes, or any of them:

(*a*) For the inspection of cattle in dairies.

(*b*) For prescribing and regulating the lighting, ventilation, cleansing, drainage, and water-supply of dairies and cow-sheds in the occupation of persons following the trade of cow-keepers or dairymen. [136]

(*c*) For securing the cleanliness of milk-stores, milk-shops, and of milk-vessels used for containing milk for sale by such persons.

(*d*) For prescribing precautions to be taken by purveyors of milk and persons selling milk by retail against infection or contamination

Provisions as to Regulations of Local Authority.

14. *Revoked* and new Procedure substituted by 1899 Order (p. 228).

EXISTENCE OF DISEASE AMONG CATTLE.

15.* If at any time disease exists among the cattle in a dairy or cow-shed, or other building or place, the milk of a diseased cow therein—

(*a*) shall not be mixed with other milk; and

(*b*) shall not be sold or used for human food; and

(*c*) shall not be sold or used for food of swine, or other animals, unless and until it has been boiled.

ACTS OF LOCAL AUTHORITIES.

16. (1) All Orders and Regulations made by a L.A. under The Dairies, Cow-sheds, and Milk-shops Order of July 1879, or any Order revoked thereby, and in force at the making of this Order shall, as far as the same are not varied by or inconsistent with this Order, remain in force until altered or revoked by the L.A.

(2) Forms of Registers and other forms which have been before the making of this Order prepared for use by a L.A. under The Dairies, Cow-sheds, and Milk-shops Order of July 1879, or any Order revoked thereby, may be used, as far as they are suitable, for the purposes of this Order.

SCOTLAND.

17. Nothing in this Order shall be deemed to interfere with the operation of The Cattle-Sheds in Burghs (Scotland) Act, 1866.

C. L. PEEL.

The Dairies, Cow-Sheds, and Milk-Shops Amending Order, 1887.

TO ALL THE LOCAL AUTHORITIES IN SCOTLAND, in terms of "The Public Health (Scotland) Act, 1867."

WHEREAS by section 34 of the Contagious Diseases (Animals) Act, 1878 (hereinafter referred to as "the Principal Act"), it was enacted that Her Majesty's Most Honourable Privy Council (hereinafter referred to as "The Privy Council"), might from time to time make such general or special Orders as they should think fit, subject and according to the provisions of the Act, for the purposes specified in that section.

And whereas on the 15th day of June 1885, the Privy Council, in pursuance of the powers vested in them by the Principal Act, made a General Order known as "The Dairies, Cow-sheds, and Milk-shops Order of 1885" (hereinafter referred to as "the Order of 1885"); and such Order extends to the whole of Scotland.

And whereas by Article 14 of the Order of 1885, it is provided that a copy of every regulation therein referred to shall be sent to the Privy Council, and that if at any time the Privy Council are satisfied on inquiry with respect to any regulation that the same is of too restrictive

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* Article 15 amended by Article III. of the said Order of 1899. (*See* Explanation in Board's Circular of 19th October, 1899, page 229, *post*.)

a character, or otherwise objectionable, and direct the revocation thereof, the same shall not come into operation, or shall thereupon cease to operate, as the case may be.

And whereas by section 9 of the Contagious Diseases (Animals) Act, 1886 (hereinafter referred to as "the Act of 1886"), it is enacted as follows :—

9. (1) The powers vested in the Privy Council of making general or special Orders under section 34 of the Principal Act, for the purposes in that section mentioned, are hereby transferred to and shall henceforth be exerciseable by the Local Government Board; every such Order shall have effect as if enacted in this section, and shall be published in such manner as the Local Government Board may direct, and the said Board may from time to time alter or revoke any such Order.

(5) The like penalties for offences against Orders or regulations made for the purposes of section 34 of the Principal Act as amended by this section may be imposed by the Local Government Board or L.A. making the same, and such offences may be prosecuted and penalties recovered in a summary manner, and subject to the like provisions, as if such Orders or regulations were bye-laws of a L.A. under the Public Health Act, 1875, and as if the L.A. mentioned in that Act included a L.A. in the metropolis as defined in this section.

(6) (*a*) The Dairies, Cow-sheds, and Milk-shops Order of 1885, and any regulations thereunder, or having effect in pursuance thereof, made by any L.A. under the Principal Act, other than the L.A. of a county, shall be deemed to have been made respectively by the Local Government Board and by a L.A. under this section.

(7) In the application of this section to Scotland, the expression "Local Government Board" shall mean the Board of Supervision for relief of the poor and for public health; the expression "local authority" shall mean the local authority under the Public Health (Scotland) Act, 1867, the expressions "Public Health Act, 1875," and "section 102 of the said Act" shall mean respectively the Public Health (Scotland) Act, 1867, and section 17 of the said Act; the expression "bye-laws of a local authority" shall mean rules and regulations made by a local authority under the Public Health (Scotland) Act, 1867; and generally the Board of Supervision and the L.A. under the Public Health (Scotland) Act, 1867, shall have all the powers of the Privy Council, and the L.A. under section 34 of the Contagious Diseases (Animals) Act, 1878, with regard to the regulation of dairies, cow-sheds, and milk-shops: Provided always, that no general or special Order made by the Board of Supervision under this section shall be binding until it has been confirmed by the Secretary for Scotland, subject to such conditions, if any, as the Secretary for Scotland shall think fit.

And whereas it is expedient that the Order of 1885 should be altered as hereinafter mentioned, and that penalties should be imposed for offences against such Order.

Now therefore we, the Board of Supervision for the relief of the poor,

and for public health in Scotland, in pursuance of the powers vested in us by the Act of 1886, hereby order as follows:—

Article 1.—This Order may be cited as "The Dairies, Cow-sheds, and Milk-shops Amending Order of 1887."

Article 2.—Article 14 of the Order of 1885 shall be altered by the substitution therein of the words "Board of Supervision" for the words "Privy Council" occurring therein.

Article 3.—If any person is guilty of an offence against the Order of 1885, he shall for every such offence be liable to a penalty of five pounds.

Provided, nevertheless, that the sheriff or other magistrate before whom any complaint may be made, or any proceedings may be taken in respect of any such offence, may, if he think fit, adjudge the payment as a penalty of any sum less than the full amount of the penalty imposed by this Order.

Article 4.—In this Order the expression "local authority" means the local authority under the Public Health (Scotland) Act, 1867.

Certified and signed by me, this twenty-seventh day of January, in the year One thousand eight hundred and eighty-seven.

JOHN SKELTON,
Secretary.

BOARD OF SUPERVISION,
EDINBURGH, 27*th January* 1887.

I hereby confirm the foregoing Order.

(L.S.)

ARTHUR JAMES BALFOUR,
Her Majesty's Secretary for Scotland.

DOVER HOUSE, WHITEHALL,
8*th February* 1887.

Circular respecting Regulation of Dairies, Cow-Sheds, and Milk-Shops.

BOARD OF SUPERVISION,
EDINBURGH, 27*th January* 1887.

Sir,—The duty of putting in force the provisions of the Contagious Diseases (Animals) Act of 1878, in so far as regards the regulation of dairies, cow-sheds, and milk-shops, in terms of section 34 of that Act, having now devolved upon the L.As. under the Public Health Act, many communications have been received by the Board in reference to the provisions of the Act and the relative Privy Council Order of 1885, to which the Board have given their best consideration. The Board are anxious to assist L.As. as far as is in their power, and they trust that the explanations which they now propose to give will facilitate the action of the Local Boards.

The Circular of the Board, dated 16th August last, indicated in a general way the purposes of the Act and of the Order. The specific duties

imposed upon L.As. by the Act and by the Order may be considered under the following heads:—I. Registration; II. Regulations; III. Inspection; IV. Prosecutions and Penalties.

I. Registration of Persons Carrying on the Trade of Cow-Keeper, Dairyman, or Purveyor of Milk.

The Order declares that it shall not be lawful for any person to carry on the trade of cow-keeper, dairyman, or purveyor of milk in the district of any L.A. unless he is registered as such therein; and it requires every L.A. to keep a register of such persons, and from time to time to revise and correct the register.

The Board have prepared for the guidance of L.As. various forms in connection with registration, of which copies are herewith sent.

a. A form of Application for Registration.

b. A form of Certificate of Registration.

c. A form of Register.

These forms are not compulsory, but the Board think they may be adopted with advantage.

L.As. are bound, on application, to register every person carrying on the trade within their districts, with certain exceptions; and they are not entitled to refuse to register any such persons. The exceptions are—

a. Persons who carry on the trade of cow-keeper or dairyman for the purpose only of making and selling butter and cheese, or both, and who do not carry on the trade of purveyor of milk; and

b. Persons who sell milk of their own cows in small quantities to their workmen or neighbours, for their accommodation.

These two classes of persons do not require to be registered.

In the case of persons who were entered in the Register of the L.A. under the Contagious Diseases (Animals) Act (which Register, or a copy thereof, has now been handed over to the L.A. under the Public Health Act) a repetition of their registration is not necessary. Nor does the Act or the Order provide for the annual or periodical renewal of registration; but the L.A. are bound from time to time to revise and correct the Register.

The L.A. must bear in mind that registration applies to persons, not to premises. They cannot therefore refuse to register any person, though his premises may be considered unfit for the purposes of the trade. But the fact of registration does not preclude proceedings being taken against such person for contravention of the provisions of the Order, or of any regulation made thereunder.

It will be observed that registration is also necessary in the case of persons who sell milk, from carts or otherwise (though not occupying premises), within the district.

II. Regulations of Local Authorities.

(For amendment of procedure regarding regulations, refer to Board's Circular of 19th October 1899, p. 229.)

Where the L.A. consider it necessary they may issue regulations for the purposes specified in Article 13 of the Order. Any regulations made by

the L.A. under the Contagious Diseases (Animals) Act are continued in force, and it is the duty of the L.A. to see that they are complied with. Such regulations do not require to be advertised of new by the L.A.

All new regulations made by the L.As. require to be published by advertisement in a newspaper circulating in the district, and a copy of every regulation must be sent to the Board not less than one month before the date named in such regulation for the same to come into force.

The approval of the Board is not required to the regulations, but the Board are empowered at any time to direct the revocation of any regulation which they deem to be of too restrictive a character, or otherwise objectionable (Art. 14, (2) and (3), of Order of 1885).

It will be observed that the effect of the Act is to substitute the Board of Supervision for the Privy Council.

The Board understand that the practice of the Privy Council in regard to the disallowing of regulations has been as follows :—

(*a*) *Registration.*—Registration is not one of the purposes specified in Article 13 of the Order for which regulations may be made. When L.As. made regulations as to registration, or for enabling them to refuse or cancel registration where requirements were not complied with, they were informed—(1) that they had no power to make regulations as to registration, and (2) that registration applies to persons and not to premises, and cannot be refused.

(*b*) *Inspection.*—Article 13 of the Order empowers L.As. to make regulations "for the inspection of cattle in dairies." Regulations authorising the periodical inspection of premises where cattle were kept by persons following the trade of cow-keepers or dairymen were not objected to by the Privy Council; but where regulations proposed to authorise the inspection of milk-shops (where cattle were not kept) they were disallowed.

(*c*) *Notification of Disease, &c.*—The following regulations were disallowed by the Privy Council as being of too stringent a character, if not *ultra vires*, viz. :—

1. Purveyors of milk to give notice to L.A. of outbreak of (human) disease on premises.
2. Purveyors of milk to keep books showing names of customers and farms or sources from which milk is supplied to each customer.
3. Power to prohibit dairymen from supplying milk coming from particular farms (the farms not necessarily being within the district of the L.A.).

The first of these regulations appeared to the Privy Council to be part of a much larger subject; and as regards the other two it seemed doubtful whether they could be said to be "precautions for protecting milk against infection or contamination," their object being rather to prevent the supply of milk when contaminated.

The above are the principal grounds on which regulations were disallowed by the Privy Council.

The Board will in general be disposed to follow the course adopted by the Privy Council. They are prepared, however, if applied to by a L.A.,

to consider whether, as the duties have now been entrusted to the Board charged with the administration of the Public Health Acts, it may not be competent and desirable in certain cases to extend the scope of the regulations hitherto sanctioned.

The L.A. can alter or revoke any regulation in force within their district. In the case of alteration, the same procedure must be gone through as in framing new regulations. In the case of revocation, intimation should be made to the Board, and public notice should also be given by advertisement in the newspapers.

III. Inspection.

The Board deem it expedient that in every district in which any person carries on the trade of cow-keeper, dairyman, or purveyor of milk, the L.A. should appoint an inspector of dairies, etc., to see that the provisions of the Act and the Order are carried out. It will be convenient, as a rule, that the sanitary inspector should also be inspector of dairies. This, however, is not compulsory; and it is competent for the L.A. to appoint an inspector of dairies other than the sanitary inspector.

The sanitary inspector, if appointed to act, should receive additional remuneration in respect of his new duties.

IV. Prosecutions and Penalties.

Section 9 (5) of the Contagious Diseases (Animals) Act, 1886, provides that—"The like penalties for offences against Orders or regulations made for the purposes of section 34 of the Principal Act as amended by this section may be imposed by the Board of Supervision or L.A. making the same, and such offences may be prosecuted and penalties recovered in a summary manner, and subject to the like provisions, as if such Orders or regulations were rules and regulations of a L.A. under the Public Health (Scotland) Act, 1867."

The Board are of opinion that the effect of this enactment is to render inapplicable to future Orders and regulations, and also to the Privy Council's Order of 1885, and regulations thereunder, the penalties fixed by section 60 of the Contagious Diseases (Animals) Act of 1878, for contravention of Orders or regulations. They have accordingly issued an Order, which has been confirmed by Her Majesty's Secretary for Scotland, imposing penalties for contraventions of the Order of 1885. A copy is sent herewith. It will now be necessary for any L.A. which has already made regulations (or may hereafter make regulations) to impose penalties for contraventions of such regulations similar to those imposed for contraventions of rules and regulations under the Public Health Act of 1867. The penalties to be imposed should not exceed five pounds for each offence. Penalties may be sued for summarily under the Summary Jurisdiction Acts, 1864 and 1881.—I am, Sir, your obedient servant,

John Skelton,
Secretary.

To the Clerk or Sanitary Inspector of the Local Authority under the Public Health Act.

Form of Certificate of Registration.

THE CONTAGIOUS DISEASES (ANIMALS) ACTS, 1878 AND 1886; AND THE DAIRIES, COW-SHEDS, AND MILK-SHOPS ORDER OF 1885.

I certify that.....

residing at.....

and occupying premises at.....

is registered as a.....

within the district of the Local Authority of.....

(Signature).....

Clerk to the Local Authority, or Sanitary Inspector.

(Place).....

(Date).....

This Certificate is to be preserved by the holder, and exhibited when required.

The fact of registration shall not be deemed to authorise the person registered to occupy as a dairy or cow-shed any particular building, or in any way preclude any proceedings being taken against such person for non-compliance with, or infringement of, any of the provisions of the above-named Order, or any regulation made thereunder.

Form of Application for Registration.

THE CONTAGIOUS DISEASES (ANIMALS) ACTS, 1878 AND 1886; AND THE DAIRIES, COW-SHEDS, AND MILK-SHOPS ORDER OF 1885.

To the Local Authority of.....

I hereby make application to be placed on the Register kept by the Local Authority under the above-named Order.

Name of Applicant . Occupation . . . Residence . . .	
Situation of Premises.	
State whether a— Cow-keeper . . Dairyman, or . . Purveyor of Milk .	

Signature of Applicant.....

(Place).....

(Date).....

Form of Register of Dairies, Cow-Sheds, and Milk-Shops.

No..... Name of Dairy, etc.....

Date of Registration.....

	FIRST INSPECTION AND REPORT. This column to be filled up at first visit; any change of circumstances at subsequent visits to be noted under head "Remarks," on next page.
Name of person carrying on the trade Occupation (state whether Cow-keeper, Dairyman, or Purveyor of Milk) . . . . . . Residence	
Number of Cows . . . . . Milk, how disposed of	
BYRE OR COW-SHED:— Construction . . . . Lighting . . . . . Ventilation . . . . . Cubic-Space . . . . . Drainage . . . . . Water-Supply . . . . . Cleanliness . . . . . Situation of Byre or Cow-Shed in relation to Dwelling-Houses, Stables, Dungsteads, Piggeries, etc. . .	
DAIRY, MILK-SHOP, OR STORE:— Situation, Construction, and general Sanitary Condition . Cleanliness of Place and Vessels Persons Sleeping where Milk kept, or in Place communicating therewith . . . . Other articles kept in Milk-Store	
Privy, Closet, Urinal, or Cesspool, communicating with Byre, Milk-Shop, or Store	
Swine kept in Byre or Milk-Store, or Place communicating therewith .	
	Date, ... *Inspector.*

LOCAL AUTHORITY OF.....

SUBSEQUENT INSPECTIONS AND REPORTS.

Date.	Remarks.

The Dairies, Cow-Sheds, and Milk-Shops Order of 1899.

TO ALL LOCAL AUTHORITIES IN SCOTLAND, IN TERMS OF THE PUBLIC HEALTH (SCOTLAND) ACT, 1897.

AND to all others whom it may concern.

WHEREAS on the 15th day of June, 1885, Her Majesty's Most Honourable Privy Council (hereinafter referred to as the "The Privy Council"), in pursuance of the Statutory provisions in that behalf, made an Order (hereinafter referred to as "The Order") which is known as "The Dairies, Cow-sheds, and Milk-shops Order of 1885";

AND WHEREAS certain powers of the Privy Council including the power of altering or revoking the Order, were transferred to the Board of Supervision for the relief of the Poor and for Public Health in Scotland, and thereafter transferred to us, the Local Government Board for Scotland; and in pursuance of such powers, the Order was altered by an Order duly confirmed by the Secretary for Scotland (hereinafter referred to as "The Amending Order"), which was made by the aforesaid Board of Supervision on the 27th day of January, 1887, and is known as "The Dairies, Cow-sheds, and Milk-shops Amending Order of 1887";

AND WHEREAS it is expedient that the Order as altered by the Amending Order should be further altered;

NOW THEREFORE, in pursuance of the powers vested in us in that behalf, we hereby Order as follows:—

Article I.—This Order may be cited as "The Dairies, Cow-sheds, and Milk-shops Order of 1899."

Article II.—Article 14 of the Order is hereby revoked, and the following provisions shall have effect after the date hereof:—

Regulations made by a L.A. under the Order shall not take effect unless and until they have been submitted to and confirmed by the Board, who may allow or disallow the same as they may think proper; nor shall any such regulations be confirmed—

Unless notice of intention to apply for confirmation of the same has been given in one or more of the local newspapers circulated within, or by handbills posted throughout, the district to which such regulations relate, one month at least before the making of such application; and

Unless for one month at least before any such application is considered, a copy of the proposed regulations has been kept at the office of the L.A., and in the case of districts other than burghs, at the office of the Parish Council of every parish to which such regulations relate, and has been open during office hours thereat to the inspection of the ratepayers of the district to which such regulations relate, without fee or reward.

Any person aggrieved by any proposed regulation, or by any proposed alteration of a regulation, may within such last-mentioned month forward notice of his objection to the Board.

The Clerk of the L.A. shall, on the application of any such ratepayer, furnish him with a copy of such proposed regulations or any part thereof, on payment of sixpence for every hundred words contained in such copy.

A regulation when confirmed by the Board shall not require confirmation, allowance, or approval by any other authority.

Article III.—Article 15 of the Order shall be altered so that the expressions in the said Article which refer to disease shall include, in the case of a cow, such disease of the udder as shall be certified by a veterinary surgeon to be tubercular; and the Order and the Amending Order shall apply and be construed with the modifications necessary to give effect to this Article.

Given under the Seal of Office of the Local Government Board for Scotland, this Sixteenth day of October, in the year One thousand eight hundred and ninety-nine.

(L.S.)

MALCOLM M'NEILL,
Vice-President.

G. FALCONAR-STEWART,
Secretary.

I hereby confirm the foregoing Order.

(L.S.)

BALFOUR OF BURLEIGH,
Her Majesty's Secretary for Scotland.

DOVER HOUSE, WHITEHALL,
17*th October* 1899.

Circular respecting Tuberculosis.

LOCAL GOVERNMENT BOARD,
EDINBURGH, 19*th October* 1899.

Sir,—I am directed by the Local Government Board for Scotland to transmit for the information of the L.A. the accompanying copy of "The Dairies, Cow-sheds, and Milk-shops Order of 1899," and to append the following explanatory notes regarding it:—

ARTICLE 15 OF THE ORDER OF 1885.

Article 15 of the Dairies, Cow-sheds, and Milk-shops Order of 1885, amended by the Order of 1887, is to the following effect:—

"If at any time disease exists among the cattle in a dairy or cow-shed, or other building or place, the milk of a diseased cow therein—

(*a*) Shall not be mixed with other milk; and

(*b*) Shall not be sold or used for human food; and

(*c*) Shall not be sold or used for food of swine, or other animals, unless and until it has been boiled."

The word "disease" as used in the above Article has hitherto had the meaning as given to it in section 5 of the Contagious Diseases (Animals) Act, 1878. The effect of the enclosed Order is to extend this meaning for the purposes of Article 15 so as to include such disease of the udder of a cow as shall be certified by a veterinary surgeon to be tubercular. These purposes are to prevent the milk from a cow suffering from such disease from being sold or used for the food of man, or unless previously boiled, for the food of swine or other animals. Article 15 applies to all milch cows, whether their owners are registered under the Order or not.

ARTICLE 13 OF THE ORDER OF 1885.

Article 13 of the Order enables L.As. to make regulations, *inter alia*, for the inspection of cattle in dairies.

The obligation to inspect milch cows rests upon the L.A. For the purposes of sections 43 and 60 of the Public Health (Scotland) Act, 1897, relative to the detection of unsound food and the discovery of the origin of infectious diseases attributable to milk, it is necessary that L.As. shall have previously "approved" veterinary surgeons available, who may also be employed in the execution of this Order. The inspector of dairies may properly render assistance under the instructions of a veterinary surgeon in the detection of diseased conditions of the udder.

The Royal Commission on tuberculosis which reported in 1895 came to the conclusion that "no doubt the largest part of the tuberculosis which man obtains through his food is by means of milk containing tuberculous matter." This view was endorsed by the subsequent Commission which reported in 1898. They further formed the opinion that contamination of milk is so generally associated with tubercular disease of the udder that the first step towards the elimination of all tuberculous cows from dairies should be the elimination of those suffering from tubercular disease of the udder.

In the power to make regulations for "prescribing and regulating the lighting, ventilation, cleansing, drainage, and water-supply" of dairy byres, the L.A. have control over the conditions which determine the health of cows while under cover. Through the judicious use of these powers by the L.A., and the intelligent co-operation of the owner, the general health of the cow may be improved, tuberculosis may be prevented, danger to the health of consumers of milk from tuberculous cows may be obviated, and pecuniary loss to the owners of a dairy-stock ensuing upon tuberculosis may be diminished.

The Board invite the attention of L.As. in framing regulations to the following recommendations of the most recent Commission, viz.:—

"12. That the conditions of the attached cow-sheds that shall warrant the registering of a dairy in a populous place, whether technically urban or rural, in the future shall include the following:—

1. An impervious floor.
2. A sufficient water-supply for flushing.
3. Proper drainage.
4. A depôt for the manure at a sufficient distance from the byres.
5. A minimum cubic contents as regards such districts of from 600 to 800 feet for each adult beast varying according to the average weight of the animals.
6. A minimum floor space of 50 feet to each adult beast.
7. Sufficient light and ventilation.

While we have prescribed a minimum cubic contents and floor space without mentioning definite dimension affecting ventilation and lighting, we are distinctly of opinion that these are by far the most important, and that requirements as to cubic and floor space are mainly of value as tending to facilitate adequate movement of air.

Existing cow-sheds should be obliged to conform to the prescribed regulations within a period of twelve months from the time of the regulations coming into force.

13. The same conditions as those recommended for populous places should apply to cow-sheds in sparsely populated places, except in so far as cubic contents per cow are concerned; as regards these cubic contents, such space per cow should be provided as would, in view of the surrounding circumstances, secure reasonable ventilation without draught. But the physical circumstances prevailing in different localities being so various, we do not find it practicable to prescribe uniform minimum requirements in this respect."

The distinction as to "cubic contents" per cow in "populous" and in "sparsely populated" places recommended by the Commission rests ultimately upon the influence of these local conditions upon the regimen of the cow. If cows are habitually grazed on grass land during the greater part of the year, and, when not so grazed, are habitually turned out during a portion of each day, then there is a reasonable ground for some distinction in the regulation of "cubic contents" as between such

cows, and cows kept and fed under cover during the whole or greater part of the year, and not turned out during a portion of each day.

Although in general the regimen which justifies the prescription of the lesser cubic space per cow exists in counties, and the regimen which demands the greater cubic space exists in burghs, the Board recommend all L.As. to base any distinction which may be made upon the fact whether cows are or are not "habitually grazed on grass land during the greater part of the year, and when not so grazed are habitually turned out during a portion of each day."

The Board recommend a minimum floor space of 50 feet *in all cases*. The distribution of cubic space between area and height regulates the lateral isolation of cow from cow, not to mention convenience in working about the cow. Cubic space added above the animals is of no advantage in this respect. In all prescriptions of cubic space, it is assumed that the lighting and ventilation are perfect.

Suggestions for Regulations.

The Board add the following suggestions of proper subjects for regulation :—

The walls of a byre or cow-shed ought not to be masked by the erection against them of structures which interfere with lighting and ventilation.

Old horse-litter ought not to be used in bedding cows.

The exclusion of dust from access to milk or milk-vessels exposed during processes of cleansing or otherwise is of the utmost importance. The free use of water in all such processes, whether in byres or milk-shops, so as to avoid the production of dust, is necessary.

Among the most important precautions against infection or contamination of milk which L.As. may prescribe are the cleanness of the cow at the time of milking, especially of the udder and teats, and also the hands of milkers.

Procedure Regarding Regulations.

The Board have deemed it advisable to revoke Article 14 of the Order of 1885, and to substitute therefor a provision assimilating the procedure regarding regulations under the Order to the procedure laid down in the Public Health Act of 1897 with respect to bye-laws under that Act.

The effect will be to remove the confusion due to the difference of procedure, as well as to relieve the L.A. of the expense of advertising the regulations *in extenso* in the newspapers. The revocation of Article 14 will not affect the validity of any regulation already made in accordance with the provisions of the Order of 1885, but in the case of new regulations, or of alterations on existing regulations, the provisions of Article II. of the Order of 1899 must be adhered to.

MEAT INSPECTION.

Circular.

In a Circular (No. IV., 1897), issued 16th November, 1897, the Board drew the attention of L.As. to the more important provisions contained in the new Public Health (Scotland) Act then about to come into operation and, *inter alia*, to the greatly extended powers as regards the inspection of food contained in section 48 thereof. I am directed to again ask the very careful consideration of this section by L.As. and their officers.

Any medical officer or sanitary inspector or any veterinary surgeon approved for the purposes of the section may inspect and may seize in any circumstances of exposure, transit, or storage for sale as human food any live animal, any carcase or part of a carcase, or any article solid or liquid. In the case of a live animal a veterinary surgeon must accompany the medical officer or sanitary inspector in the inspection.

The Royal Commission on tuberculosis, which reported in 1898, make the following recommendations as to the qualifications of meat inspectors, viz.:—

> "5. We recommend that in future no person be permitted to act as a meat inspector until he has passed a qualifying examination, before such authority as may be prescribed by the Local Government Board (or Board of Agriculture), on the following subjects:—
>
> (*a*) The law of meat inspection, and such bye-laws, regulations, etc., as may be in force at the time he presents himself for examination.
>
> (*b*) The names and situations of the organs of the body.
>
> (*c*) Signs of health and disease in animals destined for food, both when alive and after slaughter.
>
> (*d*) The appearance and character of fresh meat, organs, fat and blood, and the conditions rendering them, or preparations from them, fit or unfit for human food."

In the absence of any authority to require such "a qualifying examination," the Board recommend L.As. who propose to appoint special meat inspectors to take means to satisfy themselves that the persons selected possess these qualifications. Where meat inspection forms part of the duty of the sanitary inspector, some consideration should be given to the possession of such qualifications in making appointments to the office,—not, however, to the depreciation of qualifications for his more important duties.

Principles to be Observed by Meat Inspectors in the Inspection of Tuberculous Carcases of Cattle.

The Royal Commission also made the following recommendations relative to the practice of meat inspection, viz.:—

> "6. We recommend that the Local Government Board be empowered to issue instructions from time to time for the guidance of meat inspectors, prescribing the degree of tubercular disease which, in the

opinion of the Board, should cause a carcase, or part thereof, to be seized.

Pending the issue of such instructions, we are of opinion that the following principles should be observed in the inspection of tuberculous carcases of cattle:—

(*a*) When there is miliary tuberculosis of both lungs	The entire carcase and all the organs may be seized.
(*b*) When tuberculous lesions are present on the pleura and peritoneum .	
(*c*) When tuberculous lesions are present in the muscular system, or in the lymphatic glands embedded in or between the muscles	
(*d*) When tuberculous lesions exist in any part of an emaciated carcase . .	
(*a*) When the lesions are confined to the lungs and the thoracic lymphatic glands	The carcase, if otherwise healthy, shall not be condemned, but every part of it containing tuberculous lesions shall be seized.
(*b*) When the lesions are confined to the liver	
(*c*) When the lesions are confined to the pharyngeal lymphatic glands . . .	
(*d*) When the lesions are confined to any combination of the foregoing, but are collectively small in extent . .	

"In view of the greater tendency to generalisation of tuberculosis in the pig, we consider that the presence of tubercular deposit in any degree should involve seizure of the whole carcase and of the organs.

"In respect of foreign dead meat, seizure shall ensue in every case where the pleura have been 'stripped.'"

The Board have no authority to issue instructions, but they direct the attention of L.As. to the recommendations of the Royal Commission.

It is evident that any such principles can be applied in detail only through medical officers of health and veterinary surgeons. In the Draft Regulations framed by the Board for regulating the duties of sanitary inspectors and very generally adopted by L.As. [No. 6, relative to meat inspection under section 43 of the Public Health (Scotland) Act] there is the following proviso:—"Provided that in any case of doubt arising under this clause, he shall report the matter to the medical officer of health, with the view of obtaining his advice thereon."

It is apparent also that these principles can be properly applied only under the conditions pertaining to inspection at the time of slaughter, when "all the organs" are under observation. In this connection, the Board direct attention to sub-section (3) of section 43 of the Act which enables L.As. singly or in combination to appoint places at which animals alive or dead may be submitted to an "approved" veterinary surgeon for examination and condemnation or certification, "Provided that no carcase shall be submitted for examination either under this or

the immediately preceding sub-section [which refers to a similar examination upon the premises where the animal was slaughtered], unless as a whole carcase, including the thoracic and abdominal viscera, in such manner that the examiner shall be readily able to satisfy himself that the organs are those of the carcase under inspection."

The circumstances under which the meat inspector usually performs a most important part of his duty differ from those contemplated by the Act and by the Commission. The carcase is eviscerated and dressed; it is not whole; the criteria suggested by which to determine as between partial and total seizure are gone. In the interests of the consumer, and in these circumstances, the ultimate procedure of the inspector and official experts requires the exercise of the greatest care and discrimination.

The Commission to some extent recognise this difference in the conditions of inspection when they recommend that "in respect of foreign dead meat seizure shall ensue in every case where the pleura have been 'stripped.'" This principle applies equally to all dead meat which comes under inspection in the same circumstances as "foreign dead meat."—I am, Sir, your obedient servant,

G. Falconar-Stewart,
Secretary.

The Clerk to the Local Authority.

[For further information regarding appearances of good and bad meat, *see* Appendix, p. 870.]

ABSTRACT OF DISEASES OF ANIMALS ACT, 1894, AS AMENDED BY DISEASES OF ANIMALS ACT, 1896.

2. "The L.As. in this Act described shall execute and enforce this Act and every Order of the B.A., so far as the same are to be executed or enforced by L.As." [140]

4. Every person having under his charge an animal affected with disease shall (*a*) isolate the animal from others not so affected, (*b*) inform the police, who shall inform the person or authority as the B.A. by general order direct. [138]

5. *Cattle Plague.*—When the I. of the L.A. considers C.P. exists, or has within ten days existed, in a cow-shed, field, or other place, he shall sign a declaration thereof and serve a notice on the occupier. This, then, is by him declared an infected place. The I. serves a similar notice to all occupiers of lands and buildings within a mile, and such places shall also be declared infected by him. He shall then inform the B.A. with copies of his declarations and notices, and the B.A. after inquiry shall confirm the declaration or otherwise.

6. The B.A. on inquiry may alter the limits of declared area or place, or declare it free of C.P.

7. (1) The B.A. shall cause to be slaughtered all affected animals or "contacts" with such animals.

(2) May slaughter suspected animals.

(3) Compensation shall be given by the Treasury.

8. *Pleuro-pneumonia and Foot and Mouth Disease.*—(1) Where the I. considers P.P. to exist, or that it has existed within fifty-six days, he shall forthwith make declaration, and serve notice as in section 5, and if F. and M.D. exists or has existed in a place within ten days, he shall act similarly. (2) The I. shall serve a notice of his declaration on the occupier, and occupier of contiguous lands or buildings. (3) These places then become *infected* places subject to the declaration of the L.A. (4) The I. shall send his declaration and copy of his notice to the L.A. and also to the B.A. (5) The L.A with the assistance of a V.S. shall make inquiry, and (6) shall by order declare the place "infected," if they so consider it. (7) The L.A. may include as "infected" any adjoining part of the district of another L.A. with consent of the latter, but not otherwise. (8) If the L.A. are not satisfied that either of these diseases exists or has existed at a place, they shall by order declare accordingly, and give it a clean bill of health. (9) The L.A. shall report to the B.A. the declaration of the I. and their own proceedings, and state whether or not it is expedient to declare an area infected, and if so, limits to be included, and specifying whether within the area any market, fair, exhibition, or sale is likely to be held, and if so, whether or not in their opinion such fair, etc., should be restricted or prohibited by the B.A. (10) Subject to section 21 this section shall apply when the animals are in a place not in the possession or occupation, or under the control of the owner of the animals. (11) Where a L.A. have declared a place infected with P.P. or F. and M.D. they may, if they think fit, having first obtained advice of a V.I. at any time after expiration of cessation of P.P. or F. and M.D., for a *period* hereinafter mentioned, but not sooner, declare by order that place to be free from such disease; the period shall in the case of P.P. be fifty-six days, and in F. and M.D. fourteen days, or such longer period, not exceeding twenty-eight days, as the B.A. by general order prescribe. (12) The B.A. without all the above procedure may, if they think fit, on evidence satisfactory to them make the same declarations, etc., as under section 6.

9. The B.A. similarly on satisfactory evidence may make same declarations, etc., as in section 7 and section 8 (9) as to P.P. and F. and M.D.

10. The B.A. may make orders of a similar kind, or such as they think fit, *re* any disease other than C.P., P.P., and F. and M.D.

11. Enacts that cattle shall not be moved into or out of an infected area, or place, or moved from one place to another within a declared area, except in accordance with conditions in parts I. and II. of first schedule of Act.

12. Where the B.A. by order declare that this section shall apply in the case of any disease then upon any place becoming in pursuance of a declaration, made and signed by an I. of the L.A. an infected place, the whole space within a circle, with half a mile radius shall become an area

infected with the special disease, and the B.A. have powers when disease ceases to declare area free.

13. Gives power to the owner or person in charge to exclude strangers by notice.

14. The B.A. shall cause all cattle affected with P.P. to be slaughtered, and may cause slaughter of cases suspected or of "contacts," and compensation will be allowed. The B.A. may cause slaughtering, if the owner in writing so requires, to be carried out within twenty-one days of receipt of notice.

15. The B.A. may cause slaughter of animals affected with F. and M.D. or of "contacts," and owner will be compensated at value before illness in the former case, and at value immediately before slaughter in the case of the latter.

16. The B.A. may cause swine affected with swine fever, or suspected to be affected, and of "contacts," and the owner shall be compensated to extent of half value of animal before being affected, and in other cases whole value immediately before slaughter.

17. Gives power to B.A. to employ additional officers to carry out execution of the sections of the Act.

19. Gives power to B.A. to provide for slaughter in diseases other than C.P., and for compensation.

20. (1) The B.A. may by order remove for treatment or observation an animal liable to be slaughtered under this Act by order of the B.A. or a L.A., but subject to payment of compensation by the B.A. or L.A., as the case may be.

(2) The carcase of a slaughtered animal shall belong to the B.A. or L.A., as the case may be, and shall be buried, or sold, or otherwise disposed of by the B.A. or L.A., as they direct, and as the condition of the animal or carcase and other circumstances may require or admit; and any money received by a L.A. on any such sale shall be carried by them to the credit of the local rate.

(3) If the amount received for a carcase is beyond amount of compensation given, the B.A. or L.A., as the case may be, shall pay the excess to owner after deducting reasonable expenses.

(4) Place for burial of carcase when ordered to be slaughtered may be on any ground in possession or occupation of owner of animal or any common or uninclosed land, but, as regards the use of a L.A. of common or uninclosed land, not without the approval of the B.A.

(5) If animal slaughtered is insured, compensation awarded may be deducted by insurer or insurers from amount of insurance.

(6) The L.A. shall keep a record relative to slaughter.

(7) The B.A. or L.A. may withhold wholly or partially compensation if owner has committed an offence against this Act, or where the animal being a foreign animal, was, in their judgment, diseased at the time of its landing.

21. (1) The B.A. shall, by order, make such further provision as necessary or expedient, respecting the case of animals affected with P.P. or F. and M.D.,

(i) while exposed for sale or exhibited in a market, fair, sale-yard, or place of exhibition, or other place;
(ii) in lairs or other place before exposure for sale;
(iii) while in transit;
(iv) while in a foreign animals wharf or quarantine station;
(v) while being in a slaughter house;
(vi) or on common or uninclosed land; or,
(vii) generally, while being in a place not in possession or occupation or under the control of the owner of the animals.

(2) And for the consequences of their being so found.

(3) All such orders shall have full effect notwithstanding any provision of this Act requiring declaration of a place infected with P.P., or F. and M.D. relating to any consequences thereof, or to any matter connected herewith, and notwithstanding any other provision whatsoever of this Act.

22. "The B.A. may make such orders as they think fit, subject and according to the provisions of this Act, for the following purposes, or any of them:

(i) for prescribing and regulating the publication by placards, hand-bills, or otherwise, in the immediate neighbourhood of a place or area declared infected, of the fact of such declaration;
(ii) for prohibiting or regulating the movement of animals and persons into, within, or out of an infected place or area;
(iii) for prescribing and regulating the isolation or separation of animals being in an infected place or area;
(iv) for prohibiting or regulating the removal of carcases, fodder, litter, utensils, pens, hurdles, dung, or other things into, within, or out of an infected place or area;
(v) for prescribing and regulating the destruction, burial, disposal, or treatment of carcases, fodder, litter, utensils, pens, hurdles, dung, or other things, being in an infected place or area, or removed thereout;
(vi) for prescribing and regulating the cleansing and disinfection of infected places and areas, or parts thereof;
(vii) for prescribing and regulating the disinfection of the clothes of persons coming in contact with or employed about diseased or suspected animals, or being in an infected place, and the use of precautions against the spreading of disease by such persons;
(viii) for prohibiting or regulating the digging up of carcases which have been buried;
(ix) for prohibiting or regulating the exposure of diseased or suspected animals in markets or fairs or sale-yards, or other public or private places, where animals are commonly exposed for sale, and the placing thereof in lairs or other places adjacent to or connected with markets or fairs, or where animals are commonly placed before exposure for sale;
(x) for prohibiting or regulating the sending or carrying of diseased or suspected animals, or of dung or other thing likely to spread

disease, or the causing the same to be sent or carried, on railways, canals, rivers, or inland navigations, or in coasting vessels, or otherwise;

(xi) for prohibiting or regulating the carrying, leading, or driving of diseased or suspected animals, or the causing them to be carried, led, or driven on highways or thoroughfares, or elsewhere;

(xii) for prohibiting or regulating the placing or keeping of diseased or suspected animals on commons or uninclosed lands, or in fields or other places insufficiently fenced, or on the sides of highways;

(xiii) for prescribing and regulating the seizure, detention, and disposal of a diseased or suspected animal exposed, carried, kept, or otherwise dealt with in contravention of an order of the B.A.; and for prescribing and regulating the liability of the owner or consignor or consignee of such animal to the expenses connected with the seizure, detention, and disposal thereof;

(xiv) for prescribing the mode of ascertainment of the value of an animal slaughtered, or liable to be slaughtered, by order of the B.A. or of a L.A.;

(xv) for regulating applications for, and the mode of payment of, compensation to be paid out of money provided by Parliament;

(xvi) for prescribing and regulating the destruction, burial, disposal, or treatment of carcases of animals slaughtered by order of the B.A. or of a L.A., or dying while diseased or suspected;

(xvii) for prohibiting or regulating the movement of animals, and the removal of carcases, fodder, litter, dung, and other things, and for prescribing and regulating the isolation of animals newly purchased;

(xviii) for prescribing and regulating the issue and production of licences respecting movement and removal of animals and things;

(xix) for prohibiting or regulating the holding of markets, fairs, exhibitions, and sales of animals;

(xx) for prescribing and regulating the cleansing and disinfection of places used for the holding of markets, fairs, exhibitions, or sales of animals, or for lairage of animals, and yards, sheds, stables, and other places used for animals;

(xxi) for prescribing and regulating the cleansing and disinfection of vessels, vehicles, and pens and other places, used for the carrying of animals for hire or purposes connected therewith;

(xxii) for prescribing modes of cleansing and disinfection;

(xxiii) for prohibiting the conveyance of animals by any specified vessel to or from any port in the United Kingdom for such time as the B.A. may consider expedient;

(xxiv) for insuring for animals carried by sea a proper supply of food and water, and proper ventilation during the passage and on landing;

(xxv) for protecting them from unnecessary suffering during the passage and on landing;

(xxvi) for protecting animals from unnecessary suffering during inland transit;

(xxvii) for securing a proper supply of water and food to animals during any detention thereof;

(xxviii) for prescribing and regulating the marking of animals;

(xxix) for prohibiting, absolutely or conditionally, the use, for the carrying of animals or for any purpose connected therewith of a vessel, vehicle, or pen or other place in respect whereof, or of the use whereof, a penalty has been recovered from any person for an offence against this Act;

(xxx) for prescribing and regulating the muzzling of dogs, and the keeping of dogs under control;

(xxxi) for prescribing and regulating the seizure, detention, and disposal (including slaughter) of stray dogs and of dogs not muzzled, and of dogs not being kept under control, and the recovery from the owners of dogs of the expenses incurred in respect of their detention;

(xxxii) for prescribing and regulating the payment and recovery of expenses in respect of animals;

(xxxiii) for prescribing and regulating the form and mode of service or delivery of notices and other instruments;

(xxxiv) for authorising a L.A. to make regulations for any of the purposes of this Act or of an Order of the B.A. subject to such conditions, if any, as the B.A. for the purpose of securing uniformity and the due execution of the provisions of this Act, think fit to prescribe;

(xxxv) for extending, for all or any of the purposes of this Act, the definition of disease in this Act, so that the same shall for those purposes, or any of them, comprise any disease of animals in addition to the diseases mentioned in this Act;

(xxxvi) for extending, for all or any of the purposes of this Act, the definition of animals in this Act, so that the same shall for those purposes or any of them comprise any kind of four-footed beasts, in addition to the animals mentioned in this Act; and

(xxxvii) generally, for the better execution of this Act, or for the purpose of in any manner preventing the spreading of disease."

23. Enacts that every railway company shall make a provision to the satisfaction of the B.A. of water and food, or either of them, at such stations as the B.A. by general or specific description, direct, for animals carried, or about to be or having been carried, on the railway of the company.

24. Revoked by Diseases of Animals Act, 1896, and the following substituted—

"The provisions set forth in Part I. (slaughter at port of landing) of the third schedule to this Act shall apply to all foreign animals other than:—

(*a*) foreign animals the landing of which is for the time being prohibited by Order of the B.A.; and

(*b*) foreign animals intended for exhibition or other exceptional purposes, and the landing of which is allowed for the time being by the B.A. subject to the provisions of Part II. (quarantine) of the third schedule to this Act."

"(2) Section 26 of the Diseases of Animals Act, 1894, is hereby repealed."

25. B.A. may prohibit or make restrictions on the landing of animals from any foreign country, as they may think necessary for excluding epizootic diseases.

26. Repealed by Diseases of Animals Act, 1896, as mentioned under section 24 above.

27. Notwithstanding anything contained in this Act, or in any Order of the B.A. the B.A. may make such Orders as they think fit for allowing the landing of any foreign animals intended for exhibition or for other exceptional purposes.

28. The B.A. by Order or licence may in relation to animals brought from the Channel Islands or Isle of Man, alter or add to provisions of schedule 3 to this Act relating to slaughter or to quarantine.

29. Every Order in pursuance of this Act shall be laid forthwith before both Houses of Parliament.

30. (1) The B.A. may make such Orders as they think fit for prescribing ports, defining limits of ports or parts of ports, at which alone foreign animals may be landed, and for regulating the movements of animals into, within, or out of a defined part of a port; for regulating inspection, examination, mode and time and conditions of slaughter in a port; regulating removal of carcases, fodder, litter, utensils, dung, or other things into, within, or out of a defined port or part thereof, and the disposal thereof; for regulating, cleansing, disinfecting, or destruction of things in a defined part of a port or removed thereout; for regulating the movement of persons into, within, or out of a defined part of a port; for disinfection of clothes of persons employed in a port; for prescribing and regulating seizure and detention of any foreign animal, carcase, fodder, litter, dung, or other thing to prevent spread of disease, and generally for the better execution of this Act in relation to foreign animals, carcases, fodder, etc., etc., to prevent spread.

(2) Notwithstanding anything in this Act a defined part of a port, or any part thereof, shall not be declared to be an infected place, or be made part of an infected place, otherwise than by the B.A.

(3) When a district or part of a district of a L.A. under this Act comprises or is composed in, a port or part of a port, the B.A. may appoint an authority other than the L.A. for the purposes of this Act.

32. (1) A L.A may provide, erect, and fit up wharves, stations, lairs, sheds, and other places for the landing, keeping, sale, slaughter, or disposal of foreign or other animals, carcases, fodder, litter, etc., etc. [137]

(2) A wharf under this section shall be a market within the meaning of that term.

33. Gives power to acquire land for burial of carcases.

34. In default of a L.A. to carry out the provisions of this Act the B.A. may appoint a person to do so at the expense of the L.A.

35. Every L.A. shall appoint so many inspectors or other officers as the L.A. think necessary, and shall at all times keep appointed, at least one V.I.

37. Orders and regulations of a L.A. may be proved by production of a newspaper containing it, or a copy of an Order signed by the clerk of the L.A. An Order or regulation of a L.A. authorised by this Act or by an Order of the B.A. being only valid.

39. Allows transfer of powers from one L.A. to another, and allows of districts combining for the purposes of this Act.

43. (1) The police force of each police area shall execute and enforce this Act and every Order of the B.A., (2) and may without warrant arrest anyone contravening the Act, (3) and arrest without warrant anyone aiding obstruction, and (4) bring him before a J.P.

44. An I. shall have all the powers of a constable for the purposes of this Act, and may enter any land, dairy, shed, etc., etc., if he suspects disease there, or of its having existed there within the previous fifty-six days or that a diseased carcase has been buried or otherwise disposed of.

45. An I. of the B.A. if satisfied of contravention of the Act or of any regulation of a L.A. on board any vessel in a port may on giving notice in writing of his reasons, detain a vessel so long as the B.A. determines.

46. Deals with carcases washed ashore.

50. The B.A. must make annual returns to Parliament of any proceedings under this Act not later than 31st March, taken during and up to 31st December of the past year.

51, 52, and 53. Deals with penalties and offences against the Act. [139]

59. *Definitions.*—The expression "cattle" means bulls, cows, oxen, heifers, and calves. The expression "animals" means, except where it is otherwise expressed, cattle, sheep, and goats, and all other ruminating animals and swine. The expression "disease" means cattle-plague (that is to say, rinderpest, or the disease commonly called cattle-plague), contagious pleuro-pneumonia of cattle (in this Act called pleuro-pneumonia), foot and mouth disease, sheep-pox, sheep-scab, or swine fever (that is, the disease known as typhoid fever of swine, soldier purples, red disease, hog cholera or swine plague). The expression "carcase" means the carcase of an animal, and includes part of a carcase, and the meat, bones, hide, skin, hoofs, horns, offal, or other part of an animal separately or otherwise, or any portion thereof.

. . . . . .

SPECIAL PROVISIONS AS TO SCOTLAND.

60. "In the application of this Act to Scotland:

"(1) The L.A. and the local rate shall respectively be—

(*a*) for each burgh not being a burgh to which section 14 of the Local Government (Scotland) Act, 1889, applies, the magistrates and town council, and a rate to be levied equally upon owners and occupiers within the burgh; and

(*b*) for each county and any burgh to which section 14 of the Local Government (Scotland) Act, 1889, applies, and any royal burgh which does not return or contribute to return a member to Parliament, the county council, and a rate within the county to be levied equally upon owners and occupiers as an item of the consolidated county rates, and within such burghs and royal burghs to be ascertained, fixed, and paid, to the county council as provided by the Local Government (Scotland) Act, 1889. [**140**]

"(2) The expression 'county' means a county as defined by the Local Government (Scotland) Act, 1889;

"(3) The expression 'burgh' means a burgh which returns or contributes to return a member to Parliament.

"(4) The expressions 'police area' and 'police force' have the same meaning as in the Police (Scotland) Act, 1890;

"(5) 'Value according to the valuation roll' shall be substituted for 'rateable value';

"(6) With respect to the delegation of powers by a county council section 73 of the Local Government (Scotland) Act, 1889, shall apply; and

"(7) All deeds made or granted by a L.A. under this Act shall in addition to being sealed be signed by two members of the L.A. and by the clerk of the L.A."

61. "The provisions of this Act relating to the purchase of land shall have effect with respect to Scotland as if section 145 of the Public Health (Scotland) Act, 1897, were thereby applied, and in the said section 145 the L.A. and local rate under this Act shall be substituted for the L.A. and the assessment therein mentioned."

62. "The provisions of this Act relating to borrowing by L.As. shall, as regards Scotland, be modified as follows:—

(i) Those provisions shall have reference to the amount only of the local rate, and not to the proportion thereof;

(ii) The Secretary for Scotland shall be substituted for the Local Government Board; and

(iii) Borrowing by a L.A. shall not be subject to the provisions of the Local Loans Act, 1875; and in lieu thereof, as regards borrowing by L.As. of counties the provisions of the Local Government (Scotland) Act, 1889, shall apply, and as regards borrowing by L.As. of burghs the provisions of the Commissioners Clauses Act, 1847, with respect to the mortgages to be executed by the Commissioners, shall be deemed to have been incorporated with this Act, the L.A. being deemed to be the commissioners; and any mortgagee or assignee may enforce payment of his principal and interest by appointment of a judicial factor."

63. (1) "An I. of the B.A. shall have all the powers of an I. throughout Scotland, or that part thereof for which he is appointed.

"(2) Any person may be appointed and be a veterinary inspector in Scotland who holds the veterinary certificate of the Highland and Agricultural Society of Scotland."

64. "For the purposes of the application of this Act to Scotland—

"(1) Any offence against this Act, may be prosecuted, and any fine in respect thereof may be recovered, and any money by this Act or an Order of the B.A. made recoverable summarily may be recovered, and any summary Order under this Act, or an Order of the B.A. may be made in manner provided by the Summary Jurisdiction (Scotland) Acts; [140]

"(2) In the event of any person refusing or delaying to comply with the Order of a L.A., the L.A. may give information thereof to the procurator-fiscal of the county or burgh, who may apply to the sheriff for a warrant to carry such Order into effect, and such warrant may be executed by the officers of court in common form;

"(3) The section of this Act relating to appeals to quarter sessions shall not apply;

"(4) Notwithstanding anything in this or any other Act, the part of every fine or forfeiture recovered under this Act, which is not in this Act directed to be paid to the person who sues or proceeds for the same, shall be paid as follows:—

(*a*) to the Queen's and Lord Treasurer's Remembrancer, on behalf of Her Majesty, when the court is the sheriff court;

(*b*) to the collector of the county, in aid of the county general assessment portion of the consolidated rates of the county, when the court is the justice of the peace court;

(*c*) to the treasurer of the burgh, in aid of the funds of the burgh, when the court is a burgh court; and

(*d*) to the treasurer of the board of police, or commissioners of police, in aid of the police funds, when the court is a police court;

"(5) Nothing in this section shall apply to proceedings under the Customs Acts."

78 and *Schedule* 5.—Give the Acts and sections of previous Acts repealed, but notwithstanding such repeal, provides for the continuance, unless revoked by the B.A., of all existing appointments and regulations of previous Acts, as if they were made under this Act. *Schedule* 5.—Repeals all previous Acts of a similar kind, except section 34 of the Contagious Diseases (Animals) Act, 1878, and section 9 of 1886 Act empowering Privy Council to issue subject to the provisions of this Act, Orders for the regulation of cow-sheds, dairies, and milk-shops.

SCHEDULES.

The First Schedule, Part I., P.P., and Part II., F. and M.D. Both parts of these schedules, with the exception of the word "cattle" in the first part, which is substituted by the word "animals" in the second part, are identical, and read as follows:—

"(1) Animals shall not be moved into or out of a place infected with F. and M.D., except where, as regards movement into such a place, the animals are affected with F. and M.D., and except in such other cases as the B.A. think fit by Order to except.

"(2) In the cases so excepted by Order, animals may be moved into

or out of an infected place on conditions prescribed by Order of the B.A., and not otherwise.

"(3) Animals may be moved into, within, or out of such parts of an area infected with F. and M.D. as are not comprised in a place infected with F. and M.D., by licence of the L.A., granted on conditions prescribed by Order of the B.A., and not otherwise."

The Second Schedule deals with regulations as to cattle P.P. accounts.

THE THIRD SCHEDULE.

Foreign Animals.

PART I.

Slaughter at Port of Landing.

"1. The animals shall be landed only at a part of a port defined for that purpose by Order of the B.A., to be called a foreign animals wharf.

"2. The animals shall be landed in such manner, at such times, and subject to such supervision and control as the Commissioners of Customs direct.

"3. The animals shall not be moved alive out of the wharf.

PART II.

Quarantine.

"1. The animals shall be landed only at a part of a port defined for that purpose by Order of the B.A., to be called a foreign animals quarantine station.

"2. The animals shall be landed in such manner, at such times, and subject to such supervision and control as the Commissioners of Customs direct, and subject to such conditions in respect of the animals, or of the vessel from which they are landed, as the B.A. by Order prescribe.

"3. When landed the animals shall be placed in sheds or other receptacles in the quarantine station, prepared by the L.A. or the owners of the quarantine station, or the consignees of animals, or other persons, and approved by the B.A.

"4. The animals shall not be moved out of the quarantine station except on conditions prescribed by Order of the B.A.

"5. Notwithstanding anything in the foregoing provisions of this part of this schedule the provisions of this Act relating to slaughter in case of the existence of disease, and to compensation or other payment in respect of animals so slaughtered, and to the ownership of carcases of such animals, shall apply to animals within a foreign animals quarantine station."

THE FOURTH SCHEDULE.

COMMITTEES OF LOCAL AUTHORITIES.

"1. Every L.A. shall form and keep up a committee or committees, and may appoint the number of members by whom the powers of a committee may be exercised, and may at any time add to or diminish the number of

the members of a committee, or otherwise alter the constitution thereof, and fill up or provide for the filling up of vacancies therein, or revoke the appointment thereof and appoint another committee or committees, and lay down rules for the guidance of a committee, who shall act accordingly.

"2. A committee may consist wholly of members of the L.A. or partly thereof, and partly of other persons, being rated occupiers in the district of the L.A., and otherwise qualified, as the L.A. think fit.

"3. A L.A. may except in so far as it is otherwise provided by Order of the B.A. delegate all or any of their powers, except the power to make a rate, to a committee, with or without conditions or restrictions.

"4. A L.A. may revoke or alter any power given by them to a committee.

"5. A L.A. may, if they think fit, appoint and designate one committee as their executive committee.

"6. An executive committee shall have all the powers of the L.A., except the power to make a rate, and may, if they think fit appoint a sub-committee or sub-committees, and delegate to them [except in so far as it is otherwise provided by Order of the B.A.] all or any of the powers of the executive committee, with or without conditions or restrictions, and revoke or alter any such delegation, and appoint the number of members by whom the powers of a sub-committee may be exercised, and add to or diminish the number of the members of a sub-committee, or otherwise alter the constitution thereof, and fill up or provide for the filling up of vacancies therein, or revoke the appointment thereof and appoint another sub-committee or other sub-committees, and lay down rules for the guidance of a sub-committee who shall act accordingly.

"7. Proceedings of a committee or sub-committee shall not be invalidated by any vacancy in the committee or sub-committee.

"8. In case of the formation of two or more committees, they shall act according to rules laid down for their guidance by the L.A.

"9. A committee, and a sub-committee of an executive committee, may elect a chairman of their meetings.

"10. If no chairman is elected, or if the chairman so elected is not present at the time appointed for a meeting, the members then present shall choose a chairman for that meeting.

"11. A committee or sub-committee may meet and adjourn as they think proper.

"12. Every question at a meeting of a committee or sub-committee shall be determined by a majority of the votes of the members, including the chairman, present and voting on the question; and in case of equal division, the chairman shall have a second vote."

RABIES ORDER OF 1897.

The B.A., by virtue and in exercise of the powers in them vested under the Diseases of Animals Acts, 1894 and 1896, and of every other power enabling them in this behalf, do order, and it is hereby ordered, as follows:

Notice of Disease.

1. "(1) Every person having or having had in his possession or under his charge an animal affected with or suspected of rabies shall with all practicable speed give notice of the fact of the animal being so affected or suspected to a constable of the police force for the police area wherein the animal so affected or suspected is or was.

"(2) The constable receiving such notice shall immediately transmit the information by telegraph to the Secretary, Board of Agriculture, 4 Whitehall Place, London, S.W.

"(3) The constable shall also forthwith give information of the receipt by him of the notice to an I. of the L.A., who shall forthwith report the same to the L.A.

Duty of Inspector to Act Immediately.

2. "An I. of a L.A. on receiving in any manner whatsoever information of the supposed existence of rabies, or having reasonable ground to suspect the existence of rabies, shall proceed with all practicable speed to the place where such disease, according to the information received by him, exists, or is suspected to exist, and shall there and elsewhere put in force and discharge the powers and duties conferred and imposed on him as I. by or under the Act of 1894 and this Order.

Public Warning as to Existence of Disease.

3. "(1) The L.A. may, if they think fit, give public warning by placards, advertisement, or otherwise, of the existence of rabies in any shed, stable, building, kennel, field, or other place, with or without any particular description thereof, as they think fit, and may continue to do so during the existence of the disease, and, in case of a shed, stable, building, kennel, or other like place, until the same has been cleansed and disinfected.

"(2) It shall not be lawful for any person (without authority or excuse) to remove or deface any such placard.

Compulsory Slaughter of Dogs.

4. "A L.A. shall cause to be slaughtered every dog within their district which is diseased or suspected or which has been bitten by a diseased or suspected dog.

Owners to give Facilities for Slaughter.

5. "(1) Where the power of causing any dog to be slaughtered under this Order is exercised by a L.A., the owner and person in charge of such dog shall give all reasonable facilities for that purpose.

"(2) Any person failing to comply with the provisions of this Article shall be deemed guilty of an offence against the Act of 1894.

POST-MORTEM EXAMINATION.

6. "(1) Where an animal has died of, or has been slaughtered on account of, rabies or disease supposed to be rabies, the L.A. shall, previous to the disposal of the carcase, cause a post-mortem examination to be made thereof, in which case such examination shall be conducted by a V.I. or V.S. specially appointed in that behalf who shall forthwith report to the Board in such form as may be required, the result of such examination.

"(2) The owner and the person in charge of any such carcase shall give all reasonable facilities for the purpose of such examination, and any person failing to give such facilities shall be deemed guilty of an offence against the Act of 1894.

"(3) A certificate of a V.I. to the effect that an animal is or was affected with rabies shall for the purposes of the Act of 1894 and this Order be conclusive evidence in all courts of justice of the matter certified.

DOGS DEEMED TO BE EXPOSED TO INFECTION.

7. "Every dog shall for the purposes of this Order be deemed to have been exposed to the infection of rabies which has been in the same shed, stable, building, kennel, field, or other place or otherwise in contact with any diseased or suspected dog, or which has in any other way been exposed to the infection of rabies.

LOCAL AUTHORITY TO SECURE ISOLATION OF DOGS EXPOSED TO INFECTION.

8. "The L.A. shall so far as practicable secure the isolation of dogs which have been exposed to the infection of rabies by causing notices under the next following Article to be served with all practicable speed on the owner or person in charge of every such dog within their district, and by taking all necessary steps to enforce compliance with every notice served under such Article.

ISOLATION OF ANIMALS.

9. "(1) An I. of a L.A. or of the Board may serve a notice in writing (in the Form A set forth in the first schedule to this Order or to the like effect) on the owner or person in charge of any dog or other animal requiring the same to be kept in a kennel, shed, or other building, and after the service of such notice it shall not be lawful for any person, until such notice be withdrawn by a further notice in writing (in the Form B set forth in the first schedule to this Order or to the like effect) signed by an I. of the Board—

(*a*) to move from or out of such kennel, shed, or building as aforesaid any dog or other animal that may be therein; or

(*b*) to move any dog or other animal into such kennel, shed, or building as aforesaid; or

(c) to permit any dog or other animal to come in contact with any animal to which the notice applies.

"(2) An I. of the L.A. shall with all practicable speed send copies of any notice given by him under this Article to the Secretary, Board of Agriculture, 4 Whitehall Place, London, S.W., and to the L.A., and the police officer in charge of the nearest police station of the district.

SEIZURE, DETENTION, AND DISPOSAL OF STRAY DOGS.

10. "(1) A L.A. shall cause all stray dogs found within their district to be seized, and such dogs so seized shall be dealt with as follows:

(i) If the dog is diseased or suspected or has been bitten by a diseased or suspected dog it shall be forthwith slaughtered.

(ii) If the dog has been exposed to the infection of rabies it shall be detained, slaughtered, or otherwise dealt with as the L.A. think expedient, but so that the dog shall not, while detained by the L.A., be allowed to come in contact with any other animal.

(iii) In any other case the dog shall be detained in some proper place, and be there kept for such period as the L.A. think expedient: Provided that where the person having charge of or the owner of a dog so detained is known, the L.A. shall cause notice to be forthwith given to such person or owner of the fact of the dog having been so seized and detained, and the dog shall, without prejudice to the recovery of any penalty for the infringement of this Order, be given up to such person or owner on payment of the reasonable expenses incurred by the L.A. in respect of such detention. If the dog so seized and detained has not been claimed by such person or owner within three days after the seizure, or, where such person or owner is known, within two days after the aforesaid notice has been given, the L.A. may cause the dog to be slaughtered or otherwise disposed of in such manner as the L.A. deem expedient.

"(2) The provisions of this Article shall not apply to places subject to section 18 of the Metropolitan Streets Act, 1867, that is to say, to the city of London and the county of London.

DISPOSAL OF CARCASES.

11. "(1) The carcase of an animal which at the time of its death was affected with or suspected of rabies shall be disposed of by the L.A. as follows:—

(i) Either the L.A. shall cause the carcase to be buried as soon as possible in its skin in some proper place at a depth of not less than 6 feet below the surface of the earth, and to be covered with a sufficient quantity of quicklime or other disinfectant;

(ii) Or the L.A. may, if authorised by licence of the Board, cause the carcase to be destroyed, under the inspection of the L.A., in the mode following: The carcase shall be disinfected, and shall then be taken, in charge of an officer of the L.A., to a horse-slaughterer's or knacker's-yard approved for the purpose by the

Board, or other place so approved, and shall be there destroyed by exposure to a high temperature, or by chemical agents.

"(2) With the view to the execution of the foregoing provisions of this Article the L.A. may make such regulations as they think fit for prohibiting or regulating the removal of carcases or for securing the burial or destruction of the same.

"(3) Where under this Article a L.A. cause a carcase to be buried, they shall first cause the skin to be so slashed as to be useless.

"(4) A L.A. may cause or allow a carcase to be taken into the district of another L.A. to be buried or destroyed, with the previous consent of that L.A., but not otherwise.

DIGGING UP.

12. "It shall not be lawful for any person, except with the licence of the Board, or permission in writing of an I. of the Board, to dig up or cause to be dug up, the carcase of any animal that has been buried, whether under this Order or otherwise.

RECORD OF SLAUGHTER.

13. "A L.A. shall keep, in the form provided by the Board, a record relative to diseased or suspected animals slaughtered by their order under this Order, stating the particulars indicated in such form, with such variations as circumstances require.

REGULATIONS OF LOCAL AUTHORITY AS TO DISINFECTION OF PLACES AND THINGS.

14. "(1) A L.A. may make such regulations as they think fit for the following purposes, or any of them:

(*a*) For providing for the cleansing and disinfection of any place used by a diseased or suspected animal, and of any utensil, feeding-trough, pen, hurdle, or other thing used for or about such animal:

(*b*) For providing for the cleansing and disinfection of any van, cart, or other vehicle used for carrying any diseased or suspected animal on land otherwise than on a railway:

(*c*) For prescribing the mode in which such cleansing and such disinfection are to be effected: and

(*d*) For requiring the occupier of any such place, and the owner of any such utensil, vehicle, or thing to cleanse and disinfect the same at the expense of the L.A., or at the expense of such owner or occupier.

"(2) If any person fails to cleanse and disinfect in accordance with any such regulation, it shall be lawful for the L.A., without prejudice to the recovery of any penalty for the infringement of such regulation, to cause such place, vehicle, or thing to be cleansed and disinfected, and to recover summarily the expenses of such cleansing and disinfection from such person.

OCCUPIERS TO GIVE FACILITIES FOR CLEANSING.

15. "(1) Where the power of causing any place, vehicle, or thing to be cleansed and disinfected under this Order is exercised by a L.A., the

owner and occupier and person in charge of the place, vehicle, or thing shall give all reasonable facilities for that purpose.

"(2) Any person failing to comply with the provisions of this Article shall be deemed guilty of an offence against the Act of 1894.

PROVISIONS AS TO REGULATIONS OF LOCAL AUTHORITY.

16. "(1) A L.A. shall forthwith send to the Board a copy of every regulation made by them under this Order.

"(2) If the Board are satisfied on inquiry, with respect to any regulation made by a L.A. under this Order, that the same is for any reason objectionable, and direct the revocation thereof, the same shall thereupon cease to operate.

MOVEMENT OF ANIMALS, ETC., WITH LICENCE OF BOARD.

17. "Notwithstanding anything in this Order, or in any regulation made by a L.A. thereunder, any animal, carcase, or thing may be moved in any circumstances with a licence of an I. or officer of the Board, which licence will only be granted where the Board, after inquiry, are satisfied that exceptional circumstances render the movement necessary or expedient.

POWERS OF THE BOARD OF AGRICULTURE.

18. "Any power by this Order conferred upon a L.A. or an I. of a L.A. may at any time be exercised by the Board or an I. of the Board respectively, and in any such case the provisions of this Order shall apply as if the power were being exercised by the L.A. or an I. of a L.A.

LOCAL AUTHORITY TO ENFORCE ORDER.

19. "The provisions of this Order, except where it is otherwise provided, shall be executed and enforced by the L.A.

WEEKLY RETURNS OF RABIES.

20. "When an I. of a L.A. finds that rabies exists or has existed in his district, he shall forthwith make a return thereof to the L.A. and to the Board, on a form provided by the Board, with all particulars therein required, and shall continue to so make a return thereof on the Saturday of every week until the disease has ceased.

EXTENSION OF CERTAIN SECTIONS OF DISEASES OF ANIMALS ACT, 1894.

21. "Horses, asses, mules, and dogs (as well as the animals specified in the Act of 1894) shall be animals, and rabies shall be a disease, for the purposes of this Order and of the following sections of the Act of 1894 (namely):

Sections nineteen and twenty (slaughter);

Section forty-three (powers of police);

Section forty-four (powers of inspectors);

and also for the purposes of all other sections of the said Act containing provisions relative to or consequent on the provisions of those sections and this Order, including such sections as relate to offences or procedure.

OFFENCES.

22. "(1) If an animal or any thing is moved in contravention of this Order, or of a notice served under this Order, or of any regulation made by a L.A. under this Order, or of the conditions of a movement licence thereunder, the owner of the animal or thing, and the person for the time being in charge thereof, and the person causing, directing, or permitting the movement, and the person moving or conveying the animal or thing, and the consignee or other person receiving or keeping it knowing it to have been moved in contravention as aforesaid, and the occupier of the place from which the animal or thing is moved, shall, each according to and in respect of his own acts and defaults, be deemed guilty of an offence against the Act of 1894.

"(2) If, in contravention of any regulation made by a L.A. under this Order, a carcase is removed or is not buried or is not destroyed, the owner of the carcase, and the person for the time being in charge thereof, and the person causing, directing, or permitting the removal, and the person removing or conveying the carcase, and the consignee or other person receiving or keeping it knowing it to have been removed in contravention as aforesaid, and the person failing to bury or destroy the carcase, shall, each according to and in respect of his own acts and defaults, be deemed guilty of an offence against the Act of 1894.

"(3) If anything is omitted to be done as regards cleansing or disinfection in contravention of any regulation made by a L.A. under this Order, the owner and the lessee and the occupier and the person in charge of any place or thing in or in respect of which,—and the owner of and the person using and the person in charge of any vehicle in respect of which,—(as the case may be), the same is omitted, shall, each according to and in respect of his own acts or omissions, be deemed guilty of an offence against the Act of 1894.

"(4) If a dog or other animal is not kept isolated as required by this Order, or by a notice served under this Order, the owner of the dog or other animal, and the person for the time being in charge thereof, and the occupier of the place where the same is detained, and the person failing or neglecting to isolate the same, shall, each according to and in respect of his own acts, defaults, or omissions, be deemed guilty of an offence against the Act of 1894.

"(5) If a person with a view to unlawfully evade or defeat the operation of this Order, or of any regulation made by a L.A. under this Order, allows a dog or other animal to stray, he shall be deemed guilty of an offence against the Act of 1894.

INTERPRETATION.

23. "In this Order, unless the context otherwise requires—

'The Board' means the Board of Agriculture:

'The Act of 1894' means the Diseases of Animals Act, 1894:

'Animals' includes, with the animals specified in the Act of 1894 (that is cattle, sheep, and goats, and all other ruminating animals, and swine), horses, asses, mules, and dogs:

'Disease' means rabies, 'diseased' means affected with rabies, and 'suspected' means suspected of rabies:

'Public place' includes any street, highway, thoroughfare, public bridge, royal park, public park garden or pleasure ground, common, uninclosed land, or other place to which the public have for the time being access:

'Inspector' includes veterinary inspector:

'Carcase' means the carcase of an animal, and part of a carcase, and the meat, flesh, bones, hide, skin, hoofs, horns, offal, or other part of an animal, separately or otherwise, or any portion thereof:

Other terms have the same meaning as in the Act of 1894.

REVOCATION OF ORDER.

24. "The Order described in the second schedule to this Order is hereby from and after the commencement of this Order revoked subject to the provisions as to existing regulations contained in the next following Article: Provided that such revocation shall not invalidate or make unlawful anything done under the Order hereby revoked, or affect any licence or authority granted, or any right, title, obligation, or liability accrued thereunder before the commencement of this Order, or interfere with the institution or prosecution of any proceeding in respect of any offence committed against, or any penalty incurred under, the Order hereby revoked before the commencement of this Order.

EXISTING REGULATIONS OF LOCAL AUTHORITY.

25. "(1) All regulations made by a L.A.—

(*a*) under Article 11 (*Regulations of L.A. as to Movement of Animals, Fodder, etc.*); and

(*b*) under Article 15 (*Regulations of L.A. as to Slaughter*);

of the Order by this Order revoked and in force immediately before the commencement of this Order are hereby revoked.

"(2) All other regulations made by a L.A. under the said Order by this Order revoked and in force immediately before the commencement of this Order shall continue in force until altered or revoked by the L.A. or by the Board and shall have effect as if this Order had not been made.

EXTENT.

26. "This Order extends to Great Britain.

COMMENCEMENT.

27. "This Order shall come into operation on the sixth day of April, one thousand eight hundred and ninety-seven.

SHORT TITLE.

28. "This Order may be cited as the Rabies Order of 1897.

"In witness whereof the B.A. have hereunto set their official seal this twenty-third day of March, one thousand eight hundred and ninety-seven."

(L.S.)

T. H. ELLIOTT,
Secretary.

THE FIRST SCHEDULE.

Form A.

(Article 9.)

Notice to Owner or Person in Charge requiring Isolation of Dogs or other Animals.

DISEASES OF ANIMALS ACTS, 1894 AND 1896.

RABIES.

To *C.D.* of

I, *A.B.* , of , being an Inspector appointed by the Local Authority of the [county] of [*or* being an Inspector of the Board of Agriculture], hereby require the following animal, namely,

to be kept in [*here describe the kennel, shed, or other building where the animal is to be kept*] and I hereby require you to take Notice that, in consequence of this Notice and the provisions of the Order of the Board of Agriculture under which this Notice is issued, it is not lawful for any person, until this Notice is withdrawn by a further Notice in writing signed by an Inspector of the Board,—

(*a*) to move from or out of such kennel, shed, or building as aforesaid any dog or other animal that may be therein; or

(*b*) to move any dog or other animal into such kennel, shed, or building as aforesaid; or

(*c*) to permit any dog or other animal to come in contact with any animal to which this Notice applies.

Dated this day of , 18 .

(Signed) *A.B.*

N.B.—A dog or other animal to which this Notice applies may at any time be slaughtered by the owner.

The Inspector is with all practicable speed to send copies of this Notice to the Secretary, Board of Agriculture, 4 Whitehall Place, S.W., and to the Local Authority and to the police officer in charge of the nearest police station of the district.

[*Read the Indorsement on back of this Notice.*]

To be printed as Indorsement on Form A.

Caution.—If anything is done or omitted to be done in contravention of this Notice, the occupier of the place where the dog or other animal is detained, and the person failing or neglecting to isolate the same, and the owner of the dog or other animal moved, and the person for the time being in charge thereof, and the person causing, directing, or permitting the movement, and the person moving or conveying the dog or other animal, and the consignee or other person receiving or keeping it knowing it to have been moved in contravention as aforesaid, are liable under the Diseases of Animals Act, 1894, to fine and imprisonment.

Form B.

(Article 9.)

Withdrawal of Notice (Form A) to Owner or Person in charge requiring Isolation of Dogs or other Animals.

DISEASES OF ANIMALS ACTS, 1894 AND 1896.

RABIES.

To *C.D.* of

I, *A.B.* , of , being an Inspector of the Board of Agriculture, do hereby withdraw, as from this day of , 18 , the Notice signed by and served upon you on the day of , 18 , requiring isolation of the dog or other animal referred to in that Notice.

Dated this day of , 18 .

(Signed) *A.B.*

The Inspector is with all practicable speed to send copies of this Notice to the Secretary, Board of Agriculture, 4 Whitehall Place, S.W., and to the Local Authority and to the police officer in charge of the nearest police station of the district.

THE SECOND SCHEDULE.

ORDER REVOKED.

No.	Date.	Short Title.
5293	1895. 22 February . .	The Rabies Order of 1895.

ABSTRACT OF SALE OF HORSEFLESH REGULATION ACT, 1889 [52 & 53 VICT. CH. 11].

AN ACT TO REGULATE THE SALE OF HORSEFLESH FOR HUMAN FOOD.

1. "No person shall sell, offer, expose, or keep for sale any horseflesh for human food, elsewhere than in a shop, stall, or place over or upon which there shall be at all times painted, posted, or placed in legible characters of not less than four inches in length, and in a conspicuous position, and so as to be visible throughout the whole time, whether by night or day, during which such horseflesh is being offered or exposed for sale, words indicating that horseflesh is sold there."

2. "No person shall supply horseflesh for human food to any purchaser who has asked to be supplied with some meat other than horseflesh, or with some compound article of food which is not ordinarily made of horseflesh."

3. "Any medical officer of health or S.I. or other officer of a L.A. acting on the instructions of such authority or appointed by such authority for the purposes of this Act may at all reasonable times inspect and

examine any meat which he has reason to believe to be horseflesh, exposed for sale or deposited for the purpose of sale, or of preparation for sale, and intended for human food, in any place other than such shop, stall, or place as aforesaid, and if such meat appears to him to be horseflesh he may seize and carry away or cause to be seized and carried away the same, in order to have the same dealt with by a justice as hereinafter provided."

4. "On complaint made on oath by a medical officer of health or S.I., or other officer of a L.A., any justice may grant a warrant to any such officer to enter any building, or part of a building other than such shop, stall, or place as aforesaid, in which such officer has reason for believing that there is kept or concealed any horseflesh which is intended for sale, or for preparation for sale for human food, contrary to the provisions of this Act; and to search for, seize, and carry away or cause to be seized and carried away any meat that appears to such officer to be such horseflesh, in order to have the same dealt with by a justice as hereinafter provided.

"Any person who shall obstruct any such officer in the performance of his duty under this Act shall be deemed to have committed an offence under this Act."

5. "If it appears to any justice that any meat seized under the foregoing provisions of this Act is such horseflesh as aforesaid, he may make such order with regard to the disposal thereof as he may think desirable; and the person in whose possession or on whose premises the meat was found shall be deemed to have committed an offence under this Act, unless he proves that such meat was not intended for human food contrary to the provisions of this Act."

6. "Any person offending against any of the provisions of this Act, for every such offence shall be liable to a penalty not exceeding twenty pounds, to be recovered in a summary manner; and if any horseflesh is proved to have been exposed for sale to the public in any shop, stall, or eating-house other than such shop, stall, or place as in the first section mentioned, without anything to show that it was not intended for sale for human food, the onus of proving that it was not so intended shall rest upon the person exposing it for sale."

7. "For the purposes of this Act 'horseflesh' shall include the flesh of asses and mules, and shall mean horseflesh, cooked or uncooked, alone or accompanied by or mixed with any other substance."

9. "In the application of this Act to Scotland the expression 'justice' shall include sheriff and sheriff-substitute, and the expression 'local authority' shall mean any local authority authorised to appoint a public analyst under the Sale of Food and Drugs Act, 1875, and the procedure for the enforcement of this Act shall be in the manner provided in the thirty-third section of the said Sale of Food and Drugs Act, 1875."

10. "This Act may be cited as the Sale of Horseflesh, etc., Regulation Act, 1889."

11. "This Act shall come into operation on the twenty-ninth day of September, one thousand eight hundred and eighty-nine."

ABSTRACT OF INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889 [52 & 53 VICT. CH. 72], AS AMENDED BY INFECTIOUS DISEASE (NOTIFICATION) EXTENSION ACT, 1899.

1. "This Act may be cited as the Infectious Disease (Notification) Act, 1889" (as amended by Act, 1899).

2. "This Act shall extend to every city, burghal, rural, or port sanitary district" (after June 1899).

3. "(1) Where an inmate of any building used for human habitation within a district to which this Act extends is suffering from an infectious disease to which this Act applies, then, unless such building is a hospital in which persons suffering from an infectious disease are received, the following provisions shall have effect, that is to say:—

(*a*) The head of the family to which such inmate (in this Act referred to as the patient) belongs, and in his default the nearest relatives of the patient present in the building, or being in attendance on the patient, and in default of such relatives every person in charge of or in attendance on the patient, and in default of any such person the occupier of the building shall, as soon as he becomes aware that the patient is suffering from an infectious disease to which this Act applies, send notice thereof to the medical officer of health of the district:

(*b*) Every medical practitioner attending on or called in to visit the patient shall forthwith, on becoming aware that the patient is suffering from an infectious disease to which this Act applies, send to the medical officer of health for the district a certificate stating the name of the patient, the situation of the building, and the infectious disease from which, in the opinion of such medical practitioner, the patient is suffering. [141]

"(2) Every person required by this section to give a notice or certificate who fails to give the same, shall be liable on summary conviction in manner provided by the Summary Jurisdiction (Scotland) Acts to a fine not exceeding forty shillings;

"Provided that if a person is not required to give notice in the first instance, but only in default of some other person, he shall not be liable to any fine if he satisfies the court that he had reasonable cause to suppose that the notice had been duly given."

4. "(1) The Local Government Board may from time to time prescribe forms for the purpose of certificates under this Act, and any forms so prescribed shall be used in all cases to which they apply.

"(2) The L.A. shall gratuitously supply forms of certificate to any medical practitioner residing or practising in their district who applies for the same, and shall pay to every medical practitioner for each certificate duly sent by him in accordance with this Act a fee of two

shillings and sixpence if the case occurs in his private practice, and of one shilling if the case occurs in his practice as medical officer of any public body or institution. [141]

"(3) Where in any district of a L.A. there are two or more medical officers of health of such authority a certificate under this Act shall be given to such one of those officers as has charge of the area in which is the patient referred to in the certificate, or to such other of those officers as the L.A. may from time to time direct."

6. "In this Act the expression 'infectious disease to which this Act applies' means any of the following diseases, namely, small-pox, cholera, diphtheria, membranous croup, erysipelas, the disease known as scarlatina or scarlet fever, and the fevers known by any of the following names, typhus, typhoid, enteric, relapsing, continued, or puerperal, and includes as respects any particular district any infectious disease to which this Act has been applied by the L.A. of the district in manner provided by this Act."

7. "(1) The L.A. of any district to which this Act extends may, from time to time, by a resolution passed at a meeting of such authority where the like special notice of the meeting and of the intention to propose the resolution has been given as is required in the case of a meeting held for adopting this Act, order that this Act shall apply in their district to any infectious disease other than a disease specifically mentioned in this Act.

"(2) Any such Order may be permanent or temporary, and, if temporary, the period during which it is to continue in force shall be specified therein, and any such Order may be revoked or varied by the L.A. which made the same.

"(3) An Order under this section and the revocation and variation of any such Order shall not be of any validity until approved by the Local Government Board.

"(4) When it is so approved, the L.A. shall give public notice thereof by advertisement in a local newspaper and by handbills, and otherwise in such manner as the L.A. think sufficient for giving information to all persons interested. They shall also send a copy thereof to each registered medical practitioner whom, after due inquiry, they ascertain to be residing or practising in their district.

"(5) The said Order shall come into operation at such date not earlier than one week after the publication of the first advertisement of the approved Order as the L.A. may fix, and upon such Order coming into operation, and during the continuance thereof, an infectious disease mentioned in such Order shall, within the district of the authority, be an infectious disease to which this Act applies.

"(6) In the case of emergency three clear days' notice under this section shall be sufficient, and the resolution shall declare the cause of such emergency and shall be for a temporary Order, and a copy thereof shall be forthwith sent to the Local Government Board and advertised, and the Order shall come into operation at the expiration of one week from the date of such advertisement, but unless approved by the Local Government

Board shall cease to be in force at the expiration of one month after it is passed, or any earlier date fixed by the Local Government Board.

"(7) The approval of the Local Government Board shall be conclusive evidence that the case was one of emergency."

8. "(1) A notice or certificate for the purposes of this Act shall be in writing or print, or partly in writing and partly in print; and for the purposes of this Act the expression 'print' includes any mechanical mode of reproducing words.

"(2) A notice or certificate to be sent to a medical officer of health in pursuance of this Act may be sent by being delivered to the officer or being left at his office or residence, or may be sent by post addressed to him at his office or at his residence."

9. "Any expenses incurred by a L.A. in the execution of this Act shall be paid as part of the expenses of such authority in the execution of the Acts relating to public health and in the case of a rural authority shall be general expenses."

11. "A payment made to any medical practitioner in pursuance of this Act shall not disqualify that practitioner for serving as member of the council of any county or burgh, or as member of a sanitary authority, or as parish councillor, or in any municipal or parochial office.

"Where a medical practitioner attending on a patient is himself the medical officer of health of the district, he shall be entitled to the fee to which he would be entitled if he were not such medical officer."

13. "(1) The provisions of this Act shall apply to every ship, vessel, boat, tent, van, shed, or similar structure used for human habitation, in like manner as nearly as may be as if it were a building.

"(2) A ship, vessel, or boat, lying in any river, harbour, or other water not within the district of any L.A. within the meaning of this Act shall be deemed for the purposes of this Act to be within the district of such L.A. as may be fixed by the Local Government Board, and where no L.A. has been fixed, then of the L.A. of the district which nearest adjoins the place where such ship, vessel, or boat is lying.

"(3) This section shall not apply to any ship, vessel, or boat belonging to any foreign Government."

14. "Where this Act is put in force in any district in which there is a local Act for the like purpose as this Act, the enactments of such local Act, so far as they relate to that purpose, shall cease to be in operation."

15. "Nothing in this Act shall extend to any building, ship, vessel, boat, tent, van, shed, or similar structure belonging to Her Majesty the Queen, or to any inmate thereof."

Statutory Form of Medical Practitioner's Certificate prescribed by the Local Government Board.

THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

CERTIFICATE OF MEDICAL PRACTITIONER.

* .....

To the Medical Officer of Health of the Local Authority under the Public Health Act.

I hereby certify and declare, that in my opinion [1].....

.....

an inmate of [2].....

is suffering from [3].....

and that the above is a case occurring in my [4].....

Dated the.....day of.....19.....

(Signed).....
Medical Practitioner.

(Address).....

N.B.—This Certificate must (under a penalty not exceeding forty shillings) be sent to the Medical Officer of Health of the Local Authority forthwith, on the Medical Practitioner attending on or called in to visit the patient becoming aware that the patient is suffering from an infectious disease to which the Act applies—namely, any of the following diseases:—Smallpox, cholera, diphtheria, membranous croup, erysipelas, the disease known as scarlatina or scarlet fever, and the fevers known by any of the following names: typhus, typhoid, enteric, relapsing, continued or puerperal, and also any infectious disease to which the Act has been applied by the Local Authority in manner provided by the Act.

[5] .....

.....

The above is the FORM FOR CERTIFICATE under Section 4 of the Infectious Disease (Notification) Act, 1889 (52 & 53 Vict. ch. 72), prescribed by the Local Government Board. It is thus a statutory form, and cannot be altered except by the Board. A Local Authority may, however, in a footnote give any further information that will in their opinion facilitate the working of the Act.

G. FALCONAR-STEWART,
Secretary.

* Name of Local Authority.

[1] Name in full of person suffering from disease.

[2] No. or name of the house, and name of the street or road, and parish or place, where person is resident. In the case of a ship, boat, tent, van, shed, or other similar structure, the name or description of the dwelling, and the name of the place where it is situate, should be given.

[3] Name of disease.

[4] State whether in private practice or in practice as M.O. to public body or institution.

[5] The Local Authority may here print the name and address of the M.O.H.

Form of Report of Case of Smallpox in Accordance with the Order of the Local Government Board.

(To be sent to the Board by the Medical Officer of Health.)

*Local Authority of the**.....*County of*.....

.....

.....190 .

1. Name.....Age.....Occupation.....
2. Address.....
3. Date of Notification.....of Sickening.....
4. Householder.....Occupation.....
5. Number of Inmates—Under Ten.....Over Ten.....
   Number of Rooms.....
6. Vaccinated or Unvaccinated { Patient..... Inmates.....
7. Probable Source of Infection.....

.....

8. Notes of Movements of Patient for a fortnight previous to Sickening and up to date of discovery †.....

.....

9. Has information been passed on to Medical Officers of Health of Local Authorities concerned?.....
10. Precautions—Vaccination and Revaccination?.....
    Hospital?.....
    House of Reception?.....
    Disinfection, etc.?.....
11. Remarks.....

.....

.....

Medical Officer of Health.

To the Secretary,
Local Government Board, Edinburgh.

Note.—This Model Form for reporting cases of Smallpox is issued by the Board in order to promote uniformity and save trouble to Medical Officers of Health. It is sufficient to use the reference numbers in reports, where Local Authorities do not reprint the form.

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* Insert Burgh of.....or District of.....as the case may be.

† All local references must be as specific as possible, giving names of persons, occupations, addresses, etc., so that the information may be followed up.

REGULATIONS AS TO CHOLERA, YELLOW FEVER, AND PLAGUE, 1898.

Circular intimating repeal of Public Health Act of 1896 as regards Scotland, and re-issuing Regulations as to Cholera, Yellow Fever, and Plague.

LOCAL GOVERNMENT BOARD,
EDINBURGH, *3rd January* 1898.

Sir,—I am directed by the Local Government Board for Scotland to transmit, for the information and guidance of the L.A., the accompanying copy in duplicate of an Order containing Regulations issued by the Board in pursuance of their powers under Part IV. of the Public Health (Scotland) Act, 1897.

As the L.A. are aware, the Board's Order of 7th November 1896 was issued in terms of the Public Health Act of 1896; but this Act has been repealed so far as it relates to Scotland, and its provisions incorporated in Part IV. of the new Public Health Act. The accompanying Order, therefore, has the effect merely of continuing in force the Regulations already issued.—I am, Sir, your obedient servant,

G. FALCONAR-STEWART,
Secretary.

The Clerk to the Local Authority.

General Order containing Regulations as to Cholera, Yellow Fever, and Plague.

To all L.As. in Scotland, within whose District there is a Port or Harbour:—
To all Officers of Customs:—
To all Medical Officers of Health of the L.As. aforesaid:—
To all Masters of Ships:—
To all Pilots:—
And to all others whom it may concern.

WHEREAS We, the Local Government Board for Scotland, by an Order bearing date the 7th day of November 1896, did make certain Regulations;

And Whereas the Public Health Act, 1896, 59 and 60 Victoria, chapter 19, under which the aforesaid Order was made, has been repealed (except the repeals therein contained) in so far as it relates to Scotland, by the Public Health (Scotland) Act, 1897, 60 and 61 Victoria, chapter 38; and the said Order ceased to have any effect or force from and after the 1st day of January 1898;

And Whereas We are empowered by Section 78 of the aforesaid Public Health (Scotland) Act, 1897, from time to time to make, alter, and revoke such Regulations as to Us may seem fit, with a view to the

treatment of persons affected with any epidemic, endemic, or infectious disease, and preventing the spread of such diseases as well on the seas, rivers, and waters of Scotland, and on the high seas within three miles of the coast thereof, as on land; and may declare by what authority or authorities such Regulations shall be enforced and executed;

And Whereas by Section 85 of the Public Health (Scotland) Act, 1897, it is enacted that Regulations of the Local Government Board for Scotland, in pursuance of Part IV. of the said Act, may provide for such Regulations being enforced and executed by the Officers of Customs and the officers and men employed in the Coastguard, as well as by other authorities and officers, and without prejudice to the generality of the powers conferred by Part IV., may provide for:—

(*a*) The signals to be hoisted by vessels having any case of epidemic, endemic, or infectious disease on board; and

(*b*) The questions to be answered by masters, pilots, and other persons on board any vessel, as to cases of such disease on board during the voyage or on the arrival of the vessel; and

(*c*) The detention of vessels and of persons on board vessels; and

(*d*) The duties to be performed in cases of such disease by masters, pilots, and other persons on board vessels.

Provided that the Regulations shall be subject to the consent:—

(*a*) So far as they apply to the Officers of Customs, of the Commissioners of Her Majesty's Customs; and

(*b*) So far as they apply to officers or men employed in the Coastguard, of the Admiralty; and

(*c*) So far as they apply to signals, of the Board of Trade.

And Whereas it is expedient that the Regulations made by the said Order in terms of the Public Health Act, 1896, should now be reissued in exercise of the powers conferred on Us by the Public Health (Scotland) Act, 1897, and every other power enabling Us in that behalf; And whereas the Commissioners of Her Majesty's Customs, the Lords of the Admiralty, and the Board of Trade have respectively signified their consent to such Regulations, so far as they respectively apply to the Officers of Customs and to signals;

NOW THEREFORE, We, the Local Government Board for Scotland, do hereby reissue the following Regulations, and Declare that they shall be enforced and executed by the Authorities and Officers hereinafter mentioned:—

PART I.

Article 1.—In this Order—

The term "Ship" includes any sailing or steam ship, vessel, or boat not belonging to Her Majesty or any foreign Government;

The term "Officer of Customs" includes any person acting under the authority of the Commissioners of Her Majesty's Customs;

The term "Master," used in relation to a ship, includes the officer, pilot, or other person for the time being in charge or command of the ship;

The term "Cholera" includes Choleraic Diarrhœa;

The term "Local Authority" has the same meaning as in the Public Health (Scotland) Act, 1897;

The term "Medical Officer of Health" includes any duly qualified Medical Practitioner appointed or employed by a L.A. to act in the execution of this Order;

The term "Infected" means infected with Cholera, Yellow Fever, or Plague: Provided that every ship shall be deemed infected in which there is or has been during the voyage, or during the stay of such ship in the port of departure, or in a port in the course of such voyage, any case of Cholera, Yellow Fever, or Plague.

PART II.

Article 2.—(1) The Officer of Customs who, on the arrival of any ship from foreign, shall visit the ship, shall ascertain, so far as possible, whether such ship is infected, and if he have any reason to suspect that the ship is infected, or has come from any infected place, shall require the Master of the Ship, or the Surgeon, if the Ship carries a Surgeon, to give (in writing under his hand, and in the form hereunto appended, or in a form to the like effect) a true answer to the following question:—

Question.—Has any case or suspected case of
Cholera
Yellow Fever, or
Plague
occurred in the ship , of which you are ,
during the voyage from , or during the stay
of the ship in that port, or in any other port in the course
of the voyage?

Answer.— cases or suspected cases of occurred
on board the during the voyage from
[or during the stay of the ship in the port of],

or

No case or suspected case of Cholera, Yellow Fever, or Plague
occurred on board the during the voyage from ,
or during the stay of the ship in that port, or in any other
port in the course of the voyage.

Signed
Master [or Surgeon] of the

(2) The Officer of Customs who, on the arrival of any ship from foreign, shall visit such ship, shall, if he find or have reason to suspect that the ship is infected, detain such ship, and order the Master forthwith to moor or anchor the same in such position as such Officer of Customs shall direct; and thereupon the Master shall forthwith moor or anchor the ship accordingly.

Article 3.—Whilst such ship shall be so detained, no person (other than an Officer of Customs or a person acting in the execution of this Order) shall leave the same.

Article 4.—The Officer of Customs detaining any ship as aforesaid shall forthwith give notice thereof, and of the cause of such detention, to the L.A. of the place where such ship is lying.

Article 5.—Such detention by the Officer of Customs shall cease as soon as the ship shall have been duly visited and examined by the Medical Officer of Health; or if the ship shall, upon such examination, be found to be infected, as soon as the same shall be moored or anchored, in pursuance of Article 10.

Provided that, if the examination be not commenced within twelve hours after the ship shall have been moored or anchored, in pursuance of sub-division 2 of Article 2, the ship shall, on the expiration of the said twelve hours, be released from detention.

PART III.

Article 6. (*Amended by Articles of Order, 18th August* 1903, *v.* p. 270, *post.*) —Every L.A. within whose district persons are likely to be landed from ships coming from foreign shall, with the approval of the Chief Officer of Customs of the port, fix some place where any ship may be moored or anchored, for the purpose of Article 10; and shall make provision for the reception of patients and persons suffering from Cholera, Yellow Fever, and Plague, and removed under Articles 13 and 14.

In the case of any L.A. within whose district or jurisdiction there is, in the opinion of the L.A. and of the Chief Officer of Customs of the port, no place where a ship can be moored or anchored safely or suitably for the purpose of this Article, such L.A. may fix some place without such jurisdiction or district, but as near thereto as possible, wherein a ship may be moored or anchored for the purpose of Article 10 hereof. Provided that no such place shall be fixed without the consent of the L.A. within whose jurisdiction or district the said place is situate, and that in the event of such consent being refused the first mentioned L.A. may, in their discretion, refer the matter to Us, whose decision on any or all the points in dispute (without prejudice to any other course provided by law) shall be final; and any expenses incurred by either L.A. in carrying into effect the provisions of this Article shall be chargeable to the L.A. for whom such place of anchorage is provided within the terms of this Article.

Provided also that where, in pursuance of the Order of the Privy Council of the ninth day of September, One thousand eight hundred and ninety-three, or of any Order by the said Order revoked, or of any Order under the Public Health Act, 1896, places have been fixed for the mooring or anchoring of ships; for the purposes of the Regulations contained in any of such Orders, such places shall be deemed to have been so fixed in pursuance of and for the purposes of this Order.

Article 7.—The L.A., on notice being given to them by an Officer of Customs under Article 4, shall forthwith cause the ship in regard to which such notice shall have been given to be visited and examined by their Medical Officer of Health, for the purpose of ascertaining whether such ship is infected.

Article 8.—The Medical Officer of Health, if he have reason to suspect that any ship coming or being within the jurisdiction or district of the L.A., whether examined by the Officer of Customs or not, is infected, shall, or, if he have reason to suspect that the ship has come from an infected place, may visit and examine such ship, for the purpose of ascertaining whether such ship is infected, and may make the like visit and examination in the case of any ship coming or being within the jurisdiction of the L.A. which has come from an infected place. The Master of any such ship shall permit the same to be so visited and examined.

The Master of any such ship shall also, on being required so to do by the Medical Officer of Health, cause the ship to be brought to, and, if necessary, moored or anchored in some convenient place while the same shall be visited and examined; but due regard shall be had to the safety of the ship and to the convenience of navigation.

Article 9.—If the Medical Officer of Health, on making such examination as aforesaid (whether under Article 7 or under Article 8), shall be of opinion that the ship is infected, he shall forthwith give a certificate in duplicate in the following Form, or to the like effect, and shall deliver one copy to the Master, and retain the other copy or transmit it to the L.A. He shall also give to Us information as to the arrival of the ship, and such other particulars as We may require.

CERTIFICATE.

.....*day of*.....189 .

Local Authority of.....

I hereby certify that I have examined the ship , of , now lying in the Port of [*or detained at*], and that I find that such ship is infected with [Cholera, or Yellow Fever, or Plague].

Signed

Medical Officer of Health [or Medical Practitioner appointed or employed by the Local Authority].

Article 10. (*Amended by Order* 18, *Aug.* 1903, *v. p.* 270, *post.*)—The Master of any ship so certified to be infected shall thereupon moor or anchor such ship at the place fixed for that purpose under Article 6, and such ship shall remain there until the requirements of this Order have been duly fulfilled.

Article 11.—No person (other than an Officer of Customs or a person acting in the execution of this Order) shall leave any such ship until the examination hereinafter mentioned shall have been made.

Article 12.—The Medical Officer of Health shall, as soon as possible after any such ship has been certified to be infected, examine every person on board the same, and in the case of any person suffering from Cholera, Yellow Fever, or Plague, or from any illness which the Medical Officer of

Health suspects may prove to be Cholera, Yellow Fever, or Plague, shall certify accordingly.

Article 13.—Every person certified by the Medical Officer of Health to be suffering from Cholera, Yellow Fever, or Plague, shall be dealt with under any Bye-laws that may have been made by the L.A. under Section 180 of the Public Health (Scotland) Act, 1897; or, where no such Bye-laws shall have been made, shall be removed, if his condition admit of it, to some hospital or other suitable place appointed for that purpose by the L.A.; and no person so removed shall leave such hospital or place until the Medical Officer of Health shall have certified that such person is free from the said disease.

If any person so certified to be suffering from Cholera, Yellow Fever, or Plague cannot be removed, the ship shall remain subject, for the purposes of this Order, to the control of the Medical Officer of Health; and such person shall not be removed from or leave the ship, except with the consent in writing of the Medical Officer of Health.

Article 14.—Any person certified by the Medical Officer of Health to be suffering from any illness which such Officer suspects may prove to be Cholera, Yellow Fever, or Plague, may either be detained on board the ship for any period not exceeding two days, or be taken to some hospital or other suitable place appointed for that purpose by the L.A., and detained there for a like period, in order that it may be ascertained whether the illness is or is not Cholera, Yellow Fever, or Plague.

If any such person, while so detained, shall be certified by the Medical Officer of Health to be suffering from Cholera, Yellow Fever, or Plague, the provisions of Article 13 shall apply.

Article 15.—No person on board such a ship as is mentioned in Article 12, who has not been certified as required by that Article, shall be permitted to land unless he satisfy the Medical Officer of Health as to his name, intended place of destination, and intended address at such place.

Such name, intended place of destination and address shall forthwith be given by the Medical Officer of Health to the Clerk to the L.A., and such Clerk shall thereupon transmit the same to the L.A. of the district in which such intended place of destination is situate.

Every such person who, within forty-eight hours after landing, shall arrive at any place of destination or address other than such place or address as aforesaid, shall forthwith, upon such arrival, notify in writing his place of destination and address to the Medical Officer of Health of the L.A., or to the L.A. of the District in which such place is situate.

Article 16.—The Medical Officer of Health shall, in the case of every ship certified to be infected, give directions and take such steps as may appear to him to be necessary for preventing the spread of infection, and the Master of the said ship shall forthwith carry into execution such directions as shall be so given to him.

Article 17.—In the event of any death from Cholera, Yellow Fever, or Plague taking place on board such ship while detained under Article 10,

the Master shall, as directed by the L.A. or the Medical Officer of Health, either cause the dead body to be taken out to sea and committed to the deep, properly loaded to prevent its rising, or shall deliver it into the charge of the said Authority, who shall thereupon cause the same to be otherwise lawfully and properly disposed of.

Article 18.—The Master shall cause the clothing and bedding and other articles of personal use likely to retain infection, which have been used by any person who may have suffered from Cholera, Yellow Fever, or Plague on board such ship, or who, having left such ship, shall have suffered from Cholera, Yellow Fever, or Plague during the stay of such ship in any Port, to be disinfected or destroyed; and if the Master shall have neglected to do so before the ship arrives in Port, he shall forthwith, upon the direction of the L.A. or the Medical Officer of Health, cause the same to be disinfected or destroyed, as the case may require; and if the said Master neglect to comply with such direction within a reasonable time, the L.A. shall cause the same to be carried into execution.

Article 19.—The Master shall cause the ship to be disinfected, and every article therein, other than those last described, which may probably be infected, to be disinfected or destroyed, according to the directions of the Medical Officer of Health.

Article 20.—Where a ship is not ascertained or certified to be infected, but has passengers on board who are in a filthy or otherwise unwholesome condition, or has come from a place infected with Cholera, Yellow Fever, or Plague, the Medical Officer of Health may, if in his opinion it is desirable with a view to checking the introduction or spread of Cholera, Yellow Fever, or Plague, give a certificate in duplicate in the following form, or to the like effect, and shall deliver one to the Master, and retain the other or transmit it to the L.A.

CERTIFICATE.

.....*day of*..... 189 .

Local Authority of.....

I hereby certify that I have examined the ship from now in the port of , and that such ship has passengers on board in a filthy or otherwise unwholesome condition [*or* has come from an infected place], and that, in my opinion, it is desirable, with a view to checking the introduction or spread of Cholera, Yellow Fever, or Plague, that the persons on board such ship should not be allowed to land unless they satisfy me as to their names, places of destination, and addresses at such places.

Signed

Medical Officer of Health [or Medical Practitioner appointed or employed by the Local Authority].

Article 21.—When such certificate has been given, no person on board the ship shall leave or be allowed to leave the same, unless he satisfy the Medical Officer of Health as to his name, intended place of destination,

and intended address at such place; and such name and intended place of destination and address shall forthwith be given by the Medical Officer of Health to the Clerk to the L.A., and such Clerk shall thereupon transmit the same to the L.A. of the District in which such intended place of destination is situate. Every such person who, within forty-eight hours after landing, shall arrive at any place of destination or address other than such place or address as aforesaid, shall forthwith, upon such arrival, notify in writing his place of destination and address to the Medical Officer of Health of the L.A. or to the L.A. of the District in which such place is situate.

Article 22.—If the Medical Officer of Health have reason to believe that any ship coming or being within the jurisdiction of the L.A. is infected, or has come from an infected place, he may direct all bilge water and water ballast to be pumped out in some suitable place before such ship enters any Dock or Basin; provided that in every case where there may be reasonable cause to apprehend that the ship may be endangered by the removal of the water ballast, the Medical Officer of Health may cause any tank or other receptacle containing the water ballast to be sealed, and thenceforward, so long as the ship remains within the jurisdiction of the L.A., no person shall, without the permission of the Medical Officer of Health, break or remove such seal, or discharge or remove from such tank or receptacle any part of the water ballast. On the L.A. providing a proper supply of water for drinking or cooking purposes for persons on board any such ship, the Medical Officer of Health may direct all casks or tanks on board the ship containing water for the use of such persons to be emptied and cleansed, and the Master shall cause the said direction to be carried into effect.

Article 23.—The Master of any ship, or any other person, shall answer truly all such questions put to him by and give all such information to any Officer of Customs or Medical Officer of Health, as may be necessary for any purpose of this Order; and no person who is required, in pursuance of this Order, to give to the Medical Officer of Health, or to notify to any L.A. the name and intended place of destination and address of such person, shall knowingly give or notify a false or fictitious name, place of destination, or address, or refuse to give or notify as aforesaid the true name, intended place of destination, and address of such person.

Article 24.—The L.A. may appoint one or more legally qualified medical practitioners to act in the execution of this Order, either in place of or as an assistant or assistants to the Medical Officer of Health, and may pay such practitioner or practitioners reasonable remuneration for his or their services.

SIGNALS ORDER.

PART IV.

Article 25.*—The Master of every ship infected with Cholera, Yellow Fever, or Plague shall, when within three miles of the coast of any part of Scotland, cause to be hoisted at the mast-head, or where best seen, a large flag of yellow and black, borne quarterly, and shall keep the same displayed during the whole of the time between sunrise and sunset; and no person (other than an Officer of Customs, or a person acting in the execution of this Order) shall leave such ship until after such visit of the Officer of Customs as is mentioned in Article 2, or until after the visit of the Medical Officer of Health in pursuance of Article 8.

PART V.

Article 26.—Nothing in this Order shall render liable to detention, disinfection, or destruction any article forming part of any mail (other than a parcel mail) conveyed under the authority of the Postmaster-General, or of the Postal administration of any Foreign Government, or shall prejudicially affect the delivery in due course of any such mail (other than a parcel mail) to the Post Office, in accordance with the provisions of the Post Office Acts.

Given under the Seal of Office of the Local Government Board for Scotland, this first day of January, in the year One thousand eight hundred and ninety-eight.

(L.S.)

MALCOLM M'NEILL,
Vice-President.

G. FALCONAR-STEWART,
Secretary.

NOTICE.—The Public Health (Scotland) Act, 1897, provides by Section 87 that if any person wilfully neglects or refuses to obey or carry out, or obstructs the execution of any Regulation made under Part IV. of the aforesaid Act, he shall be liable to a penalty not exceeding *One Hundred Pounds*, and in the case of a continuing offence to a further penalty not exceeding *Fifty Pounds* for every day during which the offence continues; and any such penalty shall be recoverable with expenses at the instance of the Lord Advocate on behalf of the Board, or by any L.A. with the consent of the Board, in any competent Court.

Date of publication in the Edinburgh Gazette, 4th January 1898.

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* *Note.*—By an Amending Order dated 24th December 1902, Article 25 is amended so as to provide that infected ships shall, in addition to the day signal, carry a night signal consisting of three lights which shall be arranged at a distance of not less than six feet apart, in the form of an equilateral triangle, and of which the light at the apex of the triangle shall be white, and the other lights at the ends of the base of the triangle shall be red in colour.

AMENDING ORDER, 1903.

Article 1.—In the Regulations contained in Our Order dated the 1st day of January 1898, the place where any ship may be moored or anchored in terms of Articles 6 and 10 thereof shall include any quay, wharf, pier, or landing-place within the jurisdiction of the L.A.

Article 2.—A L.A. shall not fix any quay, wharf, pier, or landing-place as the place where a ship may be moored or anchored as aforesaid except with Our consent and subject to such conditions as We may impose.

Article 3.—When a L.A. under Article 6 of Our Order dated the 1st day of January 1898, have fixed a place where a ship may be moored or anchored for the purpose of Article 10 of the aforesaid Order, such L.A. shall forthwith intimate to Us the place so fixed (*v.* pp. 262 and 263, *ante*).

Given under the Seal of Office of the Local Government Board for Scotland, this Eighteenth day of August, in the year One thousand nine hundred and three.

Circular as to notifying cases of Cholera, Yellow Fever, and Plague.

LOCAL GOVERNMENT BOARD,
EDINBURGH, 10*th October* 1901.

Sir,—In connection with the Board's Order of 1st January 1898,* and relative Regulations as to Cholera, Yellow Fever, and Plague, I am directed to remind the L.A. of the Board's instruction of 18th January 1900,† calling upon Medical Officers of Health to report forthwith to them and to the L.A. every case of *Smallpox* or *Suspected Smallpox* occurring within their districts, and to inform them that the Board do now further require Medical Officers of Health to similarly report forthwith to the Board and to the L.A. every case or suspected case of *Cholera*, *Yellow Fever*, or *Plague*, which may come to their knowledge.

I have transmitted a Copy of this Circular direct to the Medical Officer for his information and attention when occasion requires.—I am, Sir, your obedient servant,

G. FALCONAR-STEWART,
Secretary.

The Clerk to the Local Authority.

RATS ORDER.

General Order containing Regulations with respect to Plague.

(21*st January* 1902.)

TO ALL THE LOCAL AUTHORITIES IN SCOTLAND having jurisdiction under the Public Health (Scotland) Act, 1897.
And to all others whom it may concern.

WHEREAS it is enacted by Section 79 of the Public Health (Scotland) Act, 1897, that whenever any part of Scotland appears to be threatened

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* *v.* p. 261, *ante*. † *v.* p. 302, *post*.

with or is affected by any formidable epidemic, endemic, or infectious disease, the Local Government Board may make regulations, *inter alia*, for the promotion of cleansing, ventilation, and disinfection and for guarding against the spread of disease, and for any such matters or things as may to them appear advisable for preventing or mitigating such disease:

AND WHEREAS cases of plague have occurred in Scotland and it is expedient to make provision thereanent:

NOW THEREFORE, WE, the Local Government Board for Scotland, in exercise of the authority vested in Us, as aforesaid, do by this our Order, make the Regulations following, and declare that the same shall be enforced within the whole district of every L.A. in Scotland, and shall apply to all ships whether in ports or in inland waters or on arms or parts of the sea within the jurisdiction of the Admiralty until the same be revoked or altered.

Article 1.—The L.A. shall take measures to ascertain whether there is or has recently been any disease or unusual mortality among rats within their district, and if such be found to exist, the L.A. shall at once report the facts to the Board and take steps to ascertain whether any of such animals are suffering from plague.

Article 2.—If plague is found or suspected to exist among rats within the district, or in any neighbouring district, or in any ship lying in any river, harbour, or other water within or *ex adverso* of the district, the L.A. shall at once take the necessary steps to include plague among the diseases to which the Infectious Disease (Notification) Act, 1889, applies, and shall adopt all necessary precautions to prevent the dissemination of the disease, and for that purpose shall take measures:—

(*a*) To disinfect all places and to disinfect or destroy all articles that may have been exposed to infection;

(*b*) To destroy all rats in the locality;

(*c*) To prevent their entrance into houses, ships, and other premises;

(*d*) To remove all deposits or accumulations of rubbish, refuse, manure, or other materials likely to attract such animals; and

(*e*) Generally to do everything calculated to stamp out the disease.

Given under the Seal of Office of the Local Government Board for Scotland, this Twenty-first day of January, One thousand nine hundred and two.

(L.S.) MALCOLM M'NEILL,
Vice-President.

G. FALCONAR-STEWART,
Secretary.

ABSTRACT OF CUSTOMS CONSOLIDATION ACT (As Amended by Public Health Act, 1897).

Section **234**. "It shall be lawful for the Board, from time to time, by their Order, to require that no person on board any ship coming to any port in Scotland from, or having touched at, any place out of the United Kingdom abroad, where they have reason to apprehend that Yellow Fever or other highly infectious distemper prevails, shall quit such vessel before the state of health of the persons on board shall have been ascertained, on examination by the proper Officer of Customs, at such place or places as may from time to time be appointed by the Commissioners of Customs for such purpose, and before permission to land shall have been given by such officer, and any person so quitting any such vessel shall forfeit a sum not exceeding one hundred pounds; and if the master, pilot, or person in charge of such ship shall not, on arrival at such place, hoist and continue such signal as shall be directed by such Order, until the proper officer shall have given permission to haul down the same, he shall forfeit a like penalty; and such penalties or either of them if incurred, shall be subject to reduction to any sum not exceeding one hundred pounds, and may be sued for, prosecuted, and recovered with expenses, at the instance of the Lord Advocate on behalf of the Board, or of any L.A. with consent of the Board, by proceedings in any competent Court."

ABSTRACT OF MERCHANT SHIPPING ACT, 1894 [57 & 58 Vict. Ch. 60].

7. The term "local authority" means the local authority under the Public Health (Scotland) Act, 1897.

210 and *Schedule* 11 refer to accommodation of seamen.

214. "(1) A L.A. hereinafter mentioned whose district includes a seaport may, with the approval of the Board of Trade, make bye-laws relating to seamen's lodging-houses in their district, and those bye-laws shall be binding upon all persons keeping houses in which seamen are lodged, and upon the owners thereof, and persons employed therein.

"(2) The bye-laws shall, amongst other things, provide for the licensing, inspection and sanitary conditions of seamen's lodging-houses, for the publication of the fact of a house, being licensed, for the due execution of the bye-laws, for preventing the obstruction of persons engaged in securing that execution, for the preventing of persons not duly licensed holding themselves out as keeping or purporting to keep licensed houses, and for the exclusion from licensed houses of persons of improper character, and shall impose sufficient fines not exceeding fifty pounds for the breach of any bye-law."

293 and *Schedule* 11 relate to the accommodation for steerage passengers in emigrant ships.

324. Under this section H.M. may by Order in Council make regulations *re* sanitary matters in ships :—

(i) "For preserving order, promoting health, and securing cleanliness and ventilation on board emigrant ships proceeding from the British Islands to any port in a British possession; and

(ii) For prohibiting emigration from any port at any time when choleraic or any epidemic disease is generally prevalent in the British Islands or any part thereof."

ABSTRACT OF ALKALI, ETC., WORKS REGULATION ACT, 1881 [44 & 45 VICT. CH. 37].

An Act to consolidate the Alkali Acts, 1863 *and* 1874, *and to make further provision for regulating Alkali and certain other Works in which noxious or offensive gases are evolved.*

(For Amending Act of 1892, *see* p. 277.)

PART I.

Alkali Works and Alkali Waste.

3. "Every alkali work shall be carried on in such manner as to secure the condensation, to the satisfaction of the chief I., derived from his own examination, or from that of some other I.—

"(*a*) Of the muriatic acid gas evolved in such work, to the extent of ninety-five per centum, and to such an extent that in each cubic foot of air, smoke, or chimney gases, escaping from the works into the atmosphere, there is not contained more than one-fifth part of a grain of muriatic acid.

"(*b*) Of the acid gases of sulphur and nitrogen which are evolved in the process of manufacturing sulphuric acid or sulphates in the work, to such an extent that the total acidity of such gases in each cubic foot of air, smoke, or gases, escaping into the chimney or into the atmosphere, does not exceed what is equivalent to four grains of sulphuric anhydride.

"The owner of any alkali work which is carried on in contravention of this section shall be liable to a fine not exceeding, in the case of the first offence, fifty pounds, and in the case of every subsequent offence, one hundred pounds." [142]

4. "In addition to the condensation of acid gases as aforesaid, the owner of every alkali work shall use the best practicable means for preventing the discharge into the atmosphere of all noxious gases and of all offensive gases evolved in such work, or for rendering such gases harmless and inoffensive when discharged, subject to the qualification that no objection shall be taken under this section by an I. to any discharge of gas by a chimney or flue, on the basis of the amount of acid gas per cubic

foot of air, smoke, or gases, where that amount does not exceed the amount limited by the last preceding section.

"If the owner of any alkali work fails, in the opinion of the court having cognizance of the matter, to use such means, he shall be liable to a fine not exceeding, in the case of the first offence, twenty pounds, and in the case of every subsequent offence, fifty pounds, with a further sum not exceeding five pounds for every day during which any such subsequent offence has continued."

5. "Every work in which acid is produced or used shall be carried on in such manner that the acid shall not come in contact with alkali waste, or with drainage therefrom, so as to cause a nuisance.

"The owner of any work which is carried on in contravention of this section shall be liable to a fine not exceeding, in the case of the first offence, fifty pounds, and in the case of every subsequent offence, one hundred pounds, with a further sum not exceeding five pounds for every day during which any such subsequent offence has continued.

"On the request of the owner of any such work as is mentioned in this section, the sanitary authority of the district in which such work is situate shall, at the expense of such owner, provide and maintain a drain or channel for carrying off the acid produced in such work into the sea or into any river or watercourse into which such acid can be carried without contravention of the Rivers Pollution Prevention Act, 1876; and the sanitary authority shall for the purpose of providing any such drain or channel have the like powers as they have for providing sewers, whether within or without their district, under the Public Health Act.

"Compensation shall be made to any person for any damage sustained by him by reason of the exercise by a sanitary authority of the powers conferred by this section, and such compensation shall be deemed part of the expenses to be paid by the owner making the request to the sanitary authority under this section."

6. "Alkali waste shall not be deposited or discharged without the best practicable means being used for effectually preventing any nuisance arising therefrom.

"Any person who causes or knowingly permits any alkali waste to be deposited or discharged in contravention of this section shall be liable to a fine not exceeding, in the case of the first offence, twenty pounds, and in the case of every subsequent offence, fifty pounds, with a further sum not exceeding five pounds for every day during which any such subsequent offence has continued."

7. "Where alkali waste has been deposited or discharged, either before or after the commencement of this Act, and complaint is made to the chief I. that a nuisance is occasioned thereby, the chief I., if satisfied of the existence of the nuisance, and that it is within the power of the owner or occupier of the land to abate it, shall serve a notice on such owner or occupier requiring him to abate the nuisance; and if such owner or occupier fails to use the best practicable and reasonably available means for the abatement thereof he shall be liable to a fine not exceeding twenty pounds, and if he does not proceed to use such means within such

time as shall be limited by the court inflicting such fine then he shall be liable to a further penalty of five pounds per day from the expiration of the time so limited."

PART II.

Sulphuric Acid Works and other specified Works.

8. "Every sulphuric acid work as defined in the schedule to this Act shall be carried on in such manner as to secure the condensation, to the satisfaction of the chief I., derived from his own examination or from that of some other I., of the acid gases of sulphur and nitrogen which are evolved in the process of the manufacture of sulphuric acid in such work, to such an extent that the total acidity of such gases in each cubic foot of air, smoke, or gases escaping into the chimney or into the atmosphere does not exceed what is equivalent to four grains of sulphuric anhydride.

"The owner of any sulphuric acid work which is carried on in contravention of this section shall be liable to a fine not exceeding, in the case of the first offence, fifty pounds, and in the case of every subsequent offence, one hundred pounds."

9. "The owner of any work specified in the schedule to this Act (hereinafter referred to as a scheduled work) shall use the best practicable means for preventing the discharge into the atmosphere of all noxious gases and of all offensive gases evolved in such work, or for rendering such gases harmless and inoffensive when discharged, subject to the qualification, in the case of sulphuric acid works, that no objection shall be taken under this section by an I. to any discharge of gas by a chimney or flue, on the basis of the amount of acid gas per cubic foot of air, smoke, or gases, where that amount does not exceed the amount limited by the last preceding section.

"If the owner of any such work fails, in the opinion of the court having cognizance of the matter, to use such means, he shall be liable to a fine not exceeding, in the case of the first offence, twenty pounds, and in the case of every subsequent offence, fifty pounds, with a further sum not exceeding five pounds for every day during which any such subsequent offence has continued."

10. "An I. may from time to time inquire whether, in any works in which the extraction of salt from brine is carried on, hereinafter called salt works, means can be adopted at a reasonable expense for preventing the discharge from the furnaces or chimneys of such works into the atmosphere of sulphurous and muriatic acid gases evolved in such works, or either of such gases, or for rendering such gases, or either of them, harmless or inoffensive when discharged; also whether in any works in which aluminous deposits are treated for the purpose of making cement, hereinafter called cement works, such means as aforesaid can be adopted with respect to the noxious or offensive gases evolved from such works.

"Where it appears to the Local Government Board that such means can be adopted at a reasonable expense the Board may from time to time by order require the owners of such works to adopt the best practicable

means for the purpose, and may by the order limit the amount or proportion, in the case of salt works, of sulphurous or muriatic acid gas, and in the case of cement works of any noxious or offensive gas, which is to be permitted to escape from such works into the chimney or into the atmosphere, and may also by the order extend to such works such provisions of this Act relating to scheduled works as they see fit.

"An order made under this section shall be provisional only and shall not be of any validity until confirmed by Parliament, but when so confirmed shall have full effect, with such modifications as may be made therein by Parliament; and the expression 'this Act' when used in this Act shall be deemed to include an order so confirmed, so far as is consistent with the tenor of that order.

"The Board shall take such steps as they may think fit for giving notice to persons interested of the provisions of any order made by them under this section before any Bill for confirming the same is introduced into Parliament.

"An order made under this section may impose fines for a breach of its provisions of like amount as any fines imposed by this Act for offences against this Act."

PART III.

(i.) *Registration of Works.*

11. "(1) An alkali work or a work to which Part II. of this Act applies shall not, after the first day of April 1882, be carried on unless it is certified to be registered."

. . . . . .

(ii.) *Inspection.*

14. The Local Government Board shall appoint inspectors, who shall not be engaged or interested in any work to which the Act applies with power of entrance for inspection, etc.

19. At the request of the L.A. the Local Government Board can appoint an additional inspector, and if so the L.A. shall pay not less than one half his salary or remuneration.

(iii.) *Special Rules.*

20. Gives power to owners of works to make special rules which are to be given to each worker.

(iv.) *Procedure.*

21. In calculating the proportion of acid to a cubic foot of air, smoke, or gases, for the purposes of this Act, such air, smoke, or gases, shall be calculated at the temperature of 60° Fahrenheit and at 30 inches pressure.

22. Deals with recovery of fines for offences against the Act which in Scotland are taken before the sheriff or sheriff-substitute of the county in which the offence is committed and in the county court and the sheriff may award costs to either party, and may sentence the offender to imprisonment not exceeding six months, etc. [142]

(v.) *Definitions.*

29. "'Alkali works' means every work for the manufacture of alkali, sulphate of soda, or sulphate of potash, in which muriatic acid gas is evolved, and for the purpose of this definition the formation of any sulphate in the treatment of copper ores by common salt or other chlorides shall be deemed to be a manufacture of sulphate of soda.

"'Noxious or offensive gas' does not include sulphurous acid arising from the combustion of coal.

SCHEDULE.

List of Works.

"(1) Sulphuric acid works, that is to say, any works in which the manufacture of sulphuric acid is carried on (not being alkali works within the meaning of the foregoing Act, and not being works in which the manufacture of sulphuric acid is carried on in conjunction with the extraction of copper or other metals from ore);

"(2) Chemical manure works, that is to say, any works in which the manufacture of chemical manure is carried on;

"(3) Gas liquor works, that is to say, any works in which gas liquor is used in any manufacturing process;

"(4) Nitric acid works, that is to say, any works in which the manufacture of nitric acid is carried on;

"(5) Sulphate of ammonia works and muriate of ammonia works, that is to say, any works in which the manufacture of sulphate of ammonia or of muriate of ammonia is carried on; and

"(6) Chlorine works or works in which chlorine, bleaching powder, or bleaching liquor is made."

ALKALI, ETC., WORKS REGULATION ACT, 1892 (55 & 56 Vict. Ch. 30).

An Act to amend the Alkali, etc., Works Regulation Act, 1881.

1. "The works specified in the schedule hereto shall be added to those specified in the schedule to the Alkali, etc., Works Regulation Act, 1881, and shall be scheduled works for the purposes of that Act.

"Provided that if the process used in any work specified in Part I. of the schedule hereto shall be such that no sulphuretted hydrogen is evolved therein, the work shall not be deemed to be included in the schedule."

2. "Works in which salt is produced by refining rock salt, other than those where the rock-salt is dissolved at the place of deposit, shall not be within the provisions of the Alkali, etc., Works Regulation Act, 1881, in regard to works in which the extraction of salt from brine is carried on, or of any order made or to be made under section ten of that Act."

3. "This Act shall come into operation on the first day of April in the year One thousand eight hundred and ninety-three, but certificates of registration may be applied for and issued at any time after the first day of January in that year."

4. "This Act may be cited as the Alkali, etc., Works Regulation Act, 1892."

SCHEDULE.

Part I.

"(1) Alkali waste works, that is to say, works for the recovery of sulphur from alkali waste or for utilizing the sulphur or any other constituent of such waste.

"(2) Barium works, that is to say, works for the manufacture of barium compounds from barium sulphide.

"(3) Strontium works, that is to say, works for the manufacture of strontium compounds form strontium sulphide.

"(4) Antimony sulphide works, that is to say, works for the manufacture of antimony sulphide.

"(5) Bisulphide of carbon works, that is to say, works for the manufacture of bisulphide of carbon.

Part II.

"(6) Venetian red works, that is to say, works for the manufacture of Venetian red, crocus, or polishing powder, by heating sulphate or some other salt of iron.

"(7) Lead deposit works, that is to say, works where the sulphate of lead deposit from sulphuric acid chambers is smelted.

"(8) Arsenic works, that is to say, works for the preparation of arsenious acid, or where nitric acid or a nitrate is used in the manufacture of arsenic acid or an arseniate.

"(9) Nitrate and chloride of iron works, that is to say, works in which nitric acid or a nitrate is used in the manufacture of nitrate or chloride of iron.

"(10) Muriatic acid works, that is to say, works, not being alkali works as defined in the Alkali, etc., Works Regulation Act, 1881, where muriatic acid is made.

"(11) Fibre separation works, that is to say, works where muriatic acid gas is used for the separation of silk or woollen fibre from vegetable fibre.

"(12) Tar works, that is to say, works where gas tar is distilled or is heated in any manufacturing process.

"(13) Zinc works, or works in which zinc is extracted from the ore."

ABSTRACT OF RIVERS POLLUTION PREVENTION ACTS, 1876 and 1893 (39 & 40 Vict. Ch. 75, and 56 & 57 Vict. 1893. Ch. 31).

The 1876 Act is "An Act for making further Provision for the Prevention of the Pollution of Rivers."

The 1893 Act is "An Act to explain section 3 of the Rivers Pollution Prevention Act, 1876," and is inserted immediately after that section.

Part I.

Law as to Solid Matters.

2. "Every person who puts or causes to be put or to fall or knowingly permits to be put or to fall or to be carried into any stream, so as either singly or in combination with other similar acts of the same or any other person to interfere with its due flow, or to pollute its waters, the solid refuse of any manufactory, manufacturing process or quarry, or any rubbish or cinders, or any other waste or any putrid solid matter, shall be deemed to have committed an offence against this Act.

"In proving interference with the due flow of any stream, or in proving the pollution of any stream, evidence may be given of repeated acts which together cause such interference or pollution although each act taken by itself may not be sufficient for that purpose."

Part II.

Law as to Sewage Pollutions.

3. "Every person who causes to fall or flow or knowingly permits to fall or flow or to be carried into any stream any solid or liquid sewage matter, shall (subject as in this Act mentioned) be deemed to have committed an offence against this Act.

"Where any sewage matter falls or flows or is carried into any stream along a channel used, constructed, or in process of construction at the date of the passing of this Act for the purpose of conveying such sewage matter, the person causing or knowingly permitting the sewage matter so to fall or flow or to be carried shall not be deemed to have committed an offence against this Act if he shows to the satisfaction of the court having cognisance of the case that he is using the best practicable and available means to render harmless the sewage matter so falling or flowing or carried into the stream.

"Where H.M.'s Principal Secretary of State is satisfied after local inquiry that further time ought to be granted to any sanitary authority, which at the date of the passing of this Act is discharging sewage matter into any stream, or permitting it to be so discharged, by any such channel as aforesaid, for the purpose of enabling such authority to adopt the best practicable and available means for rendering harmless such sewage matter, the Secretary of State may by order declare that this section shall not, so far as regards the discharge of sewage matter

by such channel be in operation until the expiration of a period to be limited in the order.

"Any order made under this section may be from time to time renewed by the Secretary of State, subject to such conditions, if any, as he may see fit.

"A person other than a sanitary authority shall not be guilty of an offence under this section in respect of the passing of sewage matter into a stream along a drain communicating with any sewer belonging to or under the control of any sanitary authority, provided he has the sanction of the sanitary authority for so doing." [146]

This section (3) is explained by section 1 of Rivers Pollution Prevention Act, 1893, which is as follows :—

"Where any sewage matter falls or flows or is carried into any stream after passing through or along a channel which is vested in a sanitary authority, the sanitary authority shall, for the purposes of section 3 of the Rivers Pollution Prevention Act, 1876, be deemed to knowingly permit the sewage matter so to fall, flow, or be carried."

Part III.

Law as to Manufacturing and Mining Pollutions.

4. "Every person who causes to fall or flow or knowingly permits to fall or flow or to be carried into any stream any poisonous, noxious, or polluting liquid proceeding from any factory or manufacturing process shall (subject as in this Act mentioned) be deemed to have committed an offence against this Act.

"Where any such poisonous, noxious, or polluting liquid as aforesaid falls or flows or is carried into any stream along a channel used, constructed, or in process of construction at the date of the passing of this Act, or any new channel constructed in substitution thereof, and having its outfall at the same spot, for the purpose of conveying such liquid, the person causing or knowingly permitting the poisonous, noxious, or polluting liquid so to fall or flow or to be carried shall not be deemed to have committed an offence against this Act if he shows to the satisfaction of the court having cognisance of the case that he is using the best practicable and reasonably available means to render harmless the poisonous, noxious, or polluting liquid so falling or flowing or carried into the stream."

5. "Every person who causes to fall or flow or knowingly permits to fall or flow or to be carried into any stream any solid matter from any mine in such quantities as to prejudicially interfere with its due flow, or any poisonous, noxious, or polluting solid or liquid matter proceeding from any mine, other than water in the same condition as that in which it is has been drained or raised from such mine, shall be deemed to have committed an offence against this Act, unless in the case of poisonous, noxious, or polluting matter he shows to the satisfaction of the court having cognisance of the case that he is using the best practicable and reasonably available means to render harmless the poisonous, noxious, or polluting matter so falling or flowing or carried into the stream."

6. "Unless and until Parliament otherwise provides the following enactments shall take effect, proceedings shall not be taken against any person under this part of this Act save by a sanitary authority, nor shall any such proceedings be taken without the consent of the Secretary of State: Provided always, that if the sanitary authority, on the application of any person interested alleging an offence to have been committed, shall refuse to take proceedings or apply for the consent by this section provided, the person so interested may apply to the Secretary of State, and if he on inquiry is of opinion that the sanitary authority should take proceedings, he may direct the sanitary authority accordingly, who shall thereupon commence proceedings.

"The said Secretary in giving or withholding his consent shall have regard to the industrial interests involved in the case and to the circumstances and requirements of the locality.

"The said Secretary shall not give his consent to proceedings by the sanitary authority of any district which is the seat of any manufacturing industry, unless he is satisfied, after due inquiry, that means for rendering harmless the poisonous, noxious, or polluting liquids proceeding from the processes of such manufactures are reasonably practicable and available under all the circumstances of the case, and that no material injury will be inflicted by such proceedings on the interests of such industry.

"Any person within such district as aforesaid, against whom proceedings are proposed to be taken under this part of this Act, shall, notwithstanding any consent of the Secretary of State, be at liberty to object before the sanitary authority to such proceedings being taken, and such authority shall, if required in writing by such person, afford him an opportunity of being heard against such proceedings being taken, so far as the same relate to his works or manufacturing processes. The sanitary authority shall thereupon allow such person to be heard by himself, agents, and witnesses, and after inquiry such authority shall determine, having regard to all the considerations to which the Secretary of State is by this section directed to have regard, whether such proceedings as aforesaid shall or shall not be taken; and where any such sanitary authority has taken proceedings under this Act, it shall not be competent to other sanitary authorities to take proceedings under this Act till the party against whom such proceedings are intended shall have failed in reasonable time to carry out the order of any competent court under this Act." [143, 146]

Part IV.

Administration of Law.

7. "Every sanitary or other L.A. having sewers under their control shall give facilities for enabling manufacturers within their district to carry the liquids proceeding from their factories or manufacturing processes into such sewers:

"Provided that this section shall not extend to compel any sanitary or other L.A. to admit into their sewers any liquid which would prejudicially affect such sewers or the disposal by sale, application to land, or otherwise, of the sewage matter conveyed along such sewers, or

which would from its temperature or otherwise be injurious in a sanitary point of view:

"Provided also, that no sanitary authority shall be required to give such facilities as aforesaid where the sewers of such authority are only sufficient for the requirements of their district, nor where such facilities would interfere with any order of any court of competent jurisdiction respecting the sewage of such authority." [144, 145, 147, 148]

8. "Every sanitary authority shall, subject to the restrictions in this Act contained, have power to enforce the provisions of this Act in relation to any stream being within or passing through or by any part of their district, and for that purpose to institute proceedings in respect of any offence against this Act, which causes interference with the due flow within their district of any such stream, or the pollution within their district of any such stream, against any other sanitary authority or person, whether such offence is committed within or without the district of the first-named sanitary authority.

"Any expenses incurred by a sanitary authority in the execution of this Act shall be payable as if they were expenses properly incurred by that authority in the execution of the Public Health Act, 1875.

"Proceedings may also, subject to the restrictions in this Act contained, be instituted in respect of any offence against this Act by any person aggrieved by the commission of such offence."

10. Enacts that offences against the Act are to be restrained by summary order of the sheriff.

11. If either party in any proceedings before the sheriff under this Act feels aggrieved by his decision in point of law or on the merits, or in respect of the admission or rejection of any evidence, he may appeal to the Court of Session in either division of the Inner House. Any plaint entered before a sheriff may be removed into the Court of Session by leave of any judge therein, if it appears to such judge desirable in the interests of justice that such case should be tried in the first instance in the Court of Session.

12. "A certificate granted by an I. of proper qualifications appointed for the purposes of this Act by the Secretary of State to the effect that the means used for rendering harmless any sewage matter or poisonous, noxious, or polluting solid or liquid matter falling or flowing or carried into any stream, are the best or only practicable and available means under the circumstances of the particular case, shall in all courts and in all proceedings under this Act be conclusive evidence of the fact; such certificate shall continue in force for a period to be named therein, not exceeding two years, and at the expiration of that period may be renewed for the like or any less period.

"All expenses incurred in or about obtaining a certificate under this section shall be paid by the applicant for the same.

"Any person aggrieved by the grant or the withholding of a certificate under this section may appeal to the Secretary of State against the decision of the I.; and the Board may either confirm, reverse, or modify his decision, and may make such order as to the party or parties by

whom the costs of the appeal are to be borne as to the said Secretary may appear just."

13. "Proceedings shall not be taken under this Act against any person for any offence against the provisions of Parts II. and III. of this Act, until the expiration of twelve months after the passing of this Act; nor shall proceedings in any case be taken under this Act for any offence against this Act, until the expiration of two months after written notice of the intention to take such proceedings has been given to the offender, nor shall proceedings under this Act be taken for any offence against this Act, while other proceedings in relation to such offence are pending." [143, 146]

CLEANSING OF PERSONS ACT, 1897 (60 & 61 Vict. Chap. 31).

1. On and after the passing of this Act any L.A. shall have the power, when in their discretion they shall see fit, to permit any person who shall apply to the said authority, on the ground that he is infested with vermin, to have the use, free of charge, of the apparatus (if any) which the authority possess for cleansing the person and his clothing from vermin. The use of such apparatus shall not be considered to be parochial relief or charitable allowance to the person using the same, or to the parent of such person, and no such person or parent shall by reason thereof be deprived of any right or privilege or be subject to any disqualification or disability.

L.As. may expend any reasonable sum on buildings, appliances, and attendants that may be required for the carrying out of this Act, and any expenses for these purposes may be defrayed out of any rate or fund applicable by the authority for general sanitary purposes or for the relief of the poor.

2. In this Act "local authority" means in England the council of any county borough, the district council of any district, any board of guardians, and in the county of London any sanitary authority as defined in the Public Health (London) Act, 1891.

3. In the application of this Act to Scotland, "local authority" means and includes any L.A. under the Public Health (Scotland) Act, 1867, and any Acts amending that Act; but the L.A. shall not erect buildings for the purposes of section one hereof, sxcept with the sanction of the Local Government Board for Scotland.

5. This Act may be cited as the Cleansing of Persons Act, 1897.

CATTLE SHEDS IN BURGHS SCOTLAND ACT, 1866 (29 Vict. Cap. 17).

1. This Act may be cited as "The Cattle Sheds in Burghs (Scotland) Act, 1866."

2. The words "cattle sheds," "cowhouses," and "byres" shall mean and include every house, building, shed, yard, or other enclosed place

or premises in which bulls, cows, heifers, oxen, or calves are kept or intended to be kept.

Except as otherwise provided in this Act, the interpretation section (No. 3) and the jurisdiction of magistrates section (No. 408) of "The Police and Improvement (Scotland) Act, 1862," are hereby incorporated with and shall be taken so as to extend to this Act.

3. The magistrates of royal burghs and also of parliamentary burghs in Scotland shall have power to require, and shall require, all cattle sheds and cowhouses and byres within their burghs to be inspected by an officer appointed by them, and, if found to be suitable for such purpose, to be licensed by them for the period of one year; and the magistrates shall likewise have power, from time to time, to make rules and regulations for the proper sanitary condition of the same, and to fix and determine in each licence the number of cattle which may be kept in each such cattle shed or cowhouse or byre; and if any person shall keep any cattle within any burgh without such inspection and licence, or shall violate any of the conditions of such licence, or of any of the rules and regulations made by the magistrates, he shall, on conviction before any two of them, be subjected to a penalty not exceeding five pounds for each such offence, and a like penalty for every day after the conviction for such offence upon which such offence is continued.

4. In the case of burghs (other than royal and parliamentary burghs) and populous places in Scotland which have adopted the whole or portions of "The Police and Improvement (Scotland) Act, 1862," or previously to the passing of the said Act of 1862 had adopted the whole or any parts of "The Police of Towns (Scotland) Act, 1850," the Commissioners under the said Acts shall have power to require, and shall require, all cattle sheds and cowhouses and byres within such burghs or populous places to be inspected by an officer appointed by them, and, if found to be suitable for such purpose, to be licensed by them for the period of one year; and the Commissioners shall likewise have power, from time to time, to make rules and regulations for the proper sanitary condition of the same, and to fix and determine in each licence the number of cattle which may be kept in each such cattle shed or cowhouse or byre; and if any person shall keep any cattle within any burgh or populous place without such inspection and licence, or shall violate any of the conditions of such licence, or any of the rules and regulations made by the Commissioners, he shall, on conviction before the magistrates, be subjected to a penalty not exceeding five pounds for each such offence, and a like penalty for every day after the conviction for such offence upon which such offence is continued.

5. The magistrates before whom any person is convicted of non-observance of any of the Regulations made by virtue of this Act may, as often as they shall see cause, give notice in writing requiring the owner or occupier of such cattle shed, cowhouse, or byre to make such sanitary improvements in the same as they shall direct, within a period of one month from the date of such written notice; and in any case of non-compliance with or disobedience to such notice, may, in addition to the

penalty imposed on such person under the authority of this Act, suspend, for any period not exceeding one month, the licence granted to such person under this Act; and such magistrates may, upon the conviction of any person for a second or other subsequent like offence, in addition to the penalty imposed under the authority of this Act, declare the licence granted under this Act revoked; and whenever the licence of any such person is revoked as aforesaid, the magistrates or the Commissioners may refuse to grant any licence whatsoever to the person whose licence has been so revoked.

6. Every licence granted under this Act shall continue in force for the period of one year from the granting thereof, except it shall be suspended or revoked under this Act; and no fee or reward shall be taken for any such licence; and such licence shall be required to be renewed once in every year; and if any person shall use any cattle shed, cowhouse, or byre in any burgh or populous place without a licence, he shall be liable for each offence to a penalty not exceeding five pounds, of which offence the fact that bulls, cows, heifers, oxen, or calves have been taken into such place shall be deemed sufficient *primâ facie* evidence.

7. From and after the fifteenth day of May One thousand eight hundred and sixty-seven, before any licence for the use of any cattle shed, cowhouse, or byre can be granted, fourteen days' notice of the intention to apply for such licence shall be given in writing to the magistrates or Commissioners.

8. This Act shall apply only to Scotland.

9. This Act (clause seven excepted) shall come into force on the fifteenth day of May One thousand eight hundred and sixty-six.

GUARDIANSHIP OF INFANTS ACT, 1886 (49 & 50 VICT. CAP. 27).

1. This Act may be cited as the Guardianship of Infants Act, 1886.

2. On the death of the father of an infant, and in case the father shall have died prior to the passing of this Act then from and after the passing of this Act, the mother if surviving shall be the guardian of such infant, either alone when no guardian has been appointed by the father or jointly with any guardian appointed by the father. When no guardian has been appointed by the father, or if the guardian or guardians appointed by the father is or are dead, or refuses or refuse to act, the Court may, if it shall think fit, from time to time appoint a guardian or guardians to act jointly with the mother.

3. (1) The mother of any infant may by deed or will appoint any person or persons to be guardian or guardians of such infant, after the death of herself and the father of such infant (if such infant be then unmarried), and where guardians are appointed by both parents they shall act jointly.

(2) The mother of any infant may by deed or will provisionally nominate some fit person or persons to act as guardian or guardians of such infant after her death jointly with the father of such infant, and the court,

after her death, if it be shown to the satisfaction of the court that the father is for any reason unfitted to be the sole guardian of his children, may confirm the appointment of such guardian or guardians who shall thereupon be authorised and empowered so to act as aforesaid, or make such other order in respect of the guardianship as the court shall think right.

(3) In the event of guardians being unable to agree upon a question affecting the welfare of an infant, any of them may apply to the court for its direction, and the court may make such order or orders regarding the matters in difference as it shall think proper.

5. The court may, upon the application of the mother of any infant (who may apply without next friend), make such order as it may think fit regarding the custody of such infant and the right of access thereto of either parent, having regard to the welfare of the infant, and to the conduct of the parents, and to the wishes as well of the mother as of the father, and may alter, vary, or discharge such order on the application of either parent, or, after the death of either parent, of any guardian under this Act, and in every case may make such order respecting the costs of the mother and the liability of the father for the same or otherwise as to costs as it may think just.

6. In Scotland either division of the Court of Session, may, in their discretion, on being satisfied that it is for the welfare of the infant, remove from his office any testamentary guardian, or any guardian appointed or acting by virtue of this Act, and may also, if they shall deem it to be for the welfare of the infant, appoint another guardian in place of the guardian so removed.

7. In any case where a decree for judicial separation, or a decree either nisi or absolute for divorce, shall be pronounced, the Court pronouncing such decree may thereby declare the parent by reason of whose misconduct such decree is made to be a person unfit to have the custody of the children (if any) of the marriage; and, in such case, the parent so declared to be unfit shall not, upon the death of the other parent, be entitled as of right to the custody or guardianship of such children.

8. In the application of this Act to Scotland the word guardian shall mean tutor, and the word infant shall mean pupil.

9. In the construction of this Act the expression "the Court" shall mean :—

In Scotland the Court of Session or the sheriff court within whose jurisdiction the respondent or respondents or any of them may reside.

In Scotland the expression "the Court of Session" shall mean either division of the said court, and in vacation the Lord Ordinary on the Bills.

In Scotland any application made under this Act to a sheriff court may be removed to the Court of Session, at the instance of any party, in the manner provided by and subject to the conditions prescribed by the ninth section of the Sheriff Courts (Scotland) Act, 1877 (40 & 41 Vict. cap. 50).

In Scotland an appeal shall lie to either division of the Court of Session from any order made by the Lord Ordinary on the Bills or a sheriff court under this Act.

11. Rules for regulating the practice and procedure in any proceedings under this Act, and the forms in such proceedings may from time to time be made:—(*a*) . . . . . .

(*b*) So far as respects the Court of Session in Scotland by Act of Sederunt.

12. In Scotland tutors being administrators-in-law, tutors-nominate, and guardians appointed or acting in terms of this Act who shall, by virtue of their office, administer the estate of any pupil, shall be deemed to be tutors within the meaning of an Act passed in the twelfth and thirteenth years of the reign of Her Majesty, intituled "An Act for the better protection of the property of pupils, absent persons, and persons under mental incapacity, in Scotland," and shall be subject to the provisions thereof: Provided always, that such tutors being administrators-in-law, tutors-nominate, and guardians aforesaid shall not be bound to find caution in terms of the twenty-sixth and twenty-seventh sections of the last recited Act, unless the court, upon the application of any party having interest, shall so direct.

13. Nothing in this Act contained shall restrict or affect the jurisdiction of the Court of Session in Scotland, to appoint or remove guardians, or (in the case of Scotland) tutors or factors loco tutoris or otherwise in respect of infants.

ABSTRACT OF BURIAL GROUNDS (SCOTLAND) ACT, 1855 (18 & 19 Vict. Cap. 68).

1. Gives title as above.

2. Empowers parish council to carry out this Act.

3. Makes provision as to parishes partly burghal.

4. "It shall be lawful for any two members of the parochial board of any parish in Scotland, or for any ten persons assessed for relief of the poor within such parish, or for any two householders residing within one hundred yards of any burial ground or proposed burial ground, to present a petition to the sheriff of the county within which such burial ground or proposed burial ground is situated, setting forth that a burial ground within such parish or such distance is or would be dangerous to health, or offensive or contrary to decency, and the sheriff shall thereupon fix a day, being not less than ten nor more than twenty days after such petition is presented, for inquiring into the allegations contained therein, and shall appoint intimation thereof to be made by advertisement in the 'Edinburgh Gazette' and in such newspapers of local circulation as he shall deem fitting, and on hearing the petition shall permit all parties whom he shall judge to have an interest to appear and be heard in such manner as he shall deem fitting, and if on such hearing he shall be of opinion that any of the aforesaid allegations are true, he shall pro-

nounce an interlocutor to such effect, and shall transmit a copy thereof to one of Her Majesty's Principal Secretaries of State: Provided that it shall not be competent to present any such petition to the sheriff, except with concurrence of the procurator-fiscal, till after the lapse of five years from the date of any petition to the like effect having been dismissed."

5. On representation of Secretary of State H.M. in Council may restrain the opening of new burial grounds and order discontinuance of burials in specified places.

6. Contravention of Order in Council incurs liability for each offence of imprisonment not exceeding two calendar months or penalty not over twenty pounds.

7. No such Order in Council shall extend to burial grounds of Quakers or Jews unless expressly included.

9. "Although no burial ground in the parish has been closed by Order in Council, the I. of the poor of any parish not within burgh, and the town clerk in the case of any parish within burgh, shall be bound, upon the requisition in writing of ten or more persons assessed for relief of the poor of the parish, or upon the requisition in writing of any two or more members of the parochial board of the parish, to convene a special meeting of the parochial board of such parish, for the purpose of determining whether a burial ground shall be provided under this Act for the parish; and if a majority of such meeting of the parochial board shall resolve that a burial ground shall be provided under this Act for the parish, such new burial ground shall be provided in the same manner as if an old burial ground had been closed by Order in Council."

10. "Whenever any burial ground shall have been closed by Order in Council, the parochial board shall forthwith proceed to provide a suitable and convenient burial ground for the parish, and to make arrangements for facilitating interments therein; and in the event of a suitable burial ground not being provided by the parochial board within six months after such order or requisition as aforesaid, it shall be lawful for such board, or for any ten or more persons assessed for relief of the poor in the parish, or any two or more members of the parochial board to apply by summary petition to the sheriff to have a suitable portion of land designated for the purpose of a burial ground; and the sheriff shall examine such witnesses and make such inquiry as he shall think proper, and shall keep a note of such evidence as may be adduced, and, if he thinks fit, shall thereupon proceed to designate and set apart such portion as he may deem necessary of any lands in such parish suitable for the purpose, not being part of any policy, pleasure ground, or garden attached to any dwelling."

11. Enacts that no ground not already used as or appropriated for a cemetery shall be appropriated as a burial ground, or as an addition to a burial ground nearer than one hundred yards to any dwelling-house without consent in writing of the owner, lessee, and occupier of such dwelling-house.

12. Parish council may purchase land for cemeteries, or contract with cemetery companies.

14. Parish councils may concur in providing a burial ground for the common use of their parishes.

31. A register of burials must be kept in every burial ground in which shall be distinguished in what parts of the burial ground the several bodies are buried.

32. No interlocutor or deliverance of a sheriff under this Act, excepting as herein provided, shall in any way be subject to review, or to be set aside by reason of any defect of form therein or in the procedure on which it followed.

Note that under Section 16 (11) of the Public Health (Scotland) Act, 1897, the L.A. may initiate proceedings under the Burial Grounds Act (*v.* Section 146 (2), p. 91, *ante*).

ABSTRACT OF SCOTCH EDUCATION CODE.

Article 19. "Where the Department are satisfied that, by reason of a notice of the sanitary authority under Article 30, or any provision of an Act of Parliament requiring the exclusion of certain children, the average attendance has been seriously diminished, and that consequently a loss of annual grant would, but for this Article, be incurred, the Department have power to make a special grant not exceeding the amount of such loss in addition to the ordinary grant."

Article 30.—"Where the managers have complied with any notice of the sanitary authority of the district in which the school is situated, or any two members thereof, acting on the advice of the medical officer of health, requiring them for a specified time, with a view to preventing the spread of disease, or any danger to health likely to arise from the condition of the school, either to close the school or to exclude any scholars from attendance, they may appeal to the Department, if they consider the notice to be unreasonable."

With regard to Article 30, the Local Government Board on 28th July 1904 issued the following Circular to every Medical Officer of Health :—

CLOSING OF SCHOOLS.

"It will be seen that while the power of issuing notices to the managers of schools lies with the L.A., or two of its members, the duty of advising the L.A. on the subject rests with the medical officer of health.

"The Article recognises alternative procedures—(1) the closing of the school; (2) the exclusion of individual scholars.

"With reference to the latter, the Board remind medical officers of health of the provisions of section 57 of the Public Health Act, 1897, which prohibit the attendance at school of children who are suffering from infectious disease, or who reside in houses where such disease exists, and of their duty under the regulations passed by the L.A. to cause intimation to be made to school boards and headmasters of the existence of infectious disease in any house where children of school age reside. Their duty is reciprocal to that inculcated on school managers by the Scotch Education Department in their Circular on

Closing of Schools on account of Epidemic Sickness, a copy of which is appended for information. There may be causes beyond the scope of this section in which the medical officer of health may think it necessary to advise the exclusion of individual children—*e.g.*, a child who has been exposed to infection, but does not reside in an infected house—until the lapse of the incubation period of the disease to which it has been exposed. Otherwise section 57 ought automatically to exclude individual scholars whose attendance might spread infection."

"The closing of a school is a serious interference with the educational work of a district, and is not to be recommended or required as a matter of routine or for any but substantial reasons. The fact that many of the school children are suffering from an infectious disease, and that the attendance is thereby greatly reduced, is not of itself sufficient ground for advising the closing of a school. The medical officer of health must be satisfied that the disease is being spread, or is likely to be spread, by the continued attendance of the children at school, and that the closing of the school offers a clear prospect of preventing or checking this spread. Even when satisfied that disease is being so spread, it will further be the duty of the medical officer of health to consider whether the closing of one or more classes, or of one particular department, may not be sufficient. Such considerations as the nature of the disease in question, its period of incubation, its age incidence, the mode of its infectivity, etc., as well as local matters, such as the character of the district, house accommodation, etc., etc., will throughout be duly weighed, in arriving at a decision.

"When a medical officer of health has satisfied himself that it is his duty to advise the L.A. to issue a notice in terms of Article 30 of the Code, he should embody his recommendations in a report which should be forwarded without delay to the clerk to the L.A. The report should contain information on the following points:—

"1. Whether he recommends that the whole school, or one or more departments or classes, should be closed, or that certain specified scholars should be excluded.

"2. The period during which the closure or exclusion should continue. This should be the shortest possible for securing the object aimed at. If the time suggested should prove to be insufficient a further report advising an extension of the period may be made.

"3. The disease on account of which the recommendation is made, with some statistics showing the extent and fatality.

"4. The measures already adopted to prevent its spread.

"5. His grounds for believing that the disease is being propagated by school attendance.

"6. His reasons for anticipating that the course proposed will have the effect of preventing or checking the spread of the disease, and that other or less stringent measures would not suffice."

"The Board hereby require every medical officer of health who makes such a report to send forthwith a copy thereof to the Board for their information."

Table showing period of Quarantine and Date of Return to School, adopted by the Association of Medical Officers of large Public Schools in England:—

	Quarantine required after last Exposure to Infection.	Earliest Date of Return to School after an Attack.
Small-pox	18 days	When all scabs have fallen off.
Chicken-pox	18 ,,	When all scabs have fallen off.
Measles	16 ,,	3 weeks, if all desquamation and cough have ceased.
Scarlet fever	14 ,,	6 weeks, and then only if no desquamation or sore throat.
Diphtheria	12 ,,	3 weeks, if convalescence is complete, and no sore throat, albuminuria, or discharge remain.*
Whooping-cough	21 ,,	6 weeks from the commencement of the whooping, if the characteristic spasmodic cough and whooping have ceased; earlier if all cough be gone.
Rötheln	16 ,,	2 to 3 weeks, according to the nature of the case.
Mumps	24 ,,	4 weeks, if all swelling has subsided.
Typhus fever	3 weeks	7 weeks, if convalescence complete.
Typhoid fever	3 ,,	8 weeks, if convalescence complete.
Epidemic diarrhœa	. . .	2 weeks.
Itch, impetigo, ringworm, and other skin diseases, and ophthalmia		As soon as the local affection is cured.

* I would add, "After throat swabs on cultivation yield no bacilli diphtheriæ."—[W. J. B.]

Commenting upon the above periods and dates Dr Hime of Bradford (Practical Guide to the Public Health Acts, p. 683), says with regard to small-pox—"Certainly not for at least two weeks after all scabs have been shed": with regard to scarlet fever—"Eight weeks, and not then if any albuminuria is present. The virus of scarlatina is probably the most durable of all. Children who have had to be detained in hospital for secondary affections, even nine months, have been known to infect others on their return home, though all known precautions had been used to disinfect them before their discharge; while of nearly 1000 cases of small-pox treated in Bradford hospitals in 1893-94, not one conveyed infection to their homes after discharge, though many had been kept only six to eight weeks in hospital": with regard to whooping-cough—"Certainly not for at least four from cessation of characteristic symptoms. The disease frequently remits and reappears": and with regards to mumps "six weeks."

APPENDIX A.

LIST OF MODEL BYE-LAWS OF LOCAL GOVERNMENT BOARD.

To be found in their book, "Public Health (Scotland) Act, 1897 Instructions, Forms, &c.," and to be purchased, either directly or through any Bookseller, from OLIVER & BOYD, *Edinburgh, price* 1*s.* 3*d.*

(1) General Principles for framing Bye-laws.
(2) Bye-laws for Common Lodging-houses.
(3) Bye-laws for Houses Let in Lodgings.
(4) Bye-laws as to Pig-styes.
(5) Bye-laws with respect to Slaughter-houses in Landward Districts.
(6) Bye-laws for the Business of Blood-Boiler.
(7) Bye-laws for the Business of Bone Boiler.
(8) Bye-laws for the Business of Manure Manufacturer.
(9) Bye-laws for the Business of Soap Boiler.
(10) Bye-laws for the Business of Tallow Melter.
(11) Bye-laws for the Business of Knacker.
(12) Bye-laws for the Business of Tanner.
(13) Bye-laws for the Business of Tripe Boiler.
(14) Bye-laws for the Business of Gut or Tripe Cleaner.
(15) Bye-laws for the Business of Skinner or Hide Factor.
(16) Bye-laws for the Business of Glue and Size Manufacturer.

Memorandum as to Site and Plans of Hospitals for Infectious Diseases.

In order to facilitate the consideration by the Local Government Board of applications for their approval of the site and plans for the construction of Hospitals, in terms of section 66 of the Public Health (Scotland) Act, 1897, the Board desire to draw the attention of L.As. to the following requirements:—

A. SITE.

The application for approval of the site should be accompanied by:—

1. An Ordnance Survey Sheet having the proposed site distinctly marked thereon—preferably in *red:*

2. A statement of the dimensions of the site—length, breadth, and area:

3. A statement of the number of beds in the proposed Hospital (the unit of space being 2000 cubic feet) and their ward-distribution:

4. A general description of the site with information as to soil and sub-soil, exposure, facilities for drainage and water supply, accessibility, distance from furthest points of district to be served, distance from nearest inhabited house, distance from nearest medical man (where there is to be no resident medical officer); also, in rural districts, the distance from the nearest railway station, and the distance from the chief centres of population in the district to be served:

5. A statement, expressing opinion of the site, from the Medical Officer of Health of the district, or, in the case of a proposed Combination Hospital, from the Medical Officers, conjointly, of the L.As. joining in the Combination.

B. BUILDINGS.

The plans of Hospital buildings submitted for the approval of the Board should each have a correct scale and "north-point," and should embrace :—

1. A block plan, scale $\frac{1}{384}$th ($\frac{1}{32}$nd inch to 1 foot), showing (1) the whole extent of the site, with a note of acreage, the boundaries edged with light green; (2) the buildings outlined in position and coloured all over, the ward blocks red, the others light brown, each block named and numbered with reference to the detail plans, and their distances from each other and from the boundaries figured; (3) public roads and other accesses, also the surroundings, with the nature of these noted, and any buildings, within (say) 50 yards of the site indicated; (4) the lines of drainage, with the calibres of the various drains and the position of traps, ventilators, gratings, and any other openings distinctly marked, and the nature of the outfall, the method of treating sewage before leaving the premises, and any works connected therewith (tanks, filter-beds, etc.) fully described. If separate systems of drainage for roof and soiled water are adopted, the lines of both should be shown.

2. Plans, Sections, and Elevations in detail of each block of building (scale preferably $\frac{1}{8}$th—$\frac{1}{4}$th inch to 1 foot—not less), sufficient to illustrate the design in all its parts, general structure, and details; the plans figured with the linear sizes of the several apartments, the wards and bedrooms having the position of each bed indicated, and the total cubic contents and floor area of each such apartment distinctly figured; the sections giving the height inside to the top of the wall, and, when it is an open roof, also to the ridge of the roof; and the elevations showing any levelling of the ground that may be required.

3. A sufficient boundary wall or continuous fence to be included.

4. The arrangement for heating and ventilation to be shown, with parts in detail so far as necessary in explanation of the system proposed.

The plans should be accompanied by :—

(*a*) A general description by the architect, explaining in detail the arrangements for heating and ventilation, also the number of patients and the number and description of resident officials, *e.g.*, physician, matron, nurses, cleaners, cook, etc., etc., for whom he has provided.

(*b*) A statement expressing opinion of the plans and noting anything to which exception is taken, from the Medical Officer of Health of the district, or, in the case of a proposed Combination Hospital, from the Medical Officers, conjointly, of the L.As. joining in the Combination.

LOCAL GOVERNMENT BOARD,
EDINBURGH, 31*st August* 1899.

General Memoranda on Hospitals for Infectious Diseases.

In determining the size, ward-distribution, and detail of the equipment of a Hospital for Infectious Diseases, each L.A. ought to be guided by the advice of their own Medical Officer of Health. The Board will at all times be ready to meet representatives of L.As., their accredited architects or officials, and to assist in special circumstances, but in general it is their desire that L.As. should avail themselves of the services of their own officials, and of the many competent architects who have made Hospital construction their special study. A Hospital for Infectious Diseases ought to come up to the highest standard of structure prescribed for a wholesome dwelling-house directed to the prevention of damp and the exclusion of ground air; while the heating, ventilation, and insolation must meet a higher standard still. In plaster-work, wood-work, fittings, and furnishings, considerations must be given effect to which involve an entire departure from the traditions of domestic architecture and furniture; *e.g.*, surfaces between ceiling and floor to be broken as little as possible by cornice, mouldings, or other deviations from the vertical; all surfaces to be impervious; enclosures to be avoided, and all corners, etc., to be accessible to light, inspection, and cleansing.

The following remarks are based upon the experience of the Board, as the Department to which is committed the statutory duty of approving the plans :—

1. *Administration.*—All the administrative structures—dormitories, kitchen, wash-house, etc.—ought not only to be liberal for the bed accommodation submitted, but to anticipate future extensions. Wards may be added at will without reconstruction or inconvenience, but to proportionately extend administrative buildings is necessarily more costly, and is accompanied by great inconvenience. The utility of a Hospital for Infectious Diseases depends upon its popularity, and this again upon its careful management, and especially upon the services of a good class of nurses. Good nurses cannot be retained unless they are made comfortable, as they ought to be in view of the risks of their occupation.

2. *Material.*—These remarks are specially applicable to the case of L.As. who propose to erect as permanent Hospitals structures which are in material and design primarily intended for temporary Hospitals erected in emergency. The propriety of constructing what are to be permanent Hospitals of merely *temporary* material must be considered and determined from an economic aspect by L.As. themselves; but there is no reason why the wards should be deteriorated and the details of administrative accommodation made less complete and commodious, because with deliberation a L.A. prefer such material to stone or brick. It must be understood, therefore, that although the material may be accepted, the plans must otherwise comply with the ordinary standards of Hospital accommodation.

3. *Size.*—In determining the bed accommodation necessary to meet the wants of the population, a rough standard of one bed per 1000 of urban, and one bed per 1500 of rural population has come into vogue. This must not be applied too rigidly. There are more important factors than mere numbers. The differences in the physical and social circumstances of different urban populations are as great as between populations which may be generally classified as urban and rural. So with rural districts. The L.A., as advised by their Medical Officer, ought to take all the conditions of their district into account. The smaller the Hospital, the more ample in proportion must be the bed accommodation. Provision must be made for the isolation and treatment at the same time of at least two different infectious diseases and for the separation of the sexes.

4. *Cubic Space.*—The unit is 2000 feet per bed. The three dimensions must be properly distributed. Lateral isolation of beds may be sacrificed to height and width of wards.

5. *Combination.*—Small Hospitals share the financial disadvantages of all small undertakings. It is difficult, if not impossible, to erect small Hospitals adequate in accommodation at the same capital cost per bed as large, and the working expenditure, to secure equal efficiency, must be greater. These facts lead the Board to favour combinations for Hospital purposes, especially of the smaller Burghs with the Districts of Counties to which they territorially belong. At the same time, distance as an objection to removal on the part of relatives must not be overlooked. Although experience has shown that if proper ambulances are provided and care is taken in transport, no substantial injury results from transit, the objection is natural, and may make isolation unpopular. This consideration is most frequently overlooked by L.As. who make agreements with distant general hospitals, which are not "within a convenient distance" of their districts, and are not available for the purposes of Section 54 of the Public Health (Scotland) Act, 1897.

6. *Cottage Hospital.*—It is not intended in any way to depreciate the utility in Highland and sparsely-populated districts and in the Islands of simple arrangements for the isolation of casual patients, amounting to nothing more than a wholesome cottage, where a nurse may be assured of that domestic comfort, the absence of which forms the chief obstacle to home nursing in such localities, apart altogether from the question of isolation.

7. *Sewage.*—If land is necessary for the treatment of sewage, it must belong to and be under the control of the L.A.

8. *Disinfection.*—As regards all processes of disinfection, Hospitals for the treatment of Infectious Diseases ought to be self-contained. Suitable disinfecting appliances are therefore essential. Hospitals may properly be made disinfecting centres for the district in which they are situated. (*See* Section 46 of the Public Health (Scotland) Act, 1897.)

9. *Smallpox.*—The selection of a site for a Smallpox Hospital is subject to more exacting conditions than those applicable to the site of an ordinary Fever Hospital. In this, as in every detail of structure and

subsequent management, the effective isolation *of the Hospital* itself, as well as of every person treated or employed in it must be kept in view.

N.B.—The attention of L.As. proposing to provide Hospital accommodation for the use of the inhabitants of their districts suffering from infectious diseases, whether alone or in combination, by building, by contract, or by agreement, is specially directed to the terms of Section 66 of the Public Health (Scotland) Act, 1897.

LOCAL GOVERNMENT BOARD,
EDINBURGH, 31*st August* 1899.

Form of Medical Certificate.

PUBLIC HEALTH ACT.

Local Authority of.....

Hospital at.....

I HEREBY certify, on soul and conscience, that on the..... day of....., I visited and carefully examined the Hospital at....., and that, having regard to the Drainage, Ventilation, Furniture, and arrangements, and to the condition of the Plasterwork and Building generally, I am of opinion that the Hospital is in every respect fit for the immediate reception, without risk of injury to their health, of a number of patients not exceeding.....

(*Date*).....

(*Signature*)

(NOTE.—*Any circumstances requiring special notice may be inserted below.*)

(*Signature*)

Form of Architect's Certificate.

PUBLIC HEALTH ACT.

Local Authority of.....

Hospital at.....

I HEREBY certify, that on the.....day of....., I visited and minutely inspected the Hospital at....., and compared the whole Buildings, Drainage, and other arrangements, with the Plans approved and signed by the Local Government Board; that I find the whole of the said Buildings, Drainage, and other arrangements, executed in conformity with the aforesaid Plans; and that I am of opinion that the Hospital is in every respect safe and suitable for immediate occupation.

(*Date*).....

(*Signature*)

(NOTE.—*Any circumstances requiring special notice may be inserted below.*)

(*Signature*)

Circular as to the necessity for the provision of Smallpox Hospitals and Reception Houses.

LOCAL GOVERNMENT BOARD,
EDINBURGH, *2nd March* 1901.

Sir,—In view of the wide diffusion of Smallpox, particularly in the West of Scotland, the Board deem it expedient to request the careful consideration by L.As., especially in infected counties, of the following observations:—

1. The Board are satisfied that the epidemic of Smallpox with which the country is at present threatened, if it proceeds, will progress as it began—by first establishing itself in Burghs, and from thence invading County Districts. Self-protection, therefore, requires the L.As. of these districts to co-operate with those of the Burghs in every possible way in the organisation of preventive measures. The Board cannot too strongly express their conviction that mutual helpfulness on the part of all L.As. in the use of their resources is necessary to success in resisting the advance of this disease.

2. This helpfulness can be most usefully exercised in the provision of hospital accommodation. Scarcely in any circumstances can Smallpox be safely treated *at home*. It is impossible with safety to treat it as Typhus, Scarlet Fever, and the other infectious diseases of this country are habitually treated, in wards or pavilions of the same hospital at the same time. Smallpox must have a hospital to itself, and that hospital ought to be isolated. In this respect, County Hospitals are more likely to be suitable than Burghal.

3. There are two ways in which co-operation may promote this end:—

(*a*) *By agreement of L.As. to designate an existing Hospital solely for the treatment of Smallpox*, ordinary cases which ought to go there being received into such other existing Hospitals as may be most convenient; financial claims as between L.As. to be adjusted on the clearing-house principle.

(*b*) *By combination* of L.As. to provide special Smallpox Hospitals.

The former is the more expeditious way of meeting an emergency. It may be facilitated by greater stringency in the admission of the ordinary cases. The latter would probably be the better method if a permanent system fell to be devised with deliberation, for an area such as a County with its burghs.

4. These remarks apply, but not to the same extent, to "houses of reception . . . for persons who have been exposed to infection." It is not possible to deal thoroughly with Smallpox, especially in populous places, without such accommodation. Smallpox "contacts," like Smallpox patients, must be accommodated by themselves, but the accommodation must not be at a Smallpox Hospital, and will be most useful if convenient to the homes of the people. As a rule

therefore, each Burgh ought to have its own house or houses of reception.

5. The Board have been already gratified by evidences of co-operation. The comparatively slight hold which Smallpox has so far taken of the populous County of Lanark, in spite of its dangerous neighbourhood, is, no doubt, largely due to the assistance that has been wisely given to the Burghs by the admission of their cases to certain County Hospitals which in that County have been set aside for Smallpox alone.

6. I am instructed to take this opportunity of reminding L.As. of the free hand now given to them in Section 77 of the Public Health (Scotland) Act, 1897, "to defray the cost of vaccinating or re-vaccinating such persons as to them may seem expedient." The free exercise of this power is necessary to effectual dealing with existing Smallpox, but it will be observed that the power exists at all times, and therefore L.As. have the opportunity systematically to increase the insusceptibility of their district to Smallpox.

I have to request you to submit this communication without delay to the L.A.—I am, Sir, your obedient servant,

G. Falconar-Stewart,
Secretary.

The Clerk to the Local Authority.

Further Opinions of Board relative to Hospitals.

Orientation of Hospitals.

As we were anxious to have authoritative data on which to found our advice to L.As. as to the orientation of hospitals, we addressed a letter to the Astronomer-Royal for Scotland, which will be found in the Appendix, together with his reply. It will be seen from his valuable statement that the greatest amount of sunshine most equally distributed on all sides of a hospital is obtained when the long axis of each pavilion runs, on the whole, north and south, or a little to east of north and west of south, and that he concurs in the generally accepted view that this is the best direction for the long axis of a hospital ward in Scotland.

Copy Letters referred to.

Local Government Board,
Edinburgh, 14*th July* 1899.

Sir,—The Board presently have under consideration the plans of a hospital for infectious diseases submitted for their approval in terms of Section 66 of the Public Health Act, in which the long axis of the ward pavilions is shown running in one case a little north of east and south of west, and in another due east and west. The proper inclination is generally held to be north and south or a little to east of north

and west of south, the object being the equal insolation of both sides. The site of the hospital first mentioned is in the centre of Dumfriesshire, and the Board would be extremely obliged by answers to the following questions:—

1. At summer and winter solstice, what proportions of possible sunshine would reach each of the sides of a pavilion running north and south, and of one running east and west?

2. In the latter case, would a room at the middle of north side have direct sunshine at any period of the year?

3. Having regard to the fairly equal distribution of sunshine on both sides, what in Scotland would be, on the whole, the best direction for the long axis of a ward?

The Board will esteem an answer at your convenience.—I am, Sir, your obedient servant,

(Signed) A. MURRAY,
for Secretary.

Professor Copeland, Ph.D., F.R.S.E.,
Astronomer-Royal for Scotland,
Blackford Hill, Blackford Avenue.

Royal Observatory,
Edinburgh, 20*th July* 1899.

Sir,—In reply to your communication of the 14th instant (No. 20,022) referring to the plans of a hospital for infectious diseases in the centre of Dumfriesshire, I beg to submit the following answers to your several questions. In framing these answers, I have supposed the view to be wholly unobstructed, and have made the usual allowance for refraction:—

1. (*a*) In the case of a pavilion running north and south, half of the possible sunshine would reach each side of the building both at summer and winter solstice, and indeed at all seasons of the year.

(*b*) If the pavilion ran east and west, then at summer solstice the north side of the building would be accessible to possible sunshine for 7 hours 41 minutes, while the south side would be exposed to 9 hours 39 minutes of possible sunshine.

At winter solstice no direct sunshine could reach the north side of the building.

2. In the case of a pavilion running east and west, a room at the middle of the north side would receive a part of the possible sunshine during the summer half of the year (from March 21 to September 22), varying from 7 hours 41 minutes at midsummer to nothing at the equinoxes; the sun's rays, however, would always fall obliquely from the north of east or north of west on this face of the building, and never from a greater angle than 29 degrees above the horizon, and usually at a much more unfavourable angle.

During the winter half of the year no direct sunshine could reach a room facing due north.

3. The best direction for the long axis of a hospital ward in Scotland is, on the whole, north and south or a little to east of north and west of south, as stated in the first paragraph of your letter.—I am, Sir, your obedient servant,

(Signed) RALPH COPELAND.

The Secretary,
Local Government Board,
Edinburgh.

For further remarks *re* Hospital isolation, see p. 318.

The following Circular was issued by the Board on 28th December 1904:—

Annual Report by Medical Officer of Health.

The Board, in virtue of their powers under Section 15 of the Public Health (Scotland) Act, 1897, hereby call upon every Medical Officer of Health of a District of a County * or of any part thereof, to prepare annually a Report with regard to his district for the year ending 31st December, which Report shall contain:—

(*a*) A general account of influences and conditions injurious or dangerous to the health of the district, and of the measures that in his opinion should be adopted for its improvement.

(*b*) A statement of the general inquiries he has made during the year, and of any special inquiries as to sanitary matters.

(*c*) A general statement of any matters as to which he has given advice or granted certificates, including any action as to offensive trades.

(*d*) A specific account of the administration of the Factory and Workshop Act, 1901, in workshops and workplaces, in terms of Section 132 of that Act, together with a tabular statement in the Form issued by the Home Office. (For Form, see p. 182.)

(*e*) An account of the house accommodation of the labouring classes in the district, and of any proceedings under the Housing of the Working Classes Acts, or otherwise.

(*f*) An account of any action taken under the Rivers Pollution Prevention Acts.

(*g*) An account of the hospital accommodation available for persons suffering from infectious disease (including the means provided for the conveyance of such persons), and of the houses of reception, with observations on the furnishing, maintenance, administration, and adequacy of such accommodation, etc.

(*h*) An account of the premises with necessary apparatus and attendance available for the destruction or disinfection of

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* The Medical Officer of Health of a burgh shall in addition give an account of any proceedings under the Burgh Police Act, including the substance of his half yearly Reports on Slaughter-houses (Section 280), always substituting the word "burgh" for the word "district."

infected articles (including the means for the conveyance of such articles), also of other processes of disinfection in use, with observations on the adequacy of such arrangements and processes.

(*i*) An account of the action taken to prevent the outbreak and spread of infectious disease.

(*j*) A statement as to the causes, origin, and distribution of diseases within the district, and the extent to which the same have depended on or been influenced by conditions capable of removal or mitigation.

(*k*) A tabular statement, in such form as the Local Government Board may from time to time direct, of the sickness and mortality within the district.

The Medical Officer of Health shall transmit a copy of the aforesaid Report to the Local Government Board and to the L.A. not later than the 31st March immediately following the year to which such Report refers.

Where in any district there is a chief Medical Officer of Health with one or more assistants or subordinates, it will not be necessary for each assistant or subordinate Medical Officer of Health to furnish a Report to the Board. Each will report to the chief Medical Officer of Health, who will report on the whole district.

Where the County Medical Officer is Medical Officer of Health for each of the districts in the county, the Board will hold the foregoing instructions to be complied with if the County Medical Officer furnishes a Report for the whole county, provided that in such Report each district is separately dealt with.

Annual Report by Sanitary Inspector.

The Board also call upon every S.I. of a District of a County, or of any part thereof,* to prepare annually a Report with regard to his district for the year ending 31st December, which Report shall contain :—

(*a*) A general account of the sanitary state of the district as regards water-supply, drainage, scavenging, nuisances, etc., together with any suggestions for its improvement.

(*b*) An account of his general inspections, and of any special inspections or inquiries, including the supervision of slaughter-houses and other offensive trades, and the sanitary condition of schools and of factories and workshops.

(*c*) An account of the condition of the common lodging-houses.

(*d*) An account of the condition of the dairies, cowsheds, and milk-shops.

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* The S.I. of a burgh shall in addition give an account of his proceedings under the Burgh Police Acts, and substitute the word "burgh" for the word "district."

(*e*) An account of the condition of the burial-grounds.

(*f*) A statement, in such form as the Local Government Board may from time to time direct, of his proceedings during the year.

He shall transmit a copy of the aforesaid Report to the Local Government Board and to the L.A. not later than the 31st March immediately following the year to which such Report refers.

Where in any district there is a chief S.I. with one or more assistants or subordinates, it will not be necessary for each assistant or subordinate S.I. to furnish a Report to the Board. Each will report to the chief S.I., who will report on the whole district.

Where the County S.I. is S.I. for each of the districts in the county, the Board will hold the foregoing instructions to be complied with if the County S.I. furnishes a Report for the whole county, provided that in such Report each district is separately dealt with.

Date for furnishing Reports.

The Board have fixed the 31st March as the latest date for forwarding the Reports by the Medical Officer of Health and S.I. In many cases, however, it will be possible for these officers to complete their Reports at an earlier date, and the Board desire them to understand that the Reports should be forwarded as soon as they can be completed. When the Reports are printed it is not necessary to forward the original or a manuscript copy; a printed copy will suffice, provided that no undue delay is caused by the printing.

The requirements as to the date of transmission of the Report to the Board will apply to the copy for the Home Office. That copy should be addressed to the Secretary of State, Home Office, Whitehall, London, S.W.

A copy of this Circular has been forwarded to all Medical Officers of Health and S.Is. for their information. I am to add that I have also transmitted to the Medical Officers of Health direct a copy of the Home Office Memorandum and four copies of the relative Table, in order that they may transmit one copy, duly filled up, to the Home Secretary as already directed. The second copy should be forwarded to this Board along with the Medical Officer's Annual Report, the third copy should be transmitted to the L.A., while the fourth copy should be retained by him for reference.

Medical Officers of Health to Report Cases of Smallpox.*

The Board further require every Medical Officer of Health to report forthwith to them and to the L.A. every case of Smallpox or suspected Smallpox within his district † which may come to his knowledge.

All previous instructions as to the intimation of Smallpox are hereby withdrawn.

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* *Vide* Circulars as to notification of cases of Smallpox, p. 260, *ante*, and as to notification of cases of Cholera, Yellow Fever, or Plague, p. 270, *ante*.

† When acting for a burgh the Medical Officer of Health uses the word "burgh."

Draft Regulations suggested by the Local Government Board for Scotland for the Guidance of Local Authorities in Regulating the Duties of Medical Officers of Health.

NOTE.—*These Regulations have no force or effect until they have been adopted by the Local Authority, and approved by the Local Government Board.*

1. The Medical Officer of Health shall perform all the duties lawfully imposed upon him by any bye-laws and regulations of the L.A.; and he shall further observe and execute, so far as the circumstances of his district may require, the instructions of the Local Government Board.

2. The Medical Officer of Health shall attend all meetings of the L.A. and Committees thereof, when so required.

3. The Medical Officer of Health shall inform himself as far as practicable respecting all influences affecting or threatening to affect injuriously the public health within his district.

4. The Medical Officer of Health shall inquire into and ascertain by such means as are at his disposal the causes, origin, and distribution of diseases within his district, and ascertain to what extent the same have resulted from or may depend on conditions capable of removal or mitigation.

5. The Medical Officer of Health shall, by inspection of his district, both systematically at certain periods and as occasion may require, keep himself informed of the conditions injurious or dangerous to health existing therein.

6. The Medical Officer of Health shall advise the L.A. on all matters affecting the health of his district, and on all sanitary points involved in the action of the L.A.; and in cases requiring it, he shall certify for the guidance of the L.A. or of the Sheriff or any Magistrate or Justice, as to any matter in respect of which the Certificate of a Medical Officer of Health or a Medical Practitioner is required as the basis or in aid of sanitary action.

7. The Medical Officer of Health shall advise the L.A. on any question relating to health involved in the framing and subsequent working of such bye-laws and regulations as they may have power to make.

8. When a Certificate has been received from a Medical Practitioner or a notice from the head of a family in terms of Section 3 (1) (*a*) and (*b*) of the Infectious Disease (Notification) Act, or otherwise the existence of a case of infectious disease has come to his knowledge, the Medical Officer of Health shall instruct the S.I. or other competent officer to make the necessary inquiries, and to take such measures as are necessary for preventing the spread of the disease.

9. It shall be the duty of the Medical Officer of Health to enter or cause to be entered both the Certificates and the Notices in a book to be provided by the L.A. and to be called the *Register of Notifications*,

which shall be kept in the office of the L.A. for that purpose; he shall also tabulate and report to each ordinary meeting of the L.A. the notifications received.

10. The Medical Officer of Health shall also keep any other books or forms in connection with the Infectious Disease (Notification) Act which the Local Government Board or the L.A. may from time to time consider necessary.

11. On receiving information of the outbreak of any dangerous infectious disease within his district, the Medical Officer of Health shall visit without delay the place where the outbreak has occurred, and inquire into the causes and circumstances of such outbreak, and in case he is not satisfied that all due precautions are being taken, he shall advise the persons competent to act as to the measures which may appear to him to be required to prevent the extension of the disease, and shall take such measures for the prevention of disease as he is legally authorised to take under any Statute in force in the district or by any Resolution of the L.A.

12. When in his opinion any infectious disease threatens to become dangerous or epidemic within the district, the Medical Officer of Health shall forthwith report the same to the Local Government Board and to the L.A., stating the extent of the outbreak, its supposed origin, and the measures adopted for the prevention of the spread of the disease, and for the isolation and treatment of those affected.

13. When the Medical Officer of Health becomes aware that any infectious disease, within the meaning of the Infectious Disease (Notification) Act, exists at any dairy within the meaning of the Public Health (Scotland) Act, 1897, or in the household of any person registered under the Dairies, Cowsheds, and Milkshops Order, and that milk is supplied from such dairy or by such person without the district, he shall forthwith report the same to the Local Government Board and to the L.A., specifying the name and address of such dairy or person, and of the person to whom such milk is consigned, or the district within which it is supplied, and the measures adopted to prevent the spread of the disease.

14. The Medical Officer of Health shall report to the Local Government Board and to the L.A. every case of Smallpox in the district as soon as it comes to his knowledge.

15. When the Medical Officer of Health becomes aware that any infectious disease exists in any house in which children of school age reside, he shall cause intimation thereof to be made to the Clerk of the School Board and to the headmaster of any school which such children or any of them may be attending.

16. Whenever the Local Government Board shall make regulations for all or any of the purposes specified in Section 79 of the Public Health (Scotland) Act, 1897, and shall declare the regulations so made to be in force within his district or any part thereof, the Medical Officer of Health shall observe such regulations, so far as the same relate to or concern his office.

17. The Medical Officer of Health, on receiving information from any

S.I. that his intervention is required in connection with any nuisance, shall, as early as practicable, take such steps as he is legally authorised to take under any Statute in force in the district, or by any Resolution of the L.A., as the circumstances of the case may justify and require.

If the L.A. desire that the Medical Officer of Health shall superintend the work of the S.I., the following Regulation may be substituted for No. 17:—The Medical Officer of Health shall direct or superintend the work of the S.I. or S.Is. in the way and to the extent that the L.A. shall approve, and on receiving information from any S.I. that his intervention is required in connection with any nuisance, he shall, as early as practicable, take such steps as he is legally authorised to take under any Statute in force in the district, or by any Resolution of the L.A., as the circumstances of the case may justify and require.

18. The Medical Officer of Health shall in any case when required by the L.A. or when it appears to him to be necessary or advisable, exercise the powers conferred on him by Section 43 of the Public Health (Scotland) Act, 1897. In the case of any proceeding with regard to a living animal, he shall call upon the V.S. approved by the L.A. to accompany him.

If the Medical Officer of Health is a qualified V.S., the last sentence of No. 18 will be omitted.

19. The Medical Officer of Health shall inquire into any offensive process of trade carried on within his district, and report on the appropriate means for the prevention of any nuisance or injury to health therefrom.

20. The Medical Officer of Health shall from time to time inspect any bakehouses which are workshops, and are situate within his district, and he shall thereupon report to the L.A. whether any steps are necessary to be taken for the purpose of enforcing, as respects such bakehouses, the provisions of the Factory and Workshop Acts.

21. The Medical Officer of Health shall from time to time report in writing to the L.A. his proceedings and the measures which may require to be adopted for the improvement or protection of the public health in his district. He shall in like manner report with respect to the sickness occurring within his district, so far as he is able to ascertain the same, and with respect to the mortality thereof.

22. The Medical Officer of Health shall also from time to time make such special reports and returns as may be called for by the L.A. or the Local Government Board.

23. The Medical Officer of Health shall keep a book or books, to be provided by the L.A. in which he shall make an entry of his visits, and notes of his observations and instructions thereon, and also the date and nature of applications made to him, the date and result of the action taken thereon and of any action taken on previous reports; and shall produce such book or books, whenever required, to the L.A.

24. The Medical Officer of Health shall examine and report on all plans submitted to him by the L.A.

Draft Regulations suggested by the Local Government Board for Scotland for the Guidance of Local Authorities in Regulating the Duties of Sanitary Inspectors.

NOTE.—*These Regulations have no force or effect until they have been adopted by the L.A. and approved by the Local Government Board.*

1. The S.I. shall perform all the duties specially imposed upon a S.I. by any Statute, or by any Order issued by the Local Government Board, or by any Bye-law or Regulation lawfully made by the L.A.

If the L.A. desire that the S.I. shall act under the superintendence of the Medical Officer of Health, the following words should be inserted at the beginning of No. 1:—"Subject to the general superintendence and directions of the Medical Officer of Health." And at the end there should be added:—"He shall also, subject to the directions of the L.A., attend to the instructions of the Medical Officer of Health with respect to any measures which can be lawfully taken by a S.I."

2. The S.I. shall attend all meetings of the L.A. and Committees thereof, when so required.

3. The S.I. shall, by inspection of his district, both systematically at certain periods and as occasion may require, keep himself informed in respect of the nuisances existing therein that require removal.

4. On receiving any complaint or information of the existence of any nuisance within his district, the S.I. shall, as early as practicable, visit the place, and if he finds that a nuisance under the Public Health Act exists, he shall intimate the same, within twenty-four hours thereafter, to the author of the nuisance, and shall, after a reasonable interval, visit and inquire, and, if he finds that the nuisance is not removed, he shall report the matter in writing to the L.A., and act in accordance with such instructions as he may receive.

The following extracts are from a circular issued by the Local Government Board to L.As. on 6th May 1898:—

"*The Board desire to draw attention to the changes introduced by the Act of last year in the procedure with respect to the removal of nuisances.*

"*In the first place the Statute requires, by Sec. 19, P.H.A., that intimation of the existence of any nuisance shall be immediately given to the person who may be required to remove it, and the duty is laid on the L.A. of giving such directions to their officers as shall secure that this requirement is carried*

out. The Board suggest that the duty of giving the intimation should be laid on one officer, and that he should be held responsible for its due performance.

"Should further procedure be necessary, the next step is, under Sec. 20, the service of a notice on the author of the nuisance, or, if the author cannot be found, on the occupier or owner of the premises, requiring him to remove the nuisance. The L.A. will mark the distinction between the intimation *of the existence of a nuisance and the* notice *to remove it. Both are statutory, but the intimation is a less formal proceeding, which may be carried out by any officer in accordance with a general instruction of the L.A. The notice, on the other hand, appears to be an indispensable preliminary to legal proceedings for the removal of a nuisance. In the opinion of the Board the L.A. are not entitled to delegate to any officer or person their power to issue such notices. There must in every case be a Minute of the L.A., or of a Committee duly authorised, directing that the notice be served."*

Forms for intimation and notice are to be found at page 271 *of the Board's book of "Instructions, Forms, etc.," to be had from Oliver & Boyd, Edinburgh, price* 1s. 3d.

5. Whenever it appears to the S.I. that the intervention of the Medical Officer of Health is necessary in connection with any nuisance, he shall forthwith inform such officer thereof, and shall, if requested, accompany and assist him in his inspection of the locality.

6. The S.I. shall, if directed by the L.A. to do so, superintend and see to the due execution of all works which may be undertaken under their direction for the removal of nuisances within his district.

7. The S.I. shall keep the Register of Common Lodging-Houses; he shall visit and inquire as to the condition of each Common Lodging-House within the district, at least once every *calendar month*, or oftener if required by the L.A., and enter in his journal a report of the result; he shall also report in writing to the L.A. all unregistered Common Lodging-Houses, as well as any violation of the statutory provisions or of the Bye-laws of the L.A. relating to Common Lodging-Houses which may come to his knowledge, and act in accordance with such instructions as he may receive.

8. The S.I. shall keep the Register of Houses let in Lodgings, in accordance with the Bye-laws made by the L.A.; he shall visit and inquire as to the condition of each such House within the district, at least once every *calendar month*, or oftener if required by the L.A., and enter in his journal a report of the result; he shall also report in writing to the L.A. all such Houses which in his opinion it is expedient to register, as well as any violation of the Bye-laws of the L.A. relating to Houses let in Lodgings which may come to his knowledge, and act in accordance with such instructions as he may receive.

9. The S.I. shall keep a Register of all Offensive Businesses lawfully established and carried on within the district, and shall report to the

L.A. any contravention of the Bye-laws relating to such businesses; he shall also report when any offensive business is established or enlarged without the sanction of the L.A., or when any premises are used as a slaughter-house or knacker's yard without a licence.

10. The S.I. shall from time to time visit and inspect any Water-closet, Earth-closet, Privy, or similar convenience within the district used in common by the occupiers of two or more separate dwelling-houses, or by other persons, and shall report to the L.A. any offence under Section 31 of the Public Health (Scotland) Act, 1897.

11. The S.I. shall from time to time visit and inspect the workshops within the district, and shall report to the L.A. any contravention of the sanitary provisions of the Factory and Workshop Acts; on receipt by the L.A. of any notice from the I. under the said Acts as to any sanitary defect, the S.I. shall forthwith inquire into the same and report the result to the L.A.

12. The S.I. shall from time to time visit the shops and places within the district with a view to the prevention of the sale of unsound food, and shall on receiving any complaint, or when required by the L.A., or when it appears to him to be necessary or advisable, exercise the powers conferred on him by Section 43 of the Public Health (Scotland) Act, 1897. In any case of doubt he shall report the matter to the Medical Officer of Health with the view of obtaining his advice thereon. In the case of any proceeding with regard to a living animal, he shall call upon the V.S. approved by the L.A. to accompany him.

If the S.I. is a qualified V.S., the last sentence of No. 12 will be omitted.

13. The S.I. shall, when and as directed by the L.A., procure samples of food or drugs, and if he suspect the same to have been sold to him contrary to any provision of the Sale of Food and Drugs Acts, he shall submit the same to be analysed by the analyst appointed under the said Acts, and if it appear from the certificate of the analyst that an offence against some one of the provisions of the said Acts has been committed, he shall report the matter to the L.A., and act in accordance with any instructions which he may receive.

14. The S.I. shall keep the Register of Cow-keepers, Dairymen, and Purveyors of Milk, and shall from time to time, and once at least in every *three months*, visit all Dairies, Cowsheds, and Milkshops within the district, and report the result to the L.A. He shall also forthwith inform the L.A. of any infringement of the Orders or Regulations applicable to such premises.

If any other officer has been appointed by the L.A. to inspect the Dairies, No. 14 will be omitted.

15. The S.I. shall from time to time make such inquiries as may be necessary with a view to ascertaining whether the Bye-laws made by

the L.A. are duly observed, and shall report to the L.A. any violation of the Bye-laws which may come to his knowledge.

16. In every case in which it shall be reported or otherwise become known to him that any person in a Common Lodging-House, or in any Tent, Van, Shed, or similar structure, is suffering from any infectious disease, the S.I. shall forthwith report the same to the Medical Officer of Health, and act under his instructions.

17. The S.I. shall, by the instructions of the Medical Officer of Health, remove or superintend the removal of any patient suffering from infectious disease, and shall carry out any process of disinfection or any other measures that may be required for preventing the spread of infectious disease. He shall also, as soon as possible, examine the sanitary arrangements of any house in which infectious disease has occurred and report to the Medical Officer of Health.

18. The S.I. shall, under the direction of the Medical Officer of Health make inquiries into the circumstances of each case of infectious disease within the district as regards facilities for isolation, employment, school, water-supply, milk-supply, and any other matters likely to assist the Medical Officer of Health in carrying out his statutory duties; he shall also serve the notices required by Section 50 (2) and 53 (2) of the Public Health Act.

19. The S.I. shall enter from day to day, in a book to be provided by the L.A., particulars of his inspections and of the action taken by him in the execution of his duties. He shall also keep a book or books, to be provided by the L.A., so arranged as to form, as far as possible, a continuous record of the sanitary condition of each of the premises in respect of which any action has been taken under the Public Health (Scotland) Act, 1897, or under any other Statute, and shall keep any other systematic records that the L.A. may require.

20. The S.I. shall at all reasonable times, when applied to by the Medical Officer of Health, produce to him his books, or any of them, and render to him such information as he may be able to furnish with respect to any matter to which the duties of S.I. relate.

21. The S.I. shall observe and execute all lawful orders and instructions of the L.A. and the Local Government Board applicable to his office; and, if required, he shall attend upon the Inspecting Officer of the Local Government Board, and afford him such information and assistance as he may desire.

22. The S.I. shall examine and report on all plans submitted to him by the L.A.

[Forms of Tabular Statement of Sickness and Mortality.

Forms of Tabular Statement of Sickness and Mortality referred to in the Regulations issued by the Local Government Board for Medical Officers.

COUNTIES.†

County of..... .....*District.*

TABLE I.—Births and Deaths occurring in the District during the Year 19....

Names of Sub-Divisions of District,† if any.	Population.		Acreage.	Registered Births.	Mortality at Subjoined Ages.						Mortality from Subjoined Causes.															Under or Over Five Years of Age.
	Census, 1901.	Estimated to middle of 19...			At all Ages.	Under 1 Year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 60.	60 and upwards.	Smallpox.	Diphtheria.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Other or Doubtful Fevers.	Measles.	Whooping Cough.	Diarrhœa.	Septic Diseases.*	Tubercular Diseases: Phthisis.	Tubercular Diseases: Other than Phthisis.	Cancer, Malignant Diseases.	Diseases of Nervous System.*	Diseases of Circulatory System.*	Diseases of Respiratory System.*	Violence.	All other Certified Causes.	Uncertified Causes.	
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Under 5
																														5 and upw'ds
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Under 5
																														5 and upw'ds
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Under 5
																														5 and upw'ds
Total of District†	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Under 5
																														5 and upw'ds

† For Burghs substitute for the word "Burgh" for "District" and "County."

The Local Government Board request this Statement to be returned to them as soon as possible, duly filled up, apart from the Medical Officer's Annual Report.

NOTES.—The Medical Officer may, if he thinks fit, give separately the figures for any Sub-Divisions of the District: in all cases the total for the District is to be given.

Deaths of Persons belonging to a District occurring in Public Institutions (as Lunatic Asylums, Poorhouses, Hospitals) outside of the District, are to be included with the figures for that District, and deaths of Persons not belonging to a District, occurring in Public Institutions within the District, are to be excluded.

"Diphtheria" shall include "Membranous Croup," "Diphtheritic Croup," "Croupous Diphtheria."

All deaths from "Diarrhœa," "Dysentery," "Enteritis," "Gastro-Enteritis," "Muco-Enteritis," unless qualified by the designa-

"Diphtheria" shall include "Membranous Croup," "Diphtheritic Croup," "Croupous Diphtheria."

All deaths from "Diarrhœa," "Dysentery," "Enteritis," "Gastro-Enteritis," "Muco-Enteritis"—unless qualified by the designation "Chronic," or by an alleged primary cause, *e.g.*, "Phthisis—Diarrhœa," "Bright's Disease—Diarrhœa," are to be entered under the heading "Diarrhœa."

The designation "Other Tubercular Diseases" shall include, *inter alia*, "Tabes Mesenterica," "Tubercular Meningitis," "Hydrocephalus," "Struma," "Scrofula."

The headings distinguished by asterisks shall cover all diseases placed under these headings in the classification of the Registrar-General.

The heading "Uncertified Causes" should include only those cases of Uncertified Deaths which, from want of information, cannot be assigned to one or other of the "Causes" forming headings.

TABLE II.—Density of Population, Birth-Rate, Infantile, and other Death-Rates.

Names of Sub-Divisions of District,† if any.	Persons to the Acre.	Birth Rate.	Deaths under 1 Year per 1000 Births.	DEATH-RATES,* PER THOUSAND FROM															
				All Causes.	The Principal Zymotic Diseases.									Septic Diseases.	Tubercular Diseases.		Cancer.	Diseases of Nervous System.	Diseases of Circulatory System.	Diseases of Respiratory System.
					Total.	Smallpox.	Diphtheria.	Scarlet Fever.	Typhus Fever.	Enteric and other or Doubtful Fevers.	Measles.	Whooping Cough.	Diarrhœa.		Phthisis.	Other than Phthisis.				
Total for District† . .																				

* To be calculated to three places in Decimals. † If Burgh, use the word "Burgh."

TABLE III.—Cases of Infectious Disease coming to the knowledge of the Medical Officer during the Year 19....

Names of Sub-Divisions of District,* if any.	Smallpox.	Cholera.	Diphtheria and Membranous Croup.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	Measles.	Whooping Cough.		
Total of District * . .														
Cases Treated in Hospital . .														
Percentage of Cases Treated in Hospital . .														

Date..... *Signature*.....

Medical Officer.

* If Burgh, use the word "Burgh."

Additional Form of Tabular Statement under the Infectious Disease (Notification) Act, 1889,

for the Year ending 31st December .....

To be filled up by the Medical Officer.

Local Authority of the District (or Burgh) of.....County of.....
Population, 1901..... Estimated Population to middle of 19... .....

TABLE I.

Cases.	DISEASES.															
	Smallpox.	Cholera.	Diphtheria.	Membranous Croup.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Typhoid or Enteric Fever.	Relapsing Fever.	Continued Fever.	Puerperal Fever.	*				Total.
Notified . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Of which Treated in Hospital .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Where a Local Authority have no hospital of their own, please specify below hospital or hospitals to which cases were removed.

TABLE II.

Number of Medical Practitioners' Certificates.	£	*s.*	*d.*
.....cases in Private Practice @ 2/6 .			
.....cases in Public Institutions @ 1/- .			
.....cases. Total cost in Fees . .			

3. Number of Notifications by Head of Family, Occupier, etc.....
4. Number of cases omitted either by Medical Practitioners or Heads of Families, etc.....
5. Number of Prosecutions, in terms of Section 3 (2), consequent on such omissions.....
6. Number of Convictions consequent on such Prosecutions.....

Date..... Signature.....

Note.—The Local Government Board request this Statement to be returned to them as soon as possible, duly filled up, apart from the Annual Reports.

* Insert in blank columns any other Disease to which in terms of Section 7, the Act may have been extended.

Form of Statement by Sanitary Inspector of Proceedings under the Public Health and other Acts during the year 19 .

County.....*District or Burgh*.....

	No.
Subordinate Sanitary Inspectors employed	

I. *Nuisances.*

Complaints received	
Intimations served under Sec. 19	
Notices served under Sec. 20	
Cases in which legal proceedings were taken . . .	
Do. do. do. successful . . .	

II. *Workshops.*

Inspections	
Notices served under Sec. 2 (3) of Factory and Workshop Act, 1901	
Cases in which legal proceedings were taken . . .	
Do. do. do. successful . . .	

III. *Tents and Vans.*

Inspections	

IV. *Underground Dwellings.*

Number reported to Local Authority	
Notices to Owners (Sec. 74)	

V. *Common Lodging-Houses.*

On Register at 1st January 19	
Registered during year	
Renewals of Registration	
Removed from Register	
Inspections between 8 A.M. and 10 P.M.	
Inspections between 10 P.M. and 8 A.M.	
Intimations of Irregularities sent to Keepers . . .	
Cases of Infectious Disease reported to Medical Officer (Sec. 97) .	
Unregistered Premises dealt with	
Cases in which legal proceedings were taken (breaches of bye-laws, etc.)	
Cases in which legal proceedings were successful . . .	

VI. *Houses Let in Lodgings.* No.

On Register at 1st January 19 . . . . . .
Registered during year . . . . . .
Removed from Register . . . . . .
Inspections . . . . . .
Cases in which legal proceedings were taken . . . .
Do. do. do. successful . . .

VII. *Infectious Diseases.*

Visits of Inquiry, etc. . . . . .
Patients removed to Hospital . . . . . .
Persons removed to House of Reception . . . .
Notices served under Sec. 50 (2) . . . . .
Notices served under Sec. 53 (2) . . . . .
Intimations to School Boards, Teachers, etc. . . .
Houses or Premises disinfected . . . . .
Sets of Clothing, Bedding, etc., disinfected or destroyed . .
Cases in which legal proceedings were taken . . .
Do. do. do. successful . . .

VIII. *Burials.*

Burials undertaken in terms of Sec. 69 . . . .

IX. *Dairies, Cow-Sheds, and Milk-Shops.*

On Register at 1st January 19 . . . . . .
Registered during year . . . . . .
Removed from Register . . . . . .
Inspections . . . . . .
Number of Cows in Cow-sheds (Byres) . . . .
Contraventions of Orders or Regulations dealt with . .
Cases in which legal proceedings were taken . . .
Do. do. do. successful . . .

X. *Slaughter-Houses and Offensive Trades.*

Applications under Sec. 32 for sanction to establish . .
Applications granted . . . . . .
Applications under Sec. 33 for Licence or Renewal of Licence .
Applications granted . . . . . .
Public Slaughter-Houses . . . . . .
Other Slaughter-Houses as at 31st December 19 . . .
Unlicensed Slaughter-Houses dealt with . . . .
Inspections of Slaughter-Houses . . . . .
Inspections of other Offensive Businesses . . . .
Number of such other Offensive Businesses at 31st December 19 .

No.

Cases in which legal proceedings were taken (breaches of bye-laws, etc.) . . . . . .
Cases in which legal proceedings were successful . . .

XI. *Unsound Food.**

Inspections under Sec. 43 . . . . . .
Seizures of Unsound Food . . . . . .
Cases in which owners of Unsound Food were prosecuted . .
Convictions in connection with above cases . . . . .

XII. *Food and Drugs Acts.*†

Samples procured for Analysis . . . . . .
Certified pure by Analyst . . . . . .
Certified to be adulterated . . . . . .
Cases in which legal proceedings were taken . . .
Do. do. do. successful . . .

XIII. *Bye-laws.*

Inspections in carrying out bye-laws relating to—
(*a*) Pigstyes . . . . . .
(*b*) Public Conveyances . . . . . .
(*c*) Buildings‡ . . . . . .
(*d*) Cleansing in Special Scavenging Districts‡ . . .
(*e*) Other bye-laws relating to sanitary matters . . .

.....*Sanitary Inspector.*

Date.....

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* Only those inspections and seizures in which the Sanitary Inspector has personally taken part should be inserted. The Sanitary Inspector is requested to give on the fly-leaf a statement of the nature and quantities (or weights) of the food seized—distinguishing butcher-meat, fish, fruit, etc.

† Only those samples which have been procured by the Sanitary Inspector personally should be inserted here, and the Sanitary Inspector is requested to give on the fly-leaf a statement of the articles analysed—Milk, butter, pepper, etc.

‡ Sanitary Inspectors of *Burghs* do not report on these matters.

Form of Return of Births and Deaths to be Furnished by Registrars to Medical Officers of Health.

Local Authority of the*.....

Return of Births and Deaths Registered in the.....of.....during the.....ending.....19..

Number in Register.	Date of Death.	Name.	Place of Death. (If in Infirmary or Hospital, state, if possible, the usual place of residence of the deceased.)	Sex.	Age. Years.	Age. Months.	Occupation or Condition of Life.	Cause of Death. (A Complete Copy of Medical Certificate.)	By Whom Certified.	Remarks.

Births { Legitimate, M.....F..... / Illegitimate, M.....F..... } Total.....

Ages at Death.
(*Not to be filled up by Registrar.*)

Under 1 year.....
1 year and under 5.....
5 ,, ,, 15.....
15 ,, ,, 25.....
25 ,, ,, 60.....
60 years and upwards.....

Total.....

.....*Registrar.*

Note.—The number of lines in the Form should be proportionate to the Population.
* Insert here Name of Local Authority, County, District, or Burgh, as the case may be.

PREVENTIVE MEASURES IN INFECTIOUS DISEASES.

The preventive measures to be taken in infectious diseases may be summarised as follows:—

(1) Isolation of the sick from the healthy. (2) Prophylactic measures applied to the bodies of the non-infected. (3) Fresh air and cleanliness. (4) Pure water and pure food, or the rendering of them pure; efficient drainage; and destruction of insects, etc., when carriers of disease. (5) Disinfection of infected premises and things.

All these are means which are now thoroughly recognised by the legislature and by the public as measures to be used for the prevention or mitigation, and in some cases for the stamping out, of infection and contagion. It is in their successful employment in a practical way where great difficulty is felt.

1. *Isolation.*—This may be carried out at home or hospital. When an infectious patient is kept at home, everything the patient uses should be used by the patient alone, who ought to be in a room by himself and attended to by a nurse or attendant, who can safely nurse without danger to others. Hospital isolation in the case of scarlet fever has of late been questioned as being a sound means of either lessening attack in the community, or being anything better than a great convenience for the householders in whose families the disease may break out. I shall here quote some extracts from writers who have recently given their views on the subject to the profession.

Dr John T. Wilson, M.O.H. for Lanarkshire, says*:—"It is to be feared that the prophylactic value of this excellent sanitary measure is by some authorities overrated. If we contrast the progress of mortality in some of the principal towns in Scotland with the preventive measures in force, we find that in Glasgow hospital isolation was largely practised without notification; in Dundee notification was in force, but almost no hospital isolation; in Edinburgh both measures were operative, while in Leith neither was to any extent in operation. Yet the reduction in scarlet fever mortality was slightly greater in Leith and Dundee than in Edinburgh or Glasgow. Or again, take Aberdeen, where the reduction in scarlet fever mortality occurred early, and where during the past two years (this was written in 1897) all modern preventive measures have been in full operation—notification, hospital isolation, etc.—and yet no diminution in prevalence has occurred during these years. In Denmark the experience of Copenhagen, and in England the experience of such places as Nottingham, are instructive in the same direction.

"When we take a wide survey of the movement of scarlet fever mortality, as I have endeavoured to do, it becomes apparent that some more widely-operating influence must have been at work in bringing about the reduction that has taken place."

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* "A Contribution to the Natural History of Scarlet Fever," by John T. Wilson, M.D., D.P.H., *Public Health*, vol. ix. (Supplement), p. 21. 1897.

Dr C. Killick Millard, M.O.H. for Leicester, has at various times given results of his inquiries on the subject, and in one of his contributions* he makes the following statements:—"I have, therefore, taken upon myself to try and collect some of the numerous data which are now available, with a view to ascertaining what the real position of affairs is. I have issued an inquiry form to every town of importance in England and Wales, requesting information as to scarlet fever, for as many years back as possible, under the following heads:—(*a*) population; (*b*) number of cases notified; (*c*) number of cases under five years of age; (*d*) number of cases isolated in hospital; (*e*) number of deaths registered; (*f*) dates when compulsory notification and hospital isolation were first began. . . .

"It should be noted that practically all the conditions required for a scientific experiment of this nature are present. By means of compulsory notification we know to what extent the disease has existed, both before and after the introduction of hospital isolation. By means of death registration we know the number of deaths caused by it. Allowance can be made for the changes in the populations. The difficulty arising from fluctuations caused by epidemics, and the differences due to local circumstances, can be overcome by taking the average of a number of towns. Lastly, a control experiment exists in the case of those towns which have not adopted the measure."

His conclusions are as follows:—

"After careful consideration of all the facts I have brought forward, I believe I am justified in making the following conclusions:

"I. That the hospital isolation of scarlet fever appears to have failed to materially reduce the prevalence of the disease.

"II. That the hospital isolation of scarlet fever appears to have failed to materially reduce the fatality of the disease.

"III. That the fatality of the disease has fallen most in those large towns which have not practised hospital isolation."

I shall content myself with quoting some extracts from one other who has gone into the subject by bringing together statistical facts concerning the thirty-three large towns of England and Wales † namely, Dr Edward Dean Marriott of Nottingham. Dr Marriott writes:—

"What were the promises given by the framers of Notification Acts? We were told that the stamping out of certain infective diseases would be only a question of time. In what way was this desirable end to be accomplished? The spread of disease was to be prevented by removal of the first cases. In other words, we were promised a great reduction in the number of cases. Let us inquire how far these promises, made so glibly and so readily believed in, have been fulfilled. If removal to

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* "The Influence of Hospital Isolation in Scarlet Fever: An Appeal to Statistics," by C. Killick Millard, M.D., D.Sc. London: Rebman, Limited, 129 Shaftesbury Avenue. 1901.

† "The failure of the Isolation Hospital as demonstrated by the Notification Returns of the thirty-three large towns of England and Wales"—a reprint from the "Sanitary Record."

hospital has realised the expectations of the framers of Notification Acts, we shall find that thousands of notified cases have been turned into hundreds, and these into tens and units. Is this the way it has worked out? Let us see what has been the experience of some of the thirty-three large towns of England and Wales. The Registration County of London began the stamping-out process in 1890 with 15,330 notified cases of scarlet fever. In 1892 she had 27,093 cases, and in 1894, 36,901.

"Manchester commenced her experimental undertaking with (1891) 1138 cases. In 1892 this had increased to 1671; 1893, 2031; 1894, 2230; 1895, 2302, and 1896, 2389.

"Liverpool—after having taken warning for many years by what a Committee of her Corporation saw in Nottingham—foolishly allowed herself, in 1891, to be persuaded into experimentalising with the health of her inhabitants, which she did to the following tune:—She commenced her downward career with 1176 notified cases of scarlet fever. In 1892 she had 1554 cases; in 1893, 3538; in 1894, 3963.

"Bradford was one of the pioneers in public health experiments. Her reward after ten years of hospital isolation, was that the 424 cases with which she started in 1881 had mounted up in 1891 to 1163 cases, and in 1899 to 2287 cases.

"Hull commenced in 1890 with 397 notified cases, which underwent steady increase, till in 1899 the number had reached upwards of a thousand. The experience of some of the smaller towns is still more remarkable. . . .

"Or do they not rather constitute a tremendous indictment, which indictment calls loudly for a Government inquiry into the working of the system of infectious diseases notification and hospital isolation?

"We will now deal with the extraordinary claim so frequently made that hospital-nursed cases have a much better chance of life than the home-nursed. This, to draw a comparison from military operations, is the last trench—and we shall now proceed to take it. The task if not very agreeable will not be difficult. It is necessary to point out that no dependence whatever can be placed upon those enticing statistics found (alas!) so frequently in annual reports which deal with the comparative mortalities of home and hospital-nursed cases. Why they are given a place I never could make out. While it is certain that the effect of such tables on the minds of health committee-men has been mischievous in the extreme, the very smallest consideration will convince us that these tables are of no scientific value whatever. To begin with, the hospitals receive the most favourable cases, the worst being often too serious to bear removal. In not a few cases of scarlet fever the onset is so severe that the patient dies before there has been time to summon medical assistance. The consideration above all others, however, which should have prevented the tabulation for comparison of such cases is this—the number of home-nursed cases is an unknown and unknowable quantity. The dread of removal, the fear of interference with occupation, the vexation of being marked out for avoidance by neighbours, and subjected to ostracism by friends, drive numbers of cases into *concealment*. To

this concealment even the medical attendant is sometimes a party. Not alone does concealment step in to vitiate all these statistics, but it is well known that large numbers of cases occur of so mild a type as to escape recognition altogether. The death-rate of the home-nursed is the death-rate of all these. Then how can any comparison—not absolutely intended to mislead—be made between the known cases treated in hospital and the known plus the concealed and unrecognised cases outside?"

Before making a final quotation, I shall define what is meant by "Post Scarlatinal" or "Return Cases." This is what the term implies: They are cases infected by patients coming out of hospitals after every precaution has been taken to send the latter out only after desquamation has been completed, and when free from any other ascertainable sequela occasionally occurring after scarlet fever.

Speaking of desquamation it must be borne in mind then, that its completion does not by any means determine the end of infectivity, which may continue from discharges from ears, or nostrils, or throat, but which apparently continues when none of these exist, and would seem to be determined by the length of residence in hospital, in imbibing its atmosphere—the longer in hospital the greater the chance of causing "return" cases. Some try to explain it by the system getting thoroughly saturated thereby, but without doing injury in any way to the immunised patient himself.

While touching upon desquamation, I may mention this that the desquamative stage of scarlet fever being *par excellence* the infective stage is an exploded idea, the sore throat stage being the chief infective one, and many believe that *per se* it (the desquamative stage) is non-infective, and for the following arguments as advanced by Dr Millard: "(1) The absence of evidence supporting it. It is difficult to believe, but that if the old supposition were correct, strong evidence of it would, ere this, have been forthcoming, as is now the case with discharges from the nose and ears. (2) The fact that infectivity begins prior to the onset of desquamation, and frequently continues long after desquamation has ceased. (3) The fact that scarlet fever wards, although abounding in desquamating epithelium, are not a danger to neighbouring houses. (4) The fact that the proportion of 'return' cases does not appear to be increased amongst patients sent out from hospital still desquamating.

"On the other hand, the principal argument in favour of the view that desquamation is infectious, is the fact that patients still desquamating, but otherwise apparently free from infection, have frequently been known to convey the disease to others. The whole force of this argument disappears, however, as it seems to me, when we consider that just as frequently patients, apparently quite free from infection, and in whom desquamation has entirely ceased, have also been known to convey the disease; moreover, patients still desquamating have frequently mixed freely with others without untoward result."

But to return to Dr Marriott's conclusions. He says:—

"The case against the hospital isolation of cases of scarlet fever may be thus stated:—

"(1) The danger of secondary infection. (2) The risk of 'catching' other (sometimes deadly) diseases while resident in hospital. (3) The failure of the system as instanced by 'return' cases. (4) The high mortality rate of 'return' cases. (5) The danger to the public from the 'protracted infectivity' of discharged cases. (6) The fact that numbers of people are annually exposed to the risk of becoming victims of unavoidable errors in diagnosis. (7) The fact that the period during which houses remain centres of infection, is doubled, trebled, and sometimes quadrupled by 'return' cases. (8) The fact that dread of interference leads to concealment. (9) The additional fact that concealed cases (being under no medical supervision) are a most serious factor in the spread of disease. (10) The dissemination of disease germs by the Sanitary Authority through the instrumentality of their collecting vans for the removal of patients to the hospital, and their bedding, etc. (the most infective part of a patient's belongings) to the station. (11) The injury inflicted on children by removing them from home influences and parental care. (12) The utter and complete failure of Notification Acts and isolation hospitals to exercise any control over epidemics, as evidenced by the returns of notified cases."

At page 349 will be found some statistical returns pertaining to Scotland up to the end of 1904, which may aid one in arriving at conclusions with regard to this problem.

2. *Prophylactic measures applied to the bodies of the non-infected*—the contacts in short.—The value of vaccination and of re-vaccination to prevent smallpox has been proved times without number to the satisfaction of every unbiassed, sensible man. The use of antitoxin in the treatment of diphtheria, which has undoubtedly reduced its mortality, is leading to its use as also a preventive among those brought into intimate contact with the disease. Again this means of prophylaxis has come into use by employing antityphoid serum to prevent or mitigate enteric fever, although its utility in this respect has not been quite settled, and so with other diseases.

3. *Fresh air and cleanliness.*—This is one of the most important and essential means in lessening mortality in those attacked and in preventing the spread of infection to others. Its utility is proved to demonstration in the good that has resulted from sufficient ventilation and cleanliness of houses which, in a badly-ventilated and unclean state, were hot-beds of typhus fever. Again the results of increasing cubic space for soldiers in barracks and prisoners in prison, has had a very marked effect in lessening the prevalence of phthisis in these places and lowering its mortality.

4. *Pure water and pure food*, etc.—The utility of these measures of prevention has so often been proved that comment is unnecessary. The remarkable effects, for instance, upon cholera and typhoid epidemics by rendering water supplies pure, have been proved over and over again. A remarkable instance of this by the filtration of bad water through the

Pasteur Chamberland filter was demonstrated by Colonel Henry Halcrow Johnston, C.B. of the R.A.M.C. during the African War.*

Efficient drainage has exterminated malaria in this country, and to some extent diminished the prevalence of such a disease as consumption. Again, the evil effects of bad drainage in connection with typhoid fever is undoubted.

Clearing localities infested with malaria by destroying the mosquito (anopheles) infesting malarial districts is being daily proved as an efficient measure in preventing the disease.

5. *Disinfection of Premises and Things.*—The following are the chief methods employed :—

(1) Destruction by fire—often the cheapest and easiest as in the case of bedding, etc., of smallpox patients.

(2) Disinfection by *saturated* steam under pressure † (not super-heated or dry steam). Leather articles or articles that will not bear wetting, are spoiled by it. This method is specially useful for bedding, mattresses, carpets, etc. The heat employed should be about 240° F., and applied for fifteen minutes to half an hour.

(3) Dry heat short of causing scorching, which begins in some articles even below 250° F. It is of slow, penetrating power, and articles require exposure to it for a full hour at 220° F. It is therefore inferior to the saturated steam process.

(4) Boiling in water for say twenty minutes after first soaking in cold water to remove a large portion of dirt in the articles before subjecting them to heat which might "fix" organic stains.

(5) Chemical disinfectants. The principal of these at present in vogue are :—

(*a*) Perchloride of mercury (corrosive sublimate) 1 part to 1000 water to which is added 10 per cent. chloride of sodium. Metallic articles are deleteriously affected by it. It is a poison and should be kept in non-metallic vessels and coloured artificially, and labelled "Poison."

(*b*) Formaldehyde in a 40 per cent. solution, termed formalin, mixed with water in a proportion of 2 to 4 ounces of the former to 1 gallon of the latter, and used for washing or steeping, or as a spray with the Leslie M'Kenzie spraying apparatus. The objection to it is its irritating effects on the eyes and throat. A preparation of it termed "formolyptol" containing 0·2 per cent. of formaldehyde, 5 per cent. of aceto-boro-glyceride in combination with the antiseptic constituents of pinus pumilio, eucalyptus, myrrh, storax and benzoin has been lauded as equalling corrosive sublimate in its disinfecting properties, and with the advantages of being non-poisonous, and not injuring metals. It is used largely in America.

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* Reprint from the *Journal of the Royal Army Medical Corps*, April 1905.

† The best apparatus in the market at present are—(*a*) The Defries or "Equifex"; (*b*) The Thresh; (*c*) The Lyon.

(c) Carbolic acid. This to act as a disinfectant or germicide requires to be of a 5 per cent. solution strength. Its odour is persistent and to many disagreeable.

All other chemical preparations classified as disinfectants should more correctly be termed antiseptics, and some of them deodorisers merely. The efficacy of sulphurous acid as generally employed, is mainly due to its compelling the free access of air by open windows and doors after its use, so as to get rid of its obnoxious smell; permanganate of potash, known as Condy's fluid, acts as an oxidiser of organic matter and is a deodoriser, but to trust to these latter two as disinfectants is merely raising in the minds of the public a false feeling of security, thereby often actually doing harm.

Fresh air and sunlight should never be forgotten as the cheapest and most efficient of deodorisers, and even disinfectants, after sufficient exposure to them.

Among chemical deodorisers used for cleansing cesspools, drains, etc., may be mentioned chloride of lime, sulphate of iron, permanganate of potash, carbolic acid, lysol—a saponified solution of carbolic acid and cresol, etc.—Jeyes' fluid, ashes, peat, dry earth, charcoal, tar-water, etc., etc.

The following general methods of disinfection are found in the Local Government's book of Instructions, Forms, etc., in giving an extract from the Regulations for the prevention of the introduction and propagation of Plague adopted by the Convention of Venice. These regulations are equally applicable to house disinfection. In giving them here I have substituted in the extract the words "rooms and all parts of the house" for "cabin and all parts of the ship" in regulation 5. These regulations then read thus:—

1. Wearing apparel, old rags, infected dressings, papers, and other articles without value should be destroyed by fire.

2. Underclothing, bedding, clothes, mattresses, carpets, etc., which are contaminated or suspected should be disinfected in disinfecting chambers at *normal pressure, or at a pressure of from one-and-a-half to two atmospheres, with or without circulation of saturated steam.*

Before a disinfecting chamber can be regarded as efficient for the purposes of disinfection, it must be subjected to tests, with the aid of a *signal thermometer*, showing the moment when the temperature in the middle of a mattress rises to at least 100° (Centigrade).*

To ensure that the disinfection is effective, this temperature must be maintained for from 10 to 15 minutes.

3. Disinfecting solutions—

(*a*) Solution of corrosive sublimate, of 1 part in 1000, *with the addition of* 10 *parts of chloride of sodium.*

The solution should be coloured with *aniline blue or indigo.* It should not be placed in metal vessels.

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* 212° Fahr.

(*b*) A 5 per cent. solution of pure crystallised carbolic acid, *or 5 per cent. of crude commercial carbolic acid in a warm solution of soft soap.*

(*c*) Fresh slaked lime.*

4. Special instructions to be observed in the employment of disinfecting solutions—

The linen, clothing, and articles soiled by the excreta of patients should be soaked in the solution of corrosive sublimate. The solution of pure carbolic acid, and the solution of soap and carbolic acid are perfectly suitable for the same purpose. The articles should remain in the solution for at least six hours.

Articles which cannot be subjected to the temperature of the disinfecting chamber (100° Centigrade †) without injury, such as leather goods, wooden articles stuck together with glue, felt, velvet, silk, etc., should be washed with the solution of corrosive sublimate; coins can be disinfected with the solution of soap and carbolic acid.

Persons in attendance on the sick should wash their hands and faces with the solution of corrosive sublimate, or with one of the carbolic solutions.

The carbolic solutions will be useful more particularly for disinfecting articles, such as metals, instruments, etc., which can neither be subjected to a temperature of 100° Centigrade (212° F.) nor placed in contact with corrosive sublimate without damage.

Slaked lime is particularly recommended for disinfecting excreta and vomited matters. Expectorated and purulent matters should be burnt.

The rooms and all parts of the house occupied by the sick or suspected, should be cleared out, and all articles in them should be treated as described above.

The walls should be disinfected with the solution of corrosive sublimate with an addition of 10 per cent. of alcohol. The spraying should commence from the top, horizontally, and be continued downwards, so that the whole surface of the wall becomes covered with a coating of minute drops.

The flooring should be washed with the same solution.

Two hours after, the walls and flooring should be scrubbed and washed down with plenty of water.

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* To get very strong slaked lime, take lime of good quality, slake it by moistening it gradually with half its weight of water. When the operation is completed, put the powder in a carefully-corked receptacle and place in a dry spot. As lime absorbs half its weight of water in order to become slack, 10 lbs. of lime will require ½ gallon of water. In order to obtain a whitewash which will be of about 20 per cent. strength of lime, it is sufficient to dilute the already slaked lime with double its weight of water, that is, every 10 lbs. of *slaked* lime will require to be diluted with 2 gallons of water. Or the unslaked lime may be gradually slaked and diluted in the proportion of 3½ gallons of water to every 10 lbs. of lime.

† 212° Fahr.

APPENDIX B

STATISTICAL TERMS, ETC., AND METHODS COMMONLY EMPLOYED FOR MAKING RETURNS

The Census.—This is taken every ten years at the end of March. The Census Act requires the following particulars: name, age, sex, rank, profession or occupation, conjugal condition, relation to head of family, and birthplace of every person who abode in any house on the night preceding the day of enumeration; as also the blind, deaf and dumb, imbecile or lunatic.

Law of Population.—"A population increases when unchecked in regular geometrical progression, when the births exceed the deaths, and the ratio of the births and of the deaths remains constant." There is no law regulating decrease.

Estimation of Population.—The population of a district is estimated yearly, as at the end of June, for the purpose of drawing conclusions regarding birth-rates, death-rates, etc.

It may be approximately ascertained in several ways:—

(1) By finding the number of inhabited houses in the district, and multiplying this number by the number who on an average occupied each house at the last census; or if a town is wholly new since that date, by taking the number who on an average live in a selected number of houses taken to be a fair specimen; but even without having recourse to this latter operation we can get a good idea of the number that go to each occupied house by having a knowledge of the average of other districts with a similar class of inhabitants.

(2) By taking the number of registered births during the year. This number multiplied by 1000, and the product divided by the average birth-rate per 1000 of the period between the last two enumerations gives us the population. If a town is wholly new since the last census, then the ascertained rate of a place with a similar class of inhabitants may be used as the divisor.

(3) By the use of logarithms. We know it to be the "Law of Population" that it increases when unchecked, in a geometrical ratio, and when we ascertain the rate of increase likely to have prevailed since the last census, together with any special addition to or deduction from the community after that time from specific causes, calculation can easily be effected at any special period since the last census. The process is as follows: Suppose, for example, that a district at the end of March 1891 had a census population of 73805, and at the end of March 1901, 88108. Now the true annual *rate of increase* is not got by taking the difference of these numbers and dividing by 10, but by taking the difference between the logarithms of these numbers, which gives the logarithm of the rate of increase for 10 years; then dividing this by 10 we get the logarithms of the annual rate:—

The log. of 88108 = 4·945015
" 73805 = 4·868085

The log. of the increase for 10 years = 0·076930

If this log. of increase be added to the log. of the enumeration for 1901, we get the log. of the population at the end of March 1911, thus:—

Log. of population, 1901 = 4·945015
,, 10 years' increase = 0·076930
Population, end of March 1911 = 5·021945

the corresponding number to which is 105183.

The log. of the *annual* rate of increase is $\frac{0{\cdot}076930}{10} = 0{\cdot}007693$, so that the population at the end of March for the years succeeding 1901 will be as under:—

For 1902 log. 4·945015 + 0·007693 = log. of pop. = 89692
1903 ,, 4·945015 + 2(0·007693) = ,, = 91285
1904 ,, 4·945015 + 3(0·007693) = ,, = 92916
1910 ,, 4·945015 + 9(0·007693) = ,, = 103336
1911 ,, 4·945015 + 10(0·007693) = ,, = 105183

We thus get the population at the end of March for each year, but for calculating purposes it is usual to make the estimate at the middle of the year, namely, the end of June. This is readily done by finding the log. of the rate for 3 months, which is one fourth of the log. of the annual rate, or 0·001923, and adding this to the log. of the population at the end of March of the year for which we are estimating. We thus get at the population at the *middle* of the various years which will be:—

1902 log. 4·945015 + 0·007693 + 0·001923 = log. of pop. = 90080
1903 ,, 4·945015 + 2(0·007693) + 0·001923 = ,, = 91690
1910 ,, 4·945015 + 9(0·007693) + 0·001923 = ,, = 103794

For the middle of 1911 and onwards, we have of course the accurate enumeration of that year at the end of March with the mean rate of increase between 1901 and 1911 as data to calculate from.

It is of very great importance to correctly estimate the population, for if our numbers are not fairly approximate, the calculation as to the degree of mortality actually existing is thereby affected, an overestimate causing the death-rate to appear less than it really is.

Age and Sex Distribution of Population.—As a health officer, it is essential that he should know not only the gross number of the community under his custody but the respective numbers at various periods of life which compose that community, and further, it may be advisable in some cases to differentiate these into males and females. The periods which are now taken in this country are:—Under 5 years; between 5 and 10 years; 10 and 15; 15 and 20; 20 and 25; 25 and 35; 35 and 45; 45 and 55; 55 and 65; 65 and 75; and 75 and upwards. The number living at any age period at the middle of any year is calcu-

lated in exactly a similar way to the estimate of population, that is to say, we find the numbers of the age period which existed at the last two census enumerations, take the difference of their logarithms and divide by 10 to get the log. of the annual rate of increase of people of that age; then having got the log. of the annual rate we multiply it by the number of years that have elapsed since the last census period, and this added to the log. of the number of the special age that existed at that enumeration, together with one fourth of the log. of the annual rate, gives us a log. the corresponding number to which is the number of individuals at this age period at the middle of the year.

As the census returns give the numbers of both males and females, we can make a calculation for each, if this be desirable, but generally speaking, for practical purposes it is sufficient for a sanitary officer to find the number of persons at the different periods irrespective of sex. There is one age group, namely, "*those under 5 years*," which is of more practical importance to the health officer than any of the others, for as will be afterwards seen (p. 346) in treating of mortality the health of a district can be pretty fairly gauged by the death-rate in the children of that period, which death-rate can only be accurately got at by an exact knowledge of the number who under the age of 5 survive at the time. It may here be pointed out that as a check on our calculation for this age, we may adopt another method of estimation, first suggested by Dr Willoughby Eastbourne in 1880. It is this: "Add together the total births of the five previous years, and deduct from this sum the number of deaths under 1 year of age in the first of these years, under 2 in the second, and so on. The remainder will give the number now living under the age of 5."

Age-Distribution of Population (Persons) of England and Wales, 1881-90.*

All ages.	Under 5 years.	5	10	15	20	25	35	45	55	65	75 and upwards.
1000 living.	129	119	110	100	90	149	114	85	58	34	13

Logarithms.—As it is most desirable we should be exact in our computations, or as near this as possible, and that such exactitude is more easily attained by logarithms than by any other way, the medical officer of health should be perfectly familiar with their use and able to apply the tables. Their use such as may be necessary in finding the root of a number can only be made available by a thorough acquaintance with the subject, so it shall therefore be considered as fully as space will allow.

* *v.* Supplement to the Fifty-fifth Annual Report of Registrar-General of England, p. viii.

Logarithms are a series of numbers adapted in a certain way to a series of natural numbers, and by the aid of which addition supplies the place of multiplication, and consequently subtraction the place of division.

Let us adapt a series of numbers in arithmetical progression to a series in geometrical progression, placing the least term of the one series beneath the least term of the other, thus:—

Arith. P.	0	1	2	3	4	5	6	7
Geom. P.	1	4	16	64	256	1024	4096	16384

If we wish to multiply together any two numbers in the lower line, such as 64 and 256, all that is necessary is to add the numbers in the upper line opposite to them, which in this case are 3 and 4=7, and we find under the number 7 of the top line the product, which is 16384.

Such a series as the above would however be of little practical use, because we could only find but few of those numbers we might wish to operate on. Now this is remedied by interpolating numbers in the arithmetical series between each two terms which are the arithmetical means, and likewise interpolating between each two terms in the geometrical series, geometrical means. The arithmetical mean of two terms is the sum of these two terms divided by 2. The geometrical mean of two terms is the square root of the product of these terms. We can thus interpolate our series as follows:—

0	0·5	1	1·5	2	2·5	3	etc.,	
1	2	4	8	16	32	64		

and further,

0	0·25	0·5	0·75	1	1·25	1·5	1·75	2	etc.,
1	1·414214	2	2·828427	4	5·656854	8	11·313708	16	

and so we can go on interpolating until every integer occur in the geometrical series, or a number so near to it that the difference may be neglected without error.

In every system of logarithms the log. of 1=0.

The common logarithm tables are formed by interpolating the series:—

0	1	2	3	4	5	etc.,
1	10	100	1000	10000	100000	

until the natural numbers occur in the geometrical series. Here the number 10 is taken as the *base* of our arithmetical system.

The numbers in the arithmetical series corresponding to those in the geometrical series are called their *logarithms*. It will now be seen that the log. of any number between 10000 and 100000 lies between 4 and 5. It is 4 plus a fraction. Its integer is 4, and one less than the places of figures in the number. The log. of 100 is 2, and its integer of course is 2, which is one less than the number of places in 100. The log. of any number between 10 and 100 lies between 1 and 2, or is one plus a fraction. Its integer is 1, which is therefore one less than the places in the corresponding number. The log. of any number less than 10 is less than 1, and therefore a fraction, and has no integer.

It will thus be seen that the integer of a logarithm points to the number of figures that are in the number of which it is a logarithm, for it indicates that such number contains one place more of figures than is indicated by such integer. It is on this account that the integer is termed the *index*. Since the log. of 1 is 0, the index of the log. of a decimal is negative, and the sign – (minus) is placed above it to distinguish it from the decimal part, which is of course positive.

Thus $\bar{3}$·726401 means – 3 + ·726401.

In the above series from which the common logarithms are formed, we have seen that its base is 10.* If we look upon the logarithm as an exponent of the power to which the base 10 of the table must be raised in order to produce a given number, say 1000, we express it thus, 10^3, where 3 is the index or logarithm, so likewise :—

$10^1 = 10$ and 1 is the index.
$10^{-1} = \frac{1}{10} = ·1$ and $^{-1}$ is the index.
$10^{-2} = \frac{1}{100} = ·01$ and $^{-2}$ is the index.
$10^{-3} = \frac{1}{1000} = ·001$ and $^{-3}$ is the index.

It is thus also seen that the log. of any number between ·1 and 1 is – 1 + some fraction; that of any number between ·01 and ·1, is – 2 + some fraction; that of any number between ·001 and ·01, is – 3 + some fraction.

It will now be evident that the log. of any number and the log. of one ten times, a hundred, or a thousand times greater or less, consist of the same decimals, and differ only in the integral part, so that all numbers whether integers or decimals, or partly both, have the same positive quantity for the decimal part of their logarithm.

Thus the log. of 3456	is 3·538573
345·6	is 2·538573
34·56	is 1·538573
3·456	is 0·538573
·3456	is $\bar{1}$·538573
·03456	is $\bar{2}$·538573
·003456	is $\bar{3}$·538573

I shall now briefly summarise the main properties of logarithms, from which their utility will be manifest.

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* The only other base to which logarithms have ever been constructed is the number 2·718281828459. This was the base chosen by Baron Napier, the inventor of logarithms, and in consequence these are called Naperian logarithms, but they are likewise commonly known by the name of hyperbolic logarithms, from their connection with the quadrature of the hyperbola. The hyperbolic log. of a number is found by multiplying the common log. of the number by 2·302585052994. The common log. is got from the Naperian by multiplying the latter by 0·4342944819.

(1.) In the same system the sum of the logarithms of two or more numbers is the log. of their product. To illustrate this, let us take the first system employed at page 327, the numbers of the uppermost line being the logarithms of those of the lower:—

Arith. P.	0	1	2	3	4	5	6	7	etc.
Geom. P.	1	4	16	64	256	1024	4096	16384	

Here it is plain that the sum of 1 and 3, which is 4, is the log. of 256, the product of 4 and 64.

(2). The difference of any two logarithms of two numbers, is the log. of their quotient; thus $3-1=2$, which is the log. of 16, the quotient of 64 divided by 4.

(3.) The log. of the quotient of any two numbers is equal to the difference of the logarithms of these numbers, or the log. of a fraction is equal to the log. of the numerator, minus that of its denominator:—

thus, $256 \div 4 = \frac{256}{4} = 64$, whose log. is 3, the difference of the logarithms of the numbers 256 and 4, which are 4 and 1 respectively. In a proper fraction where the numerator is less than the denominator the log. is negative.

(4.) If the log. of a number be multiplied by any number n, the product is the log. of that number raised to the nth power: thus, let the multiplier be 3 and the number 16, then 2 the log. of 16 multiplied by $3 = 6$, which is the log. of 4096, the cube or third power of 16.

(5.) If the log. of a number be divided by any number n, the quotient is the log. of the nth root of that number; thus take the number 1024, whose log. is 5, and divide this log. by the number 5; then the quotient is 1, which is the log. of 4, the fifth root of 1024.

(6.) Hence if a series of quantities are in geometrical progression, their logarithms are in arithmetical progression.

Logarithm Tables.—These are either large, giving the logarithms of numbers up to 100000, or smaller, as in the "common" tables, which extend to 10000, or still smaller, namely, 0 to 1000. The last is appended to conserve space which larger tables would necessitate. They are taken from Molesworth's "Pocket-book of Engineering Formulæ." They are large enough however to indicate how to use tables where the integral figures of any number extend to more figures than those found in tables.

To find the Logarithm of a Number by the Tables.—When the number consists of two figures, look for these figures in the left marginal column, and the log. without the index will be found in the same horizontal line in column having 0 at the top. The index is then supplied as already pointed out. When the number consists of three figures, look for the first two figures in the left marginal column, marked No., and run along that line to the column which has the

third figure of the number at the top, and there will be found the log. for these three figures without the index, which as before must be supplied.

Ex. What is the log. of 123?

Look in the margin for 12, and run along that line to the column having 3 at the top, where is found 08991. To this prefix the index, which is one less than the number of integral figures in 123, and therefore 2, which is of course positive. The log. of 123 is thus 2·08991.

When the number consists of more than three figures, take the log. of the first three figures without the index, and find the difference between it and and the next greater log., and multiply this difference by the remaining figures of the number, and from the product cut off as many figures as are in the multiplier; the rest added to the log. for the first three figures gives the log. required. The *mean* difference is found in the extreme right column, and it may be used as *the* difference (although not nearly so exact as finding the real difference). After multiplying and when we reject a decimal place or places from the product, the preceding figure is to be increased by 1 when the rejected figure next to the non-rejected is 5 or greater. This is what is termed finding the *Proportional Part.*

Ex. What is the log. of 12345?

Look in the margin for 12, and, as before, run along the line to get the log. of 123, and take the difference between its log. and the log. of the next higher (124) and which we find to be 351 (not the proportional part exactly as given in the last right-hand column). This multiplied by the remaining figures 45, considered as decimals, gives 157·95. The decimals being struck off leaves 157, and the rejected figure next to the non-rejected figure being greater than 5, 158 remains to be added to the log. of 123. Therefore the log. of 12345 after prefixing the index = 4·09149.

To find the Number corresponding to a given Logarithm.—When the log. is found exactly in the tables, the first two figures of the number will be found on the same line in the left-hand marginal column and the third at the top of the column in which the log. is found, and the index of the log. increased by 1 will be the number of integers in the given number when it is a whole number, or the index diminished by 1 will be the number of prefixed ciphers when the number is a decimal fraction and the index negative: thus the number corresponding to the log. 2·86213 is 728, and that corresponding to $\bar{2}$·86213 is 0·0728. But when the log. is not exactly found in the table, take the next lower log., the number belonging to which will consist of three figures, and these will form the first three figures of the number required; then subtract this log. from the given log. and add ciphers to the remainder. Then divide this remainder with ciphers added by the difference found in the right-hand marginal column, or, more correctly, by the difference between it and the next higher in the tables. This will give the fourth and fifth figures. The index will show where the decimal point is to be placed.

The number cannot be carried accurately to more than five places as there are only five decimal places in the appended tables.

Ex. Find the number corresponding to the log. $\bar{3}\cdot09151$.

The log. is not found exactly in the table. The next lower is 08991, whose corresponding figures are 123 and these then form the first three figures. To find the others we subtract 08991 from the given log. 09151, and 160 remains. Adding ciphers to this remainder we divide it by the difference between 08991 and the next higher in the table 09342, or by 351, and we get 45, etc. Now the index is $\bar{3}$, which means that the number is a decimal and that the first *significant figure is the third from the decimal point.* Therefore ·0012345 is the number required.

Computation of Negative Indexes.—Calculations with negative exponents are made according to the rules used in addition and subtraction in algebra.

To add two negative indexes.—Add them as if they were positive, and make their sum negative.

Ex. $\bar{4}\cdot30103 + \bar{3}\cdot26854 = \bar{7}\cdot56957$.

To add a positive and negative index.—Take their difference, and if the positive index is the greater, the remainder is positive, and negative if the negative is greater.

Ex. $3\cdot46216 + \bar{1}\cdot12434 = 2\cdot58650$

and $6\cdot38746 + \bar{2}\cdot92456 = 5\cdot31202$.

In the latter example the 1 is carried from the first decimal place to the 6, making it 7, which with $\bar{2} = 5$.

To subtract a negative index.—Change its sign to plus, and add it as in addition.

Ex. (1)			*Ex.* (2)		
From	$2\cdot63421$		From	$\bar{4}\cdot58432$	
subtract	$\bar{3}\cdot26145$		subtract	$\bar{6}\cdot64312$	
	$5\cdot37276$			$1\cdot94120$	

In Ex. 2, the 1 carried from the first decimal place is subtracted from $\bar{4}$, and as its sign is minus, it makes $\bar{4}, \bar{5}$; thus the sign of $\bar{6}$ being changed we have $\bar{5} + 6 = 1$.

Ex. (3) From $\bar{6}\cdot23542$ subtract $\bar{2}\cdot43284$.

The answer is $\bar{5}\cdot80258$. Here 1 is carried, making $\bar{6}, \bar{7}$; then $\bar{7} + 2 = \bar{5}$.

To multiply a logarithm with a negative sign.—Multiply the fractional part as in ordinary multiplication, then multiply the index which will give a negative product, and if there is anything to carry from the decimal place this quantity is positive, and is added as with positive and negative quantities.

Ex. (1) $2\cdot34655 \times 2 = 4\cdot69310$.

Ex. (2) $\bar{6}\cdot82132 \times 8 = \bar{42}\cdot57056$.

To divide a logarithm having a negative index.—When the negative index can be divided by the divisor, the quotient is written negative, and the fractional part divided in the ordinary way. When it is not so divisible, add to it the smallest negative amount which will make it divisible without a remainder, and prefix to the fractional part an equal positive integer. Then divide both parts of the log. separately, and place the quotient of the first part, marked negatively, as the index, and the quotient of the second part as the fractional part.

Ex. (1) $\bar{4}\cdot24236 \div 2 = \bar{2}\cdot12118.$

Ex. (2) $\overline{13}\cdot26434 \div 8.$

Here we add $\bar{3}$ to $\overline{13}$ to make it divisible, and we get $\overline{16}$, which when divided $= \bar{2}$; place before the fractional part the equal positive integer 3, making the fractional part 3·26434, which divided by 8 = ·40804. Therefore the quotient is $\bar{2}\cdot40804$.

Application of Logarithms.—(1) *To find the arithmetical complement.* The arithmetical complement of a number is the remainder after subtracting it from a number consisting of 1 with as many ciphers annexed as the number has integers. It is found by subtracting the right hand figure of the log. from 10 and all the rest from 9. Thus the arithmetical complement of 3·36542 is 6·63458.

(2) *To perform multiplication by logarithms.** Add the logarithms of the factors, and the sum is the log. of the product. (A negative index is to be subtracted when the log. is added, and added when the log. is subtracted.)

Ex. Multiply ·00352 by 86·4.

Log. of ·00352 = $\bar{3}\cdot54654$

,, 86·4 = 1·93651

Log. $\bar{1}\cdot48305$

the corresponding number to which is ·304128 = the product.

(3) *To perform division by logarithms.*—From the log. of the dividend subtract that of the divisor, and the remainder will be the log. of the quotient. Or add the arithmetical complement of the divisor to the log. of the dividend, then the sum with the index lessened by 10 is the log. of the quotient.

Ex. Divide 9·7128 by 0·456.

Log. of 9·7128 = 0·98734

,, 0·456 = $\bar{1}\cdot65896$

1·32838

* By the table appended no number can be accurately multiplied whose product contains more than 5 figures, for there are but 5 decimal places in these tables.

the corresponding number to which is 21·3 = quotient;

or, Log. of	9·7128	= 0·98734
Arith. comp. of	0·456	= 0·34104
Log. of Quotient	21·3	= 1·32838

(4) *To work proportion by logarithms.*—Add the log. of the second and third terms together, and from their sum subtract the log. of the first; the remainder is the log. of the answer; or add together the arithmetical complement of the first term to the log. of the second and third terms, and the sum after deducting 10 from the index will be the answer.

Ex.	First term	144	log.	2·15836
	Second term	21·3	,,	1·32838
	Third term	892·647	,,	2·95067
				4·27905
	Fourth term	132·03	log.	2·12069

or,	Arith. comp. of first term .	7·84164
	Log. of second term . .	1·32838
	Log. of third term . .	2·95067
	Fourth term . . .	12·12069 − 10 = 2·12069

(5) *To perform involution by logarithms.*—Multiply the log. by the name of the power; the product is the log. of the power.

Ex. (1). What is the twentieth power of 1·014?

Log. of 1·014 = 0·006038, which multiplied by 20 = log. ·12076 = 1·3205 answer.

Ex. (2). What is the cube of ·009?

Log. of ·009 = $\bar{3}$·95424, which multiplied by 3 = log. $\bar{7}$·86272 = 000000729, which is the cube.

(In multiplying the negative index, the carriage of it from the log. must be subtracted from the product.)

(6) *To extract the root of a number by logarithms.*—Divide the log. of the number by the number of the root, and the quotient is the log. of the root.

Ex. (1). Find the sixth root of 2. The log. of 2 is 0·30103, which divided by 6 = log. 0·05017, the number corresponding to which is 1·112246 = root.

Ex. (2). Find the cube root 0·041063625. The log. of this is $\bar{2}$·61345. Adding a negative 1 to the index (p. 332) gives $\bar{3}$, which divided by 3 = $\bar{1}$ the index of the log.; then prefixing 1 positive to the fractional part we get 1·61345, which divided by 3 = 1·53781, the number corresponding to which is 0·345, the root required.

LOGARITHM OF NUMBERS FROM 0 TO 1000.

No.	0	1	2	3	4	5	6	7	8	9	Prop.
0	0	00000	30103	47712	60206	69897	77815	84510	90309	95424	
10	00000	00432	00860	01284	01703	02119	02531	02938	03342	03743	415
11	04139	04532	04922	05308	05690	06070	06446	06819	07188	07555	379
12	07918	08279	08636	08991	09342	09691	10037	10380	10721	11059	344
13	11394	11727	12057	12385	12710	13033	13354	13672	13988	14301	323
14	14613	14922	15229	15534	15836	16137	16435	16732	17026	17319	298
15	17609	17898	18184	18469	18752	19033	19312	19590	19866	20140	281
16	20412	20683	20952	21219	21484	21748	22011	22272	22531	22789	264
17	23045	23300	23553	23805	24055	24304	24551	24797	25042	25285	249
18	25527	25768	26007	26245	26482	26717	26951	27184	27416	27646	234
19	27875	28103	28330	28556	28780	29003	29226	29447	29667	29885	222
20	30103	30320	30535	30750	30963	31175	31387	31597	31806	32015	212
21	32222	32428	32634	32838	33041	33244	33445	33646	33846	34044	202
22	34242	34439	34635	34830	35025	35218	35411	35603	35793	35984	193
23	36173	36361	36549	36736	36922	37107	37291	37475	37658	37840	185
24	38021	38202	38382	38561	38739	38917	39094	39270	39445	39620	177
25	39794	39967	40140	40312	40483	40654	40824	40993	41162	41330	170
26	41497	41664	41830	41996	42160	42325	42488	42651	42813	42975	164
27	43136	43297	43457	43616	43775	43933	44091	44248	44404	44560	158
28	44716	44871	45025	45179	45332	45484	45637	45788	45939	46090	153
29	46240	46389	46538	46687	46835	46982	47129	47276	47422	47567	148
30	47712	47857	48001	48144	48287	48430	48572	48714	48855	48996	143
31	49136	49276	49415	49554	49693	49831	49969	50106	50243	50379	138
32	50515	50651	50786	50920	51055	51189	51322	51455	51587	51720	134
33	51851	51983	52114	52244	52375	52504	52634	52763	52892	53020	130
34	53148	53275	53403	53529	53656	53782	53908	54033	54158	54283	126
35	54407	54531	54654	54777	54900	55023	55145	55267	55388	55509	122
36	55630	55751	55871	55991	56110	56229	56348	56467	56585	56703	119
37	56820	56937	57054	57171	57287	57403	57519	57634	57749	57864	116
38	57978	58093	58206	58320	58433	58546	58659	58771	58883	58995	113
39	59106	59218	59329	59439	59550	59660	59770	59879	59988	60097	110
40	60206	60314	60423	60531	60638	60746	60853	60959	61066	61172	107
41	61278	61384	61490	61595	61700	61805	61909	62014	62118	62221	104
42	62325	62428	62531	62634	62737	62839	62941	63043	63144	63246	102
43	63347	63448	63548	63649	63749	63849	63949	64048	64147	64246	99
44	64345	64444	64542	64640	64738	64836	64933	65031	65128	65225	98
45	65321	65418	65514	65610	65706	65801	65896	65992	66087	66181	96
46	66276	66370	66464	66558	66652	66745	66839	66932	67025	67117	95
47	67210	67302	67394	67486	67578	67669	67761	67852	67943	68034	92
48	68124	68215	68305	68395	68485	68574	68664	68753	68842	68931	90
49	69020	69108	69197	69285	69373	69461	69548	69636	69723	69810	88
50	69897	69984	70070	70157	70243	70329	70415	70501	70586	70672	86
51	70757	70842	70927	71012	71096	71181	71265	71349	71433	71517	84
52	71600	71684	71767	71850	71933	72016	72099	72181	72263	72346	82
53	72428	72509	72591	72673	72754	72835	72916	72997	73078	73159	81
54	73239	73320	73400	73480	73560	73640	73719	73799	73878	73957	80
55	74036	74115	74194	74273	74351	74429	74507	74586	74663	74741	78

LOGARITHM OF NUMBERS FROM 0 TO 1000—*continued.*

No.	0	1	2	3	4	5	6	7	8	9	Prop.
56	74819	74896	74974	75051	75128	75205	75282	75358	75435	75511	77
57	75587	75664	75740	75815	75891	75967	76042	76118	76193	76268	75
58	76343	76418	76492	76567	76641	76716	76790	76864	76938	77012	74
59	77085	77159	77232	77305	77379	77452	77525	77597	77670	77743	73
60	77815	77887	77960	78032	78104	78176	78247	78319	78390	78462	72
61	78533	78604	78675	78746	78817	78888	78958	79029	79099	79169	71
62	79239	79309	79379	79449	79518	79588	79657	79727	79796	79865	70
63	79934	80003	80072	80140	80209	80277	80346	80414	80482	80550	69
64	80618	80686	80754	80821	80889	80956	81023	81090	81158	81224	68
65	81291	81358	81425	81491	81558	81624	81690	81757	81823	81889	67
66	81954	82020	82086	82151	82217	82282	82347	82413	82478	82543	66
67	82607	82672	82737	82802	82866	82930	82995	83059	83123	83187	64
68	83251	83315	83378	83442	83506	83569	83632	83696	83759	83822	63
69	83885	83948	84011	84073	84136	84198	84261	84323	84386	84448	63
70	84510	84572	84634	84696	84757	84819	84880	84942	85003	85065	62
71	85126	85187	85248	85309	85370	85431	85491	85552	85612	85673	61
72	85733	85794	85854	85914	85974	86034	86094	86153	86213	86273	60
73	86332	86392	86454	86510	86570	86629	86688	86747	86806	86864	59
74	86923	86982	87040	87099	87157	87216	87274	87332	87390	87448	58
75	87506	87564	87622	87680	87737	87795	87852	87910	87967	88024	57
76	88081	88138	88196	88252	88309	88366	88423	88480	88536	88593	57
77	88649	88705	88762	88818	88874	88930	88986	89042	89098	89154	56
78	89209	89265	89321	89376	89432	89487	89542	89597	89653	89708	55
79	89763	89818	89873	89927	89982	90037	90091	90146	90200	90255	54
80	90309	90363	90417	90472	90526	90580	90634	90687	90741	90795	54
81	90849	90902	90956	91009	91062	91116	91169	91222	91275	91328	53
82	91381	91434	91487	91540	91593	91645	91698	91751	91803	91855	53
83	91908	91960	92012	92065	92117	92169	92221	92273	92324	92376	52
84	92428	92480	92531	92583	92634	92686	92737	92788	92840	92891	51
85	92942	92993	93044	93095	93146	93197	93247	93298	93349	93399	51
86	93450	93500	93551	93601	93651	93702	93752	93802	93852	93902	50
87	93952	94002	94052	94101	94151	94201	94250	94300	94349	94399	49
88	94448	94498	94547	94596	94645	94694	94743	94792	94841	94890	49
89	94939	94988	95036	95085	95134	95182	95231	95279	95328	95376	48
90	95424	95472	95521	95569	95617	95665	95713	95761	95809	95856	48
91	95904	95952	95999	96047	96095	96142	96190	96237	96284	96332	48
92	96379	96426	96473	96520	96567	96614	96661	96708	96755	96802	47
93	96848	96895	96942	96988	97035	97081	97128	97174	97220	97267	47
94	97313	97359	97405	97451	97497	97543	97589	97635	97681	97727	46
95	97772	97818	97864	97909	97955	98000	98046	98091	98137	98182	46
96	98227	98272	98318	98363	98408	98453	98498	98543	98588	98632	45
97	98677	98722	98767	98811	98856	98900	98945	98989	99034	99078	45
98	99123	99167	99211	99255	99300	99344	99388	99432	99476	99520	44
99	99564	99607	99651	99695	99739	99782	99826	99870	99913	99957	44

Mean Age of Population.—This is got by adding together the ages of all persons living, and dividing the sum by the total number of living persons. Dr Farr found the mean age of the English population to

remain constant from 1851 to 1871, and it was 26·4 years, that of males being 26, that of females 26·8. Further, he found that the mean age of persons of 20 and upwards for the census of 1851 was 40·4 years, for census 1861, 40·7, and for census 1871, 40·8.

Causes of Movement of Population.—These are:—

1. External.—(1) IMMIGRATION, which not only adds to the total number of units, but as a rule alters the age and sex distribution of a people as seen in new countries where the males are more numerous than the females, and the proportion of people under 30 years of age is greater than in Europe.

(2) EMIGRATION has the very opposite effect upon the country it influences, tending to retard the proportional increase of the young in the general population, and to increase in some measure the relative proportion of total females.

2. Internal.—(1) MARRIAGES. It is self-evident that the greater the number of marriages the more rapidly does a population increase, provided the fecundity of such marriages and the age at marriage remain the same, and so with increased fecundity and with early marriage if the number who marry remain unchanged. Fertility of marriages depends mainly upon the age of the females at marriage and the duration of married life. The mean duration of married life is calculated at 27 years, and represents the mean time that children have both their parents. It is shortened by late marriages (which lessen fecundity), and thus we see why the age of the parent when the child is born, is a factor to be taken into account in the movement of population. Those females marrying between 16 and 45 marry during the child-bearing age; those who do so after 45 are not likely to be prolific. The woman who marries, say at 17, has the prospect of about 28 years of child-bearing life before her; she who does so at 35 has but 10. True, it is a noticeable fact that those who marry very young cease bearing children as a rule at a very early age, but the probability of bringing forth their complement is greater than in those who marry late.

The *age at marriage* affects population in another way from actual fecundity. Early marriages shorten the intervals between succeeding generations, and thus tend to increase of population. That the shortening of the intervals acts in this way will be apparent from the following:—Suppose the interval between generations to be 33 years, and the rate of increase 1·29 per cent., that is 0·0129 per individual, so that each one becomes 1·0129 in a year. The log. of 1·0129 = 0·005566, which multiplied by 33 = 0·183678, the corresponding number to which is 1·526, thus 1 becomes 1·526 in 33 years, or every 1000 becomes 1526. Now if the intervals were shortened to 29 years, but the births and duration of life remained the same, the rate of increase would be raised from 1·29 per cent. to 1·46 per cent. (at which rate 1000 would become 1613 in 33 years) for the log. of 1·526 = 0·183678, and this divided by 29 = 0·00633, the number corresponding to which is 1·0146. That is 0·0146 is the rate per individual which is 1·46 per cent.

Marriage Rate.—This is stated in three ways—(1) The number of marriages to every 1000 persons living; (2) The number of marriages per 1000 marriageable persons living, and (3) The number of *persons* marrying to every 1000 living. Method (1) is used very generally. Method (2) only in some countries, although it is the more correct, allowing of reliable comparisons with other populations by eliminating error of age constitution. Method (3) is that adopted by the Registrar General for this country.

Estimated population at middle of year : 1000 : : number married during the year : x.

(2) The Number Born.—When more births than deaths take place in a given time in a community, it has increased, and the net increase is termed the **Natural Increment** of the people—the term **Actual Increment** being used to designate the increase as found by enumeration, and which thus takes migration into account.

Sex Proportion at Birth.—There are more males than females born, and their relation seems to depend in some measure upon the age at which the people marry. The younger this is the larger is the proportion of boys.

Illegitimates.—These are generally stated as (1) a percentage of the total births, or (2) as so many per 1000 births. The calculation is as follows:—

Total births during year : 100 (or 1000) : : illegitimate births during year : x.

Other methods are also used, namely (*a*) finding the proportion of illegitimate births to 1000 living persons; and (*b*) the proportion to unmarried women living between the ages of 15 and 45 (or 15 and 55). The last is the most correct.

The Birth-Rate.—This may be calculated in two ways. (*a*) Number of births to every 1000 living women between the ages of 15 and 45—the principal child-bearing period. This method is essential in comparing the birth-rates of different communities, as by it we eliminate any error arising from difference of age and sex distribution. (*b*) The number of births to every 1000 living persons. Thus—

Estimated pop. middle of year : 1000 : : births during the year : x.

This latter method is that generally adopted, but we must always bear in mind that valuable as it is, in comparing one year's births with those of another year in the same community, it cannot be used for purposes of comparison with other communities, except with such as have a similar age and sex scale.

Effect of Birth-Rate upon Age Constitution.—The higher the birth-rate the greater is the number of young and middle-aged in a community.

(3) Deaths.—The number who die is the other direct main factor in regulating movement of population, for if there are more deaths than births the numbers of the people decrease; or if the death-rate, though less than the birth-rate, rise, and the birth-rate remain the same, the rate of increase of the population is thereby diminished. It is largely by the death-rate that we are enabled to gauge the sanitary condition of a district, and for this reason we must carefully study its calculation so as to guard against fallacy.

The Death-Rate is stated in two ways: (*a*) the number of deaths to every 1000 living inhabitants, and which is calculated as follows:—

Estimated pop. middle of year : 1000 : : total deaths during year : *x*.

(*b*) The number of deaths at a certain age period to every 1000 living at that age period—age period meaning the interval between two ages as 0 to 5; 5 to 10 years, etc. (all of the exact age 5 go into the period 5 to 10, and all of the exact age 10 into the period of 10 to 15, and so on).

The result of the first method (*a*) is called the *crude death-rate*, and is reliable enough when we are dealing with one community year after year, or with communities having the same age and sex distribution. It is, however, useless for comparison when considering populations in which sex and age distribution vary, unless subjected to *correction*.

In using the second method (*b*) we avoid this, but complicate the subject by introducing different death-rates at various groups of ages. Both methods should be employed in a thorough investigation of the mortality of a district.

We shall now discuss the first method, and show how the death-rate is determined by age and sex distribution, and how in two communities with different age and sex distribution we can apply the method and obviate the error that would occur in a comparison of their crude death-rates without correction.

From the Supplement to the Forty-fifth Annual Report of the Registrar General regarding the mean annual mortality at 12 groups of ages for the various decennial from 1841 to 1880 in England and Wales. Dr Ogle shows by a table of mortality rates that in every decennium there are 7 groups of ages in which the death-rate is less than that for all ages. The groups taken are as follows:—All ages; under 5; 5 to 10; 10 to 15; 15 to 20; 20 to 25; 25 to 35; 35 to 45; 45 to 55; 55 to 65; 65 to 75; and 75 and over. He shows that the death-rate for *all ages* is exceeded among those under 5 years, but is not again approached until we come to group 45 to 55, and not reached until group 55 to 65 which is again greater. This applies to both sexes. It is thus plain that in a community more largely composed of units of ages from above 5 to under 55, than is the population of England and Wales, from which the table is constructed, that the death-rate at *all ages* will be less, other things being equal, because the community will be more largely composed of people of an age at which the rate of dying is low. So in a population in which the proportion of those under 5 and above 55, is greater than that of England and Wales, we should find the death-rate at *all ages* higher. Or we may consider the matter in this way:—Suppose we have two communities living under exactly similar sanitary conditions, each with a population of 1000, and that community A contains 200 whose ages are under 5 years, and 800 of ages above 5; while community B contains 100 under 5 years, and 900 of ages above; and suppose the death-rate of children living under such conditions and under 5 was 80 per 1000 living of that age period, and that the mean death-rate for

all ages above 5 was 10 per 1000 persons living above that age; then we should have the crude death-rate as follows :—

200 at 80 per 1000 = 16
800 at 10 per 1000 = 8
A's crude death-rate = 24

100 at 80 per 1000 = 8
900 at 10 per 1000 = 9
B's crude death-rate = 17

Here then are two communities whose sanitary condition is identical, the one with a crude death-rate of 24 whilst the other has but 17, and this wholly due to difference of age distribution.

Again, the table shows that the mortality among females at all groups of ages but two is lower than that among males, and even in the two groups (they are 10 to 15, and 15 to 20) in which a higher mortality prevails, the excess over the male mortality is very small. It is thus obvious, that if we have a population constituted more largely of females than of males in one community than in another (excepting of course the improbable supposition that nearly all are of ages 10 to 15, or 15 to 20, or both), the rate of mortality of the former will be the less.

Now communities differ materially in age and sex distribution. In new countries and large industrial towns there is a constant accession of young adults at an age at which the death-rate is low. Moreover, the marriage and birth-rates, as before explained, are high, and in consequence after a time an arrangement of age constitution in the population is arrived at, by which there is a greater proportion of those between the ages of 5 and 55, in which the mortality rate is low, than is found in communities in general. There is of course an undue proportion of the age 0 to 5 as well, and in which the mortality is extremely high, but so great is the proportion of the former that the effect which the latter would otherwise have in increasing the general death-rate, is entirely overbalanced, and as a result a lowered *general rate* follows if faulty sanitation does not prevent it. This lowering of the crude death-rate which ought everywhere to be produced by such arrangement of distribution is unfortunately not noticeable in the records of our industrial towns, for the insanitary conditions there so raise the mortality that the effect is more than eclipsed, and, in fact, the age distribution of such places hides the death-rate which their insanitary state gives rise to, for when allowance is made for age distribution their already high rate is made higher.

The sex distribution of communities also varies, but only in very special cases is it worth while considering its influence upon the general rate, and for this reason, that even if a population were wholly composed of one sex the mortality would not be altered to any serious

extent, so that when there is but a small excess of either sex the effect upon the death-rate is insignificant.

Now, then, how can we from the crude death-rate compare the sanitary condition of two communities in which the age and sex distribution differ? This is done by taking a community as a *standard*. The standard generally adopted for any part in England is that of England and Wales, but for any part of Scotland all Scotland may be taken, and the process to be gone through is as follows: Let x be the community whose death-rate we wish to compare with that for England and Wales, which was 21·27 per 1000 at all ages during period 1871-80.*

We find out the numbers living in x at the successive groups of ages, placing them alongside the columns of death-rates, male and female, at those ages which obtained in England and Wales, or in Scotland if Scotland is to be the standard, in the same year, or what was the mean of any decennium. We then apply these death-rates, male and female, to the members of community x, male and female respectively, and place the results in adjoining columns. We next take the sum of these results (male and female columns), and apply them to the total population of x to get what is called the standard death-rate, and a table of this kind is formed—

Age.	Mean Annual Mortality per 1000 for England and Wales, 1871-80.		Population of x.		"Results," or Total Deaths, got by applying Death-Rates of England and Wales at each Age Period to the Number in Population of x, living at the same Age.		Standard Rate, being Total Results applied to the whole Population of x.
	Males.	Females.	Males.	Females.	Males.	Females.	
Under 5	68·14	58·10	3000	3200	204·42	185·92	..
5-10	6·67	6·20	2900	2800	19·34	17·36	..
10-15	3·69	3·70	2600	2700	9·59	9·99	..
15-20	5·23	5·43	2400	3000	12·55	16·29	..
20-25	7·32	6·78	2500	3000	18·30	20·34	..
25-35	9·30	8·58	4000	4000	37·20	34·32	..
35-45	13·74	11·58	3000	3000	41·22	34·74	..
45-55	20·05	15·59	2000	3000	40·10	46·77	..
55-65	37·76	28·54	1500	1800	52·14	51·37	..
65-75	69·57	60·82	1000	1200	69·57	72·98	..
75 & over	169·08	155·83	300	400	50·72	62·33	..
			25200	28100	555·15	552·41	
					53300 : 1000 :: 1107·56 : 20·77		

* I take England and Wales for convenience, as it was that which I took in discussing this subject in my D.Sc. Thesis in 1890, and from which I have extracted the small summary regarding Vital Statistics given in this book.—[W. J. B.]

This 20·77—the standard death-rate—is the crude death-rate which x would show if the mortality in the various age groups comprising its population were the same as that which obtained for the like age periods in England and Wales during 1871-80 (21·27).

Having got our standard, we can now compare the crude death-rate of x with that of England and Wales during 1871-80, at any other time :— Thus suppose the rate for x in any year to be 19; then we know that the ratio which our standard rate holds to that of England and Wales is as 20·77 to 21·27, so it is, therefore, in this ratio that a death-rate of 19 stands, and we have 20·77 : 21·27 :: 19 : 19·45.

Now 19·45 is called the corrected death-rate as distinguished from 19, which is the recorded rate.

Instead of working out the proportion in this way, we can of course obtain the same result by multiplying the recorded rate 19 by $\frac{21{\cdot}27}{20{\cdot}77}$ that is, by 1·0240, which is therefore termed the correcting factor.

To be accurate, we should always correct for both the age and sex distribution, but practically it is usually unnecessary to do so for the latter, because as already explained, the slight difference in the result is so trifling that it is not worth the labour involved, which is of course double that required for age distribution only, when we but take the crude death-rate of *persons* (for Scotland or for England and Wales) as our first column, and *persons* living at the various groups in x for our second.

The mean annual death-rate per 1000 *persons* at the successive groups of ages in England and Wales, 1881-90, taken from Supplement to Fifty-fifth Annual Report, is as follows :—

Under 5	5-10	10-15	15-20	20-25	25-35
56·82	5·29	3·02	4·35	5·61	7·53
35-45	45-55	55-65	65-75	75 & over.	All Ages.
11·42	17·06	31·33	64·65	153·67	19·08

What is known as the comparative mortality figure is a number which allows one more readily to see the difference between the mortalities of different districts after correction. It is calculated as follows :—Take the recorded death-rate as above for decennium 1871-80 of England and Wales, namely, 21·27. District A has a corrected death-rate of 15·97. Therefore its comparative figure when 1000 is the standard, is $15{\cdot}97 \times 1000 \div 21{\cdot}27 = 751$. That for B is $26{\cdot}87 \times 1000 \div 21{\cdot}27 = 1263$.

Dr Ogle in the Registrar General's Forty-fifth Annual Report for England and Wales states that as a general rule correction raises the rates of towns and industrial centres, but lowers the rate of rural districts.

Before passing from *Method I.*, we shall explain the practical plan adopted in finding the crude death-rate for terms less than a year, as is customary for large cities where weekly or even daily returns are made. It is as follows: Suppose the number of deaths which took place during a week in any city after deducting country deaths was 92, and that the population estimated to the middle of that year was 266900. The correct number of days in a natural year = 365·24226, and the number of weeks 365·24226 ÷ 7 = 52·17747.

If we divide the estimated population by this number, we get what may be called the weekly population, namely 5115, which serves as a constant throughout the year by which to divide the number of weekly deaths to get the rate per individual. The rate then per individual for that city for that week was 92 ÷ 5115, or 0·018. By removing the decimal point three places to the right, we get the rate per 1000, namely 18. This plan saves the labour involved in multiplying the deaths each week by 52·17747, and dividing the product by the estimated population.

As to the other method (*b*) of stating the death-rate, namely, showing the ratio of mortality at groups of ages, the system is practically faultless when given for both sexes; and by it perfectly trustworthy comparisons may be made between various communities.

As before indicated, the numbers of males and of females living in the population at the different age periods are found calculated to the middle of the year, and then the total deaths—males and females—that have taken place during the year at the successive age periods are respectively applied to these. Thus let us take the two age periods 0-5 and 20-25.

In district *x* with a population of 50,000 there were living under 5 years 3500 males and 3600 females, and between 20 and 25 years 2000 males and 2500 females, as calculated to the middle of the year. During the period 1st January to 31st December both inclusive, the deaths of males under 5 years amounted to 245, and the deaths of females to 216; that of males between 20 and 25 to 16, and of females 17. It may also be added that the total deaths were 990.

Then, 3500 : 1000 :: 245 : 70
and 3600 : 1000 :: 216 : 60

Again,

2000 : 1000 :: 16 : 8
2500 : 1000 :: 17 : 6·8

so that the death-rate would be stated as 70 per 1000 for males and 60 for females at the age group 0-5, and 6·8 for females at the age group 20-25.

We shall now point out the *false methods* mentioned in the Supplement to the Thirty-fifth Annual Report of the Registrar General of England, as being employed by some medical officers in dealing with mortality at age groups. They are:—

"(*a*) Stating the proportion of deaths at various age periods *to the deaths at all ages*"; and

"(*b*) Stating the proportion of deaths at various periods *to the population at all ages.*"

In comparing the proportion of deaths at any age period to the deaths at all ages, and stating the ratio they bear thereto, it is manifest that the figures resulting would unduly raise the rate if the total deaths were small, and would thereby seek to show that a high mortality at this age period had prevailed when the total low death-rate actually indicated the probability of the very opposite, or suppose that in our *x* community an epidemic of measles took place raising the total deaths to 1320. By this false method we might be led to believe that the mortality, which was in reality very excessive in those under 5, was at the 20-25 age period very low, because the rate of the latter held the ratio of one death at that age period to every 40 deaths, whereas before there was one death to every 30; still in this community no change in the death-rate of that age period might have occurred. But this is merely dealing with one community. If we apply the method to two communities with different age distribution the fallacies from it are introduced, and comparing them would be useless. And so if the proportion of deaths recorded at an age period is stated as a ratio to the population at all ages, age and sex distribution step in and destroy comparison.

The age periods we ought to adopt if our population is a small one should not exceed 5, for if it be divided into 11, as is done by the Registrar General in dealing with large numbers, their value for comparative purposes is questionable.

There are two periods, the ratio for which we must always carefully investigate, when we wish to compare the sanitary states of districts. These are, (*a*) the proportion who die under 1 year or *infant mortality*, and, (*b*) the proportion who die under 5 years, because it is at these ages that insanitary conditions of environment tell most markedly.

Infant Mortality should be calculated like other rates, that is, by the proportion of deaths in the year to the estimated number of infants living under 1 year, but owing to the census returns of this number being unreliable, because of mistakes arising from the confusion of the meaning of 1 year by those making the returns, another method is adopted, namely, *stating the proportion of deaths under 1 year to the registered births in the same year.** The calculation is as follows:—

Registered births during year : 1000 :: deaths under 1 : *x*.

The period of greatest mortality is the first week. Male infants have a higher rate than female, and illegitimate than legitimate. It is greater in industrial than in agricultural counties, and in large manufacturing towns it is very heavy. The causes influencing mortality among infants apart from the diseases incident to infant life are chiefly bad health or

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* The mean of the births of the current and preceding year ought to be taken, but as the births in a population vary very little, this simpler method is generally adopted.

hereditary taints, as syphilis, on the part of the parents inducing premature or weakly children; ignorance of nursing, specially noticeable in young mothers; nursing by bottle instead of by breast; unsuitable diet; infanticide; and neglect of children by their mothers.

Such influences, and especially bad feeding and neglect, are the more prevalent in towns where women are employed in textile manufacture, and who allow their children to look after the infants or send their infants out to be nursed, and thus results the higher death-rate in such places. It is owing also to the last mentioned causes, namely infanticide and neglect, that illegitimate infants have such an enormous mortality as we find them to have, amounting to 300 to 400 per 1000 illegitimate births.

It is of even greater importance to know correctly the mortality at the wider group age, 0-5, for its rate is the best index we have of the health of a district.

As shown by Dr Farr, out of every 1000 children born 149 die on an average before the first year of life is ended, and nearly half of that number before the end of the second month, 54 die in the second year, 28 in the third, 18 in the fourth, and 14 in the fifth year, so that by the end of this age period 263 of the 1000 have disappeared. But if we look at different localities we find great variation. In the healthy districts only 175 instead of 263 succumb, whereas in certain cities with faulty sanitary conditions the number sometimes reaches 460. The causes of death during the period are very similar to those affecting the infant age, these being measles, whooping-cough, diphtheria, scarlet fever, and those diseases resulting from starvation and neglect.

From mortality returns we have still another means by which we may gauge the sanitary amenity of a district, namely, finding its zymotic death-rate, or the proportion which the deaths from diseases usually classified under this term, bear to the number of living inhabitants; for it is in communities with insanitary surroundings, as improper water-supply, bad drainage, inferior house accommodation, overcrowding, filth, etc., that these diseases find a suitable nidus and spread. To render this death-rate a more reliable sanitary test, it should be subjected to correction for age and sex distribution. But taken, as it usually is, without this correction it generally indicates to some extent the sanitary state. It is specially useful when applied to the same community for a *series* of years, for of course we must bear in mind that an extensive epidemic one year raises the rate for that particular disease in that year, and lowers it for some succeeding years, because of one attack generally preventing recurrence in the same individual. Moreover, the degree of virulency with some of the diseases may vary much at their several visitations when affecting the same numbers living under what would appear to be precisely similar sanitary conditions.

The seven chief zymotic diseases selected by the Registrar General are, (1) small-pox, (2) measles, (3) scarlet fever, (4) diphtheria, (5) whooping-cough; (6) fever, including typhus, typhoid, and ill-defined forms of continued fever; and (7) diarrhœal diseases, including dysentery

and cholera. Their mortality rate per 1000 living persons during the last few years may be put down as follows:—Small-pox 0·013, measles 0·468, scarlet fever 0·240, diphtheria 0·15, whooping-cough 0·44, typhus 0·006, typhoid 0·179, continued fever 0·01, diarrhœa, including dysentery and cholera 0·68. True dysentery is now unknown in this country, and cholera has not visited us since 1866. Perhaps the most remarkable decrease in mortality in all these zymotics has occurred in the case of scarlet fever, whose virulency has been gradually lessening from the quinquennial period 1861-65, when it stood about 0·98 per 1000 living, until the present time when the rate is about 0·24.

This decrease has likewise occurred in Scotland (see Edinburgh table, p. 349), and all over Western Europe.

The fatality of these zymotics—that is, the percentage of those who die to the number attacked—may be put down at the present time as follows: Small-pox 10-12 per cent., measles 4-8, scarlet fever 4-5, diphtheria and croup 16-20, whooping-cough about 5, typhus 22-25, typhoid 17-18, continuous and relapsing fevers 7-8, erysipelas 4-5. Puerperal fever is better stated as per 1000 births, and the rate is about 2·2. Of late years there has been a marked decrease in the case mortality of diphtheria, probably due to antitoxin treatment, now so largely employed. A glance at the following tables will indicate how the attack rates per 1000 population, the mortality rates of *all cases*, as well as *case mortality rates* (hospital and home-treated) have varied for scarlet fever, diphtheria, and typhoid, from 1891 to 1904, both inclusive.

Recording of Statistical Results.—In recording statistical results, two methods are employed, the tabular and the graphic or chart method.

Appended is the tabular method as per returns of Edinburgh and Glasgow with regard to the three most common diseases notifiable. In looking over these tables, there are a few figures deserving of special attention. Take the Edinburgh table. Here one is struck with the enormous drop in the case fatality of scarlet fever, beginning in the most marked degree in 1880 and 1881, and gradually getting less and less up to 1904. This remarkable decline in case mortality has been common to Britain and the Continent.

It is impossible with our present knowledge to say to what it is due, except change in the virulence of the disease. Although the case fatality has gone down, there cannot be said to have been any diminution in the rate per 1000 inhabitants attacked, notwithstanding the declining birth-rate, except in the last five years, which, judging from results elsewhere in the past where per centage of population attacked has been noted, will probably rise again and approach the earlier figures. The typhoid attack rate and the typhoid case mortality have remained fairly stationary for many years, some diminution being observed in attack rate since 1896. The cases classed under diphtheria and croup seem of late years to be on the increase, but the case mortality has been gradually falling for years, and perhaps may be accounted for by the antitoxin treatment. Whatever the influencing factors are in this connection, the facts shown by statistics are very remarkable. Another feature in

this table is the gradual decline in the birth-rate which set in as early as 1888, and reached to the low rate of 23·4 per 1000 population in 1904.

The Glasgow tables show a similar state of matters to the Edinburgh table, only in a less marked degree, excepting that the case mortality is slightly higher in scarlet fever than in that of Edinburgh.

Then if we look at the case mortality in the Glasgow table of cases treated in hospital and cases treated at home, there is an apparent advantage in having scarlet cases treated in hospital, but in this disease it has to be kept in mind that the cases which go into hospital are not as a rule the bad cases which either die at home before the nature of the disease is determined or are too ill to be removed to hospital. There are also other disturbing factors which have made many to question whether, on the whole, hospital treatment of this disease is advisable. The rate of case mortality which it now exhibits, makes one ask whether the advantage of removal is not one only of convenience for householders, and whether it is commensurate with the expense to the ratepayer. This is not surprising when we consider the low mortality rate which the disease has now reached. The special infectious stage of the disease which, twenty years ago, was considered by the majority of medical men as the disquamative, has of late years been questioned, especially as an infectious medium *per se*, and by many at the present moment it is denied, the most infectious period being the early stages before disquamation, or at any rate during the sore throat stage or afterwards from ear and nose sequelæ.

Small-pox is not given in either table, as this disease is not very frequent in an epidemic form, and would vanish altogether as an epidemic were compulsory re-vaccination established.

Instead of tabulating diseases, the graphic method of expressing prevalence, mortality, etc., is most easily seen at a glance in chart records. In illustration, the chart for scarlet fever prevalence in the city of Dundee is given for the decennium 1895-1904 (page 353). It is a method now used by most medical officers of cities, and has the great advantage of expressing at a glance conditions regarding statistical results without the fatigue involved in examining tabular statements. The remarkable rise in this chart in 1898 will be noted, and the great fall reached in 1904, probably to rise as before during the next decennium.

During all of the periods given in the appended tables for which returns are tabulated, notification Acts were in operation. In Edinburgh, before the passing of the 1889 Act, notification was in force under a local Act.

EDINBURGH TABLE.

Year.	Population.	Scarlet Fever.					Typhoid Fever.					Diphtheria and Membranous Croup.					Birth-Rate.
		Total Notifications.	Percentage Case Fatality.	Cases notified per 1000 Population.	Treated in Hospital.	Percentage Case Fatality.	Total Notifications.	Percentage Case Fatality.	Cases notified per 1000 Population.	Treated in Hospital.	Percentage Case Fatality.	Total Notifications.	Percentage Mortality.	Cases notified per 1000 Population.	Treated in Hospital.	Percentage Case Fatality.	
1880	..	..	17·8	..	..	..	336	14·5	..	..	..	172	20·3	..	..	..	..
1881	228,346	1904	13·4	8·3	..	..	413	11·3	1·8	..	..	171	21·6	·7	..	..	32·2
1882	232,602	2161	4·0	9·2	..	..	639	10·9	2·7	..	..	217	15·2	·9	..	..	31·6
1883	239,910	1817	4·6	7·5	..	..	346	12·1	1·4	..	..	214	15·8	·8	..	..	28·5
1884	242,802	1423	5·1	5·8	..	..	591	11·8	2·4	..	..	183	24·0	·7	..	..	30·8
1885	245,447	1087	2·5	4·4	..	..	589	10·5	2·4	..	..	149	28·8	·6	..	..	29·9
1886	248,121	1306	3·2	5·2	..	..	224	13·8	·9	..	..	212	24·0	·8	..	..	30·0
1887	250,824	2587	5·5	10·3	..	..	332	11·4	1·3	..	..	256	22·2	1·0	..	..	30·4
1888	253,264	618	3·2	2·4	..	..	245	11·0	·9	..	..	245	26·5	·9	..	..	29·6
1889	256,318	1255	2·3	4·8	..	..	320	10·0	1·2	..	..	354	27·1	1·3	..	..	28·9
1890	259,110	1197	4·0	4·6	480	5·0	500	8·8	1·9	241	7·4	361	23·5	1·3	122	22·9	27·6
1891	261,225	979	5·0	3·7	502	3·5	445	9·4	1·7	320	7·5	207	23·1	·7	89	19·1	28·2
1892	265,573	1856	3·7	6·9	932	4·0	238	11·7	·8	132	14·4	203	20 6	·7	75	20·0	26·9
1893	269,105	1629	3·0	6·0	960	2·7	274	13·1	1·0	157	14·6	251	24·7	·9	88	27·2	27·6
1894	272,683	1821	3·5	6·6	1087	2·7	310	12·2	1·1	189	11·6	362	23·7	1·3	129	31·0	26·4
1895	276,309	2832	2·2	10·2	1692	2·1	417	12·9	1·5	306	10·4	314	20·7	1·1	157	21·0	26·6
1896	279,983	2185	2·1	7·8	1703	2·4	328	10·9	1·1	263	12·5	251	20·7	·8	114	24·5	27·1
1897	297,198	2597	3·5	8·7	748	3·9	254	9·4	·8	195	10·8	214	20·5	·7	110	18·1	26·8
1898	301,305	2387	3·0	7·9	1605	2·7	241	11·2	·7	157	12·0	269	14·1	·8	120	17·5	26·8
1899	305,468	1185	4·2	3·8	1034	3·9	289	13·4	·9	216	12·9	279	10·0	·9	147	7·4	26·9
1900	309,688	991	2·7	3·2	825	2·5	249	10·0	·8	206	6·8	483	10·0	1·5	321	10·5	26·2
1901	316,837	892	2·9	2·8	748	2·6	215	13·9	·6	186	9·6	542	10·7	1·7	398	7·0	24·9
1902	322,966	812	3·6	2·5	700	4·0	192	14·0	·5	173	7·5	408	7·8	1·2	323	5·8	24·4
1903	327,441	1415	3·7	4·3	1293	3·0	237	9·2	·7	230	6·9	575	10·2	1·7	459	7·4	24·7
1904	331,977	1070	2·8	3·2	1157	2·3	196	11·2	·5	193	9·3	752	8·3	2·2	624	6·5	23·4

GLASGOW—SCARLET FEVER.

Year.	Population.	Treated at Home.			Treated in Hospital.			Per Cent. Fatality all Cases.			5 Yearly Means.	Cases notified per 1000 Population.	Birth-Rate.
		Cases.	Deaths.	Case Mortality per cent.	Cases.	Deaths.	Case Mortality per cent.	Cases.	Deaths.	Rate.			
*1891	567,272	1133	62	5·5	1912	139	7·3	3045	201	6·6	..	5·3	Mean, 33·9
1892	669,059	1807	110	6·1	3037	191	6·3	4844	301	6·2	..	7·2	
1893	677,883	1172	83	7·1	2855	184	6·4	4027	267	6·6	..	5·9	
1894	686,820	1034	63	6·1	2896	147	5·1	3930	210	5·3	..	5·7	
1895	695,876	858	43	5·0	2644	141	5·3	3502	184	5·3	6·0	5·0	
1896	705,052	576	25	4·3	2152	118	5·5	2728	143	5·2	..	3·8	34·1
1897	714,919	724	29	4·0	2231	101	4·5	2955	130	4·4	..	4·1	33·4
1898	724,349	640	45	7·0	2980	145	4·9	3620	190	5·2	..	5·0	33·2
1899	742,194	764	58	7·6	3964	147	3·7	4728	205	4·3	..	6·3	32·5
1900	753,494	594	47	7·9	3568	163	4·6	4162	210	5·0	4·8	6·0	32·2
1901	764,467	522	26	5·0	2795	105	3·8	3317	131	3·9	..	4·3	31·8
*1902	775,601	369	25	6·8	2140	88	4·1	2509	113	4·5	..	3·2	31·8
*1903	786,897	297	17	5·7	1734	65	3·8	2031	82	4·0	4·2 (4 years)	2·5	32·0
*1904	798,357	265	13	4·9	1308	56	4·3	1573	69	4·4	..	2·0	..

* Registrar General's Annual Summaries.

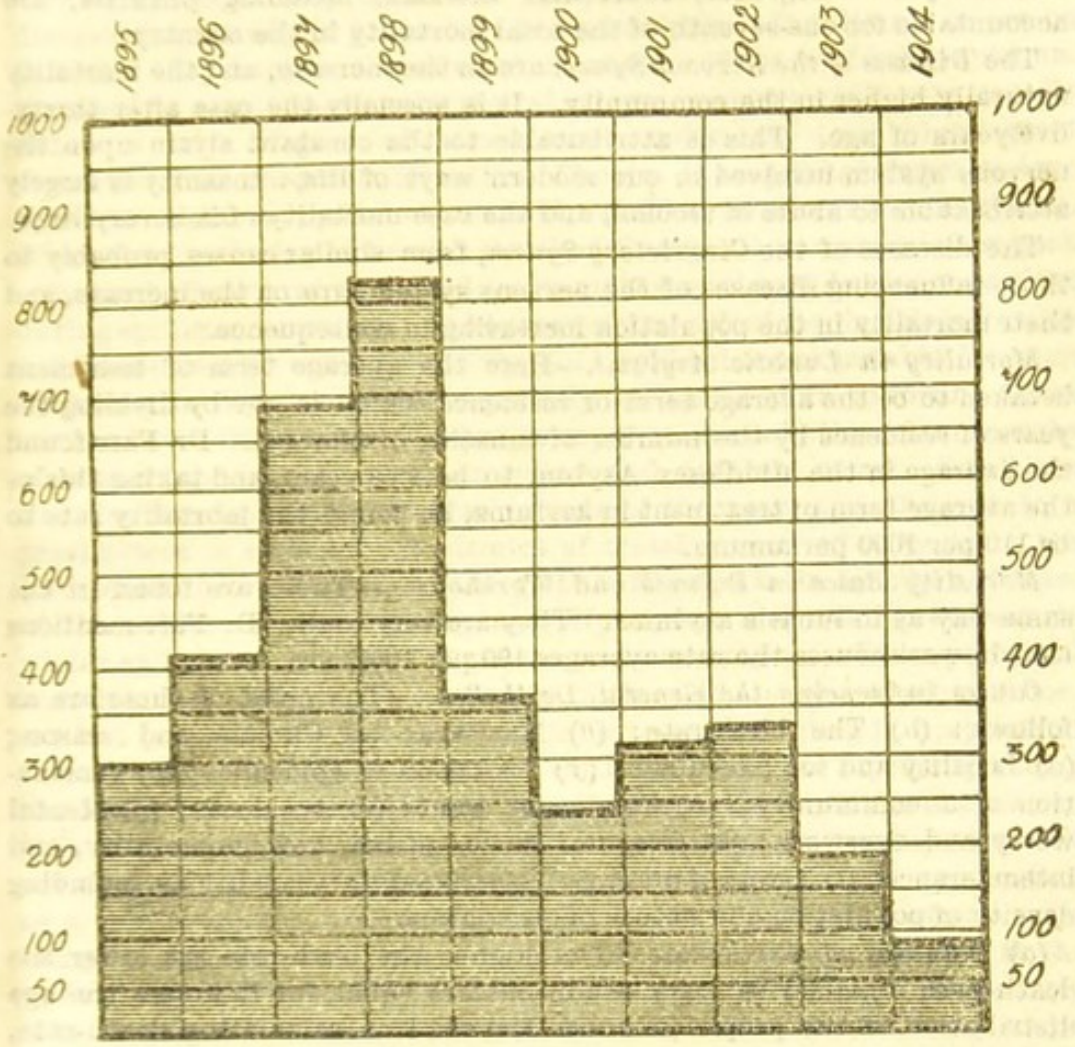
GLASGOW—ENTERIC FEVER.

Year.	Population.	Treated at Home.				Treated in Hospital.				Fatality, all Cases.			Means 5 Yearly.	Notifications per 1000 Population.
		Cases.	Deaths.	Case Mortality per cent.	5 Yearly Period Means.	Cases.	Deaths.	Case Mortality per cent.	5 Yearly Period Means.	Cases.	Deaths.	Rate per cent.		
1891	567,272	315	37	11·8	..	469	86	18·3	..	784	123	15·7	..	1·38
1892	669,059	246	33	13·4	..	344	68	19·8	..	590	101	17·1	..	0·89
1893	677,883	275	38	13·8	..	428	82	19·2	..	703	120	17·1	..	1·0
1894	686,820	225	36	16·0	..	585	115	19·7	..	810	151	18·6	..	1·27
1895	695,876	203	33	16·3	14·3	594	89	15·0	18·4	797	122	15·3	16·8	1·14
1896	705,052	200	40	20·0	..	491	105	21·4	..	691	145	20·98	..	0·98
1897	714,919	230	37	16·1	..	675	137	20·3	..	905	174	19·2	..	1·26
1898	724,349	162	32	19·8	..	1050	196	18·7	..	1212	228	18·8	..	1·67
1899	742,194	114	28	24·6	..	966	150	15·5	..	1080	178	16·5	..	1·45
1900	753,494	151	23	15·2	17·1	862	135	15·7	18·2	1013	158	15·6	18·2	1·34
1901	764,467	187	42	22·5	..	1070	168	15·7	..	1257	210	16·7	..	1·64
1902	775,601	65	13	20·0	..	633	97	15·3	..	698	110	15·7	..	0·89
1903	786,397	73	12	16·2	..	871	130	14·9	..	944	142	15·0	..	1·19
1904	798,357	53	14	26·4	21·3 (4 years)	575	70	12·2	14·5	628	84	13·4	17·7 (4 years)	0·78

GLASGOW—DIPHTHERIA, MEMBRANOUS CROUP.

Year.	Population.	Treated at Home.			Treated in Hospital.			All Cases.			5 Yearly Means.	Cases notified per 1000 Population.
		Cases.	Deaths.	Case Mortality Per cent.	Cases.	Deaths.	Case Mortality Per cent.	Cases.	Deaths.	Rate Per cent.		
1891	567,272	390	100	25·6	75	31	41·3	465	131	28·2	..	0·81
1892	669,059	494	183	37·0	81	12	14·8	575	195	33·9	..	0·81
1893	677,883	671	183	27·3	157	63	40·1	828	246	29·7	..	1·22
1894	686,820	715	203	28·4	252	87	34·5	967	290	29·99	..	1·41
1895	695,876	468	111	23·7	186	26	13·9	654	137	20·9	28·5	0·93
1896	705,052	411	81	19·7	190	35	18·4	601	116	19·3	..	0·85
1897	714,919	310	88	28·4	152	39	25·6	462	127	27·5	..	0·64
1898	724,349	175	59	33·7	258	54	20·9	433	113	26·1	..	0·59
1899	742,194	222	75	33·8	243	34	14·0	465	109	23·4	..	0·62
1900	753,494	219	70	32·0	321	55	17·1	540	125	23·1	23·9	0·71
1901	764,467	241	64	26·5	322	51	15·8	563	115	20·4	..	0·73
1902	775,601	246	40	16·3	371	65	17·5	617	105	17·0	..	0·79
1903	786,897	209	32	15·3	515	71	13·8	724	103	14·2	..	0·92
1904	798,357	195	38	19·5	452	53	11·7	647	91	14·0	16·4 (4 years)	0·81

CHART SHOWING THE NUMBER OF CASES OF SCARLET FEVER IN DUNDEE, 1895-1904.



Of all other diseases not classified as zymotic, I have only space to mention three in their connection with mortality, and these with a single remark.

Phthisis has been gradually diminishing where attention has been directed to increased cubic space per person, in workshops, barracks, etc., and to better ventilation in private dwellings, and to improved drainage of soils and dryness of houses. Open air treatment in sanatoria is now being largely resorted to, especially with the better classes, but reliable statistical data are scarcely possible as to results, because of the many stages at which the disease is sent to them, its variation in type, mode of attack, acute or otherwise, etc. Commencement of sanatorium treatment among the very poor is at present in its very infancy, and it is among them that such treatment should have the consideration of our city and burghal authorities, especially in towns where there are densely-populated slums. Probably owing to the indoor habits, the mortality in females is

largely in excess of that in males in this disease. The mortality from hydrocephalus and other forms of tubercular disease which, for the most part, consist of tabes mesenterica and tubercular peritonitis, remains about stationary. Altogether, tubercular diseases, including phthisis, are accountable for one-seventh of the total mortality in the country.

The *Diseases of the Nervous System* are on the increase, and the mortality naturally higher in the community. It is specially the case after thirty-five years of age. This is attributable to the constant strain upon the nervous system involved in our modern ways of life. Insanity is largely attributable to abuse of alcohol, and the case mortality of it is very high.

The diseases of the *Circulatory System*, from similar causes probably to those influencing diseases of the nervous system, are on the increase, and their mortality in the population increasing in consequence.

Mortality in Lunatic Asylums.—Here the average term of treatment is taken to be the average term of residence which is got by dividing the years of residence by the number of lunatics discharged. Dr Farr found the average in the Middlesex Asylum to be 4·48 years, and taking this as the average term of treatment in asylums, he found the mortality rate to be 110 per 1000 per annum.

Mortality Rates in Prisons and Workhouses.—These are found in the same way as in lunatic asylums. They are very high. Dr Farr mentions that in workhouses the rate averages 190 per 1000.

Causes influencing the General Death-Rate.—The chief of these are as follows: (*a*) The birth-rate; (*b*) Marriage; (*c*) Climate and season; (*d*) Locality and soil; (*e*) Race; (*f*) Visitation of epidemics; (*g*) Vaccination of a community; (*h*) Famine or want; (*i*) Accidents; (*j*) Mental worry and overwork; (*k*) Irregular modes of life, vice, immorality, and intemperance; (*l*) Errors of diet; (*m*) General sanitary conditions, including density of population and nature of occupation.

(*a*) *Influence of Birth-Rate.*—The higher the birth-rate the lower the death-rate, provided sanitary conditions are equal, for it lowers the age distribution of the people (*v.* under Method I. in calculating death-rate, p. 341).

(*b*) *Influence of Marriage.*—When examined it is found that the married state is favourable to the death-rate, even in women where the puerperal state might be supposed to have an opposite tendency. The widowed state is unfavourable, the death-rate among widows and widowers being in excess of even bachelors and spinsters. These facts apply to all ages above 20. The differences are partly accounted for by the fact that bad health precludes marriage among many who go to swell the list of the single. Grief and change of condition of living would seem to act on those who lose their partners in life.

(*c*) *Influence of Climate and Season.*—In the tropics, stomatitis, dysentery, liver affections, hæmorrhoids, nervous palpitations, menstrual disorders, tetanus, elephantiasis, leprosy, malarial fevers, dengue, beri-beri, and yellow fever are particularly common, whereas gout and rickets are rare, and scarlet, typhus, and relapsing fevers are of much less frequent occurrence than in non-tropical regions. Certain diseases are peculiar

to special climates, and the effects of heat or cold, of rainfall and of season are very marked in many affections in this and all other quarters of the globe. Dengue is a highly tropical malady, and frost kills it as a rule; the same may be said of yellow fever. The severity of malarial diseases is generally in proportion to the warmth of the climate or season in which they happen, the most virulent time of the year being autumn. Beri-beri is a tropical or sub-tropical illness, and the outbursts usually follow a high degree of atmospheric moisture, and when great vicissitudes of temperature occur. Cholera is suspended from its true epidemic character by the winter cold, reaching its maximum in autumn. When the "sweating sickness" attacked Europe, it was preceded on each occasion by heavy rainfalls, and seven-ninths of the epidemics took place during spring and summer. Epidemic cerebro-spinal meningitis is usually a disease of winter and spring. Typhoid epidemics are notable for their frequency in dry years, and especially in an autumn following a hot summer with little rain. Typhus is most common in the colder months of winter and spring when crowding and filth are worst. Small-pox likewise flourishes best at these periods of the year, and dies out to a great extent in summer. Epidemics of measles most often begin in the cold season over all parts of the globe. Erysipelas is mainly a disease of the colder months. Croup and diphtheria are most prevalent in winter and spring, although there are many exceptions. When puerperal fever becomes epidemic, it is usually in the cold and wet weather it does so; but perhaps this fact is attributable to overcrowding in hospitals at these seasons. Bronchial affections cause their ravages especially among the old in winter, while infantile diarrhœa is a disease of the hot season. It is in great measure owing to diseases of the respiratory system that our quarterly returns differ in their mortality rates, which are highest as a rule in the first quarter and lowest in the third, the common order being 1st, 4th, 2nd, 3rd. The influence of low temperature is seen in the weekly reports issued for the principal towns. When the thermometer falls to below the mean the mortality rises, and when standing under freezing point this is very marked. The rise takes place at once, but the effects of the low temperature are felt for a month or more afterwards.

It is the old who suffer most from "cold waves." Dr Farr states that the mortality from the result of cold increases 8 per cent. for every year after the age of 20. With very hot summers the diarrhœa diseases multiply and raise the rate for the 3rd quarter, which with cool summers is as a rule low.

(*d*) *Influence of Locality and Soil.*—Dengue prefers the overcrowded streets on the sea-coasts of those countries it visits. The extent and severity of malarial diseases diminish as we ascend above the sea-level, and are undoubtedly closely connected with the moisture and pools and organic constituents in the soil where certain mosquitoes flourish. Yellow fever confines itself pretty much to the sea-coast and the shores of great navigable rivers, and seldom attacks places of high elevation; moreover it is a disease exclusively of towns. Damp soils favour

rheumatism and phthisis, although there are many exceptions in the case of the latter, but at all events there is no doubt that high altitudes produce beneficial results in this disease which is never *endemic* in such situations. Goitre and cretinism confine themselves to certain very limited localities. "Milk sickness" in man is found in districts where the "trembles" affect cattle. Again, sleeping sickness (trypanosomiasis) only occurs where a certain species of fly acts as a carrier of the specific organism causing the disease.

(*e*) *Influence of Race.*—Negroes are very susceptible to small-pox, and succumb to the disease more readily than whites. The predisposition to leprosy is greatest among the negroes and half-castes in South Africa. In Java it is the Malays who are lepers, the Indian race escaping. The black races have a relative immunity from malarial fevers as far as regards their own homes at least. Greenlanders and Icelanders are almost exempt from syphilis, although every chance of its gaining a footing in these countries is afforded by the constant visitation of sailors of various nations.

(*f*) *Influence of Epidemics* requires no explanation.

(*g*) *Influence of Vaccination and Re-vaccination.*—Vaccination in infancy is in Scotland compulsory before the sixth month. In England before the third. Its effect in preventing an attack of small-pox has been proved too often to allow of any unbiassed person to question its utility in influencing the death-rate favourably. Recent vaccination practically prevents attack, and if it does not, it mitigates the virulency of the disease. The vaccination of infancy is, however, only protective for a comparatively short period (some ten years) when efficiently performed. Unfortunately it has been but too often found that its performance has in many cases been carried out in the most perfunctory manner. Medical certificates have too frequently been signed for successful vaccination when the insertions have failed "to take." Or again, the insertions have not been sufficient in number or large enough in area, for it has been clearly demonstrated that efficiency is regulated by both. The instructions of the Local Government Board are that insertions should be made sufficient to produce, at least, four good-sized vesicles or groups of vesicles not less than half an inch from each other, the total area of which on the eighth day afterwards should not be less than half a square inch. Re-vaccination should be carried out at school age and again about the age of 20. By these means an epidemic of small-pox would be impossible in this country, and the enormous expense of prevention by present measures saved.

(*h*) *Influence of Famine or Want.*—This is too obvious to call for any remark.

(*i*) *Influence of Accidents.*—This requires no explanation.

(*j*) *Influence of Mental Worry and Overwork.*—These impair the health and tend to premature old age and death. The mental powers give way, leading often to dementia and paralysis, or the vital organs become affected, and disease of the heart, lungs, liver and kidneys is the result. There is much reason to believe that this cause is on the increase.

(*k*) *Influence of Irregular Modes of Life, of Vice, Immorality, and Intemperance* —These exercise a serious effect upon the death-rate, in part directly, but mainly by undermining the constitution, and rendering it less able to resist disease, and more likely to succumb to any malady. The most telling of these factors is intemperance. Apart from the minor ailments of the nervous and digestive systems which follow excess, and the danger to other people from the victims of the mania, *a potu*, we have serious maladies induced in the regularly intemperate. These are liver diseases more especially, fatty heart, aneurism, rapid forms of phthisis, gout, kidney affections, and a host of mental disorders culminating in brain softening, paralysis, suicide, and insanity. Regarding the last mentioned, every Annual Report of Dr Clouston, the celebrated specialist in lunacy, and Physician Superintendent, Royal Asylum, Edinburgh, proves to demonstration the direful influence of alcoholism, and the late Mr Wakely, Coroner of Middlesex, and his successor, the late Dr Lankester, estimated that one-tenth of the total deaths is due to it. Perhaps the best guide to its influence as a factor in mortality is shown by Dr Ogle in a table prepared for the Forty-fifth Annual Report of the Registrar-General, which is too large to introduce here.

(*l*) *Influence of Errors in Diet.*—Overfeeding is by no means a rare predisposing cause of disease. Bad cooking and the use of inferior or unsuitable food tend the same way. The chronic starvation of those who subsist on tea and bread induces nervous disorders and lowers the physique. But it is with children that errors in diet induce the greatest evils. Dr George Wilson, Medical Officer of Health for Mid-Warwick has estimated* that there is an annual sacrifice of 50,000 infants in the United Kingdom from diseases induced by insufficient, improper, and careless feeding of them. The high mortality of infants and young children in industrial cities has been shown to be to a large extent due to this cause.

(*m*) *Influence of General Sanitary Condition, including Density of Population and Nature of Occupation.*—A perusal of Dr Buchanan's ninth report to the Privy Council will satisfy the most sceptical as to the great benefits resulting from the establishment of sanitary works, cleanliness, and good water-supply on the mortality from typhoid fever. Again, the researches of Virchow relating to typhoid in Hamburg, and of Liévin as to the same disease in Danzig, are equally convincing. The diminution and even extinction of malarial fever by subsoil drainage, the immunity from cholera after a water-supply has been made pure, the lessening of phthisis and typhus fever by increasing the means of ventilation, all point the same conclusion that wherever strict attention is paid to cleanliness and to sufficiency in the supply of fresh air and good water, a lowering of the death-rate results, and as a further proof we may look to the rapidly-falling mortality rates since the passing of the Public Health Acts. The improvement has been more marked in urban

* "Healthy Life and Healthy Dwellings: A Guide to Domestic Hygiene," p. 78. London, J. & A. Churchill, 1880.

than in rural localities in England, which might be expected, for the wretched state of certain towns has relatively been more amended than that of country districts. In Scotland as a result of Acts and improvements the same has occurred. In Glasgow * the mean death-rate in the quinquennial period 1855-1860 was 29·5 per 1000; in decennium 1861-70, 30·97. In the next decennium when the Act of 1867 had begun to show its effects, namely 1871-80, it fell to 27·99, and 1881-90 to 22·34. For 1900 it was 21·8; 1901, 21·2; 1902, 20·0; 1903, 19·2, and last year 1904, 19·3.

In close connection with the sanitary condition of a population, in fact, as part of it, is its *density or number of persons to a square mile*. Even if the water-supply be good and wholesome, the sewage disposal satisfactory, and the scavenging perfect, the massing of people together has a most baneful influence, vitiating the atmosphere by their organic effluvia, and preventing proper isolation of the sick when disease breaks out. Such massing is common wherever industries abound, and as emanations from works connected with these constantly pollute the air, the sanitary surroundings are not made any better thereby. In such places houses have but a very limited cubic space, and are too often constructed on the very worst principles for efficient ventilation, as are the *back to back* dwellings now so universally condemned, and which were erected to conserve ground area and lessen expense of mason work. It is, in fact, the limited house accommodation, bad ventilation and inadequate provision for isolation or separation of the sick, together with impurities in the air outside the people's houses, and the special occupations of a considerable proportion of their number that are largely responsible for the density of population increasing the mortality rate, for not only do these act directly, but indirectly, as the water is more apt to receive impurities, and the conditions favour filth, immorality, and intemperance.

The effect of house space was well shown by the late Dr Russel, Member of the Local Government Board, and formerly Medical Officer of Health for Glasgow,† in his examination of the mortality in Glasgow of those occupying variously sized houses. The distribution of death-rates (uncorrected) there was as follows:—For the population inhabiting one room 27 per 1000; two rooms 26; three rooms 20; four rooms 17·8, and five rooms and upwards 11·2. Dr Ogle in the Supplement to the Forty-Fifth Annual Report shows the influence of aggregation in a very clear manner. Space does not allow of giving his excellent and elaborate tables, so we must be content with his remarks commenting on the figures, in which he says, "It is not apparently until the density has reached a certain degree of intensity that it begins to exercise any appreciable effect. This indeed might have been anticipated. For though we can readily understand that in crowded communities it may be a matter of vital importance whether there are 500 or 1000 or 2000 or more

* I am indebted for these figures to Dr A. K. Chalmers, Medical Officer of Health for the city.—[W. J. B.]

† "Ticketed houses of Glasgow." *Transactions, Glasgow Philosophical Society*, 1888.

persons living on a square mile, yet it can scarcely make any difference, so far as health goes, whether in rural districts there be 2 acres or 3 acres on an average to each inhabitant. The differences in the death-rates in these sparse populations are determined by other conditions than aggregation."

So struck was Dr Farr with the relation between density of population and death-rate that he worked out a density formula, by which he could tell the mortality rate for many large and densely populated places on knowing how many persons there were to a square mile, and being given the death-rate and number per square mile of some other place having equality in water-supply, sewage disposal, and scavenging. This formula is given here, but although it is applicable to many densely populated large areas, when the given data are taken from large areas with a high death-rate, it is certainly by no means a reliable method of arriving at even a probable mortality rate, and this is not surprising when we reflect upon the complexity of factors involved in density as a cause influencing death. His calculation was based upon the theory that the ratio in which mortality increases by increased density is as the 8·3348th root of the densities.

Thus the number to a square mile, say for 50 districts, is 458, and the death-rate 20·56; then to find the death-rate for say 6 districts in which the density is 6144, we should have the following proportion :—

$$\sqrt[8\cdot3348]{458} \;:\; \sqrt[8\cdot3348]{6144} \;::\; 20\cdot56 \;:\; \text{probable death-rate} = 28.$$

However, were we to apply the death-rate *re* the 50 districts to the estimation of the probable mortality rate of London, where density was 32,000 for 1871-80, we should find it to be 34 per 1000, whereas the observed rate for that period was 22·4.

Regarding the influence of occupation on mortality, the subject was carefully worked out by Farr and Ogle in elaborate tables of death-rates of males, 25-45 and 45-65 years of age in different occupations, 1860-71 and 1880-1-2 and the comparative mortality figure for 1880-1-2 of those between 25 and 65. The comparative figure for all these periods is taken as 1000, and the comparative figure for occupied males of 25-45 and 45-65 during 1880-1-2 as 967.

In a second table are given the *causes of deaths of males* aged 25-65 years in different industries, being samples abstracted from the death registers of 1880-1-2, and in a third table the *comparative mortality of males* 25 to 65 years of age in different *industries;* from all and several causes (the figures in this table are the numbers of deaths that would occur annually in each industry out of 64,641 males from 25-65 years of age; of whom 41,920 were under, and 22,721 were over 45 years of age).

Space permits of Table I. only, which is as follows :—

Occupation.	Mean Annual Death-Rates per 1000 Living.				Comparative Mortality Figure.
	1860-1-1871.		1880-1-2.		1880-1-2.
	Age.		Age.		Age.
	25-45	45-65	25-45	45-65	25-65
All Males	11·27	23·98	10·16	25·27	1000
Occupied Males	..	..	9·71	24·63	967
Unoccupied Males	..	..	32·43	36·20	2182
Males in Selected Healthy Districts (those districts in which mean annual death-rates for persons—males and females together—was under 17·00 per 1000 in 1871-80)	..	..	8·47	19·74	804
Clergyman, Priest, Minister	5·96	17·31	4·64	15·93	556
Barrister, Solicitor	9·87	22·97	7·54	23·13	842
Physician, Surgeon, General Practitioner	13·81	24·55	11·57	28·03	1122
Schoolmaster, Teacher	9·82	23·56	6·41	19·84	719
Artist, Engraver, Sculptor, Architect	11·73	22·91	8·39	25·07	921
Musician, Music Master	18·94	34·76	13·78	32·39	1314
Farmer, Grazier	7·66	17·32	6·09	16·53	631
Labourer in Agricultural Counties (Hertfordshire, Oxfordshire, Bedfordshire, Cambridgeshire, Suffolk, Wiltshire, Dorset, Devon, Hereford, and Lincolnshire)	..	..	7·13	17·68	701
Gardener, Nurseryman	6·74	17·54	5·52	16·19	599
Fisherman	11·26	15·84	8·32	19·74	797
Cab, Omnibus Service	15·94	35·28	15·39	36·83	1482
Bargeman, Lighterman, Waterman	14·99	30·78	14·25	31·13	1305
Carter, Carrier, Haulier	..	..	12·52	33·00	1275
Groom, Domestic Coachman	..	..	8·53	23·28	887
Commercial Traveller	12·28	29·00	9·04	25·03	948
Brewer	19·26	36·86	18·90	34·25	1361
Innkeeper, Publican, Spirit, Wine, Beer Dealer	18·01	34·14	18·02	33·68	1521
Inn, Hotel, Servant	21·91	42·19	22·63	55·30	2205
Maltster	7·04	22·26	7·28	23·11	880
Law Clerk	18·75	37·05	10·77	30·79	1151
Commercial Clerk and Insurance Service	14·28	28·88	10·48	24·49	996
Bookseller, Stationer	10·84	21·36	8·53	20·57	825
Chemist, Druggist	13·92	23·56	10·58	25·16	1015
Tobacconist	13·19	21·76	11·14	23·46	1000
Grocer	9·49	17·15	8·00	19·16	771
Draper and Manchester Warehouseman	14·34	26·33	9·70	20·96	883

Occupation.	Mean Annual Death-Rates per 1000 Living.				Comparative Mortality Figure.
	1860-1-1871.		1880-1-2.		1880-1-2.
	Age.		Age.		Age.
	25-45	45-65	25-45	45-65	25-65
Ironmonger	10·38	22·95	8·42	23·87	895
Coal Merchant	8·83	22·59	6·90	20·62	758
General Shopkeeper	..	..	9·12	21·23	865
Cheesemonger, Milk, Butterman	..	..	9·48	26·90	1009
Greengrocer, Fruiterer	11·41	24·51	10·04	26·57	1025
Fishmonger, Poulterer	15·62	29·21	10·53	23·45	974
Shopkeepers as represented by the above eleven	..	..	9·04	21·90	877
Butcher	13·19	28·37	12·16	29·08	1170
Baker, Confectioner	10·72	26·39	8·70	26·12	958
Corn Miller	9·32	26·65	8·40	26·62	957
Hatter	12·81	31·76	10·78	26·95	1064
Hairdresser	15·11	30·10	13·64	33·25	1327
Tailor	12·92	24·79	10·73	26·47	1051
Shoemaker	10·39	22·30	9·31	23·36	921
Tanner, Fellmonger	10·43	26·57	7·97	25·37	911
Currier	11·32	25·09	8·56	24·07	906
Saddler, Harness Maker	12·29	25·21	9·19	26·49	987
Tallow Chandler, Soap-boiler (in 4th column the rate is based on less than 5000 years of life)	11·75	27·24	7·74	26·19	920
Tallow, Soap, Glue, Manure Manufacture	..	..	7·31	27·57	933
Printer	13·02	29·38	11·12	26·60	1071
Bookbinder (in 4th column the rate is based on less than 5000 years of life).	17·76	31·56	11·73	29·72	1167
Watch and Clock Maker	10·78	24·90	9·26	22·64	903
Watch, Clock, Philosophical Instrument Maker, and Jeweller	..	..	9·22	23·99	932
Paper Manufacture	10·33	20·19	6·48	19·62	717
Glass Manufacture	13·19	29·32	11·21	31·71	1190
Earthenware Manufacture	12·59	41·75	13·70	51·39	1742
Cotton, Linen, Manufacture (in early period, figures relate to England and Wales; in later period to Lancashire)	10·65	27·90	9·99	29·44	1088
Silk Manufacture	9·89	20·08	7·81	22·79	845
Wool, Worsted Manufacture (in early period, figures relate to England and Wales; in later period to West Riding)	9·35	23·26	9·71	27·50	1032
Carpet, Rug Manufacture	9·92	25·57	9·48	24·10	945
Lace Manufacture	..	..	6·78	20·71	755
Hosiery Manufacture (Leicestershire, Notts)	..	..	6·69	19·22	717
Dyer, Bleacher, Printer, etc. of Textile Fabrics	11·19	25·99	9·46	27·08	1012

Occupation.	Mean Annual Death-Rates per 1000 Living.				Comparative Mortality Figure.
	1860-1-1871.		1880-1-2.		1880-1-2.
	Age.		Age.		Age.
	25-45	45-65	25-45	45-65	25-65
Rope, Twine, Cord Maker	9·19	29·35	7·95	22·25	839
Builder, Mason, Bricklayer	11·43	27·16	9·25	25·59	969
Slater, Tiler (in 4th column figures are based on less than 5000 years of life).	10·66	30·76	8·97	24·93	942
Plasterer, Whitewasher	9·50	27·90	7·79	25·07	896
Plumber, Painter, Glazier	14·48	34·66	11·07	32·49	1202
Upholsterer, Cabinetmaker, French Polisher	11·09	24·09	9·55	24·77	963
Carpenter, Joiner	9·44	21·36	7·77	21·74	820
Sawyer	8·67	21·27	7·46	23·74	852
Wood Turner, Boxmaker, Cooper	11·80	26·13	10·56	28·55	1091
Coachbuilder	10·43	29·57	9·13	24·72	944
Wheelwright	8·40	21·17	6·83	19·21	723
Shipbuilder, Shipwright	10·68	26·26	6·95	21·29	775
Locksmith, Bellhanger, Gasfitter	11·04	27·90	9·15	25·66	967
Gunsmith	10·62	25·32	10·62	25·78	1031
Cutler, Scissors Maker	..	..	12·30	34·94	1309
Filemaker (in 4th column figures are based on less than 5000 years of life).	16·27	42·30	15·29	45·14	1667
Cutler, Scissors, File, Needle, Saw, Tool Maker (figures in first 2 columns based on 1871 only)	11·88	32·74	11·71	34·42	1273
Engine, Machine Maker, Fitter, Millwright	..	..	7·97	23·27	863
Boiler Maker	..	..	9·27	26·65	994
Last two together	10·61	23·81	8·23	23·89	888
Blacksmith	10·07	28·88	9·29	25·67	973
Other Iron and Steel Workers	..	..	8·36	22·84	869
Tin Workers	10·36	23·67	8·00	24·17	885
Copper, Lead, Zinc, Brass, etc. Workers	10·74	26·17	9·15	26·79	992
Metal Workers	..	..	8·80	25·03	938
Miner—					
Durham, Northumberland	11·30	22·01	7·79	24·04	873
Lancashire	..	..	7·91	26·30	929
West Riding	..	..	6·59	21·80	772
Derbyshire, Nottinghamshire	..	..	6·54	20·23	734
Staffordshire	11·33	30·45	7·81	26·50	929
South Wales, Monmouthshire	14·72	29·66	9·05	30·87	1081
Coal Miners as represented by the above six	..	..	7·64	25·11	891
Miner (North Riding and other Ironstone districts)	..	..	8·05	21·85	834
Miner, Cornwall	11·94	41·78	14·77	53·69	1839
Stone, Slate Quarrier	10·88	28·67	9·95	31·04	1122

Occupation.	Mean Actual Death-Rates per 1000 Living.				Comparative Mortality Figure.
	1860-1-1871.		1880-1-2.		1880-1-2.
	Age.		Age.		Age.
	25-45	45-65	25-45	45-65	25-65
Railway, Road, Clay, Sand, etc. Labourer	..	..	11·01	24·80	1025
Coalheaver	..	..	10·22	23·77	968
Chimney Sweep (figures in 4th column are based on less than 5000 years of life)	17·53	42·87	13·73	41·54	1519
Messenger, Porter, Watchman (not Government)	..	..	17·07	37·37	1565
Costermonger, Hawker, Street Seller	20·09	37·82	20·26	45·33	1879
General Labourer (London)	18·35	40·64	20·62	50·85	2020

Dr Ogle analyses all three tables very fully in his supplement, and we shall here follow on the same lines and summarise in a less detailed way the conclusions which the figures in the tables lead to.

In the first place it is seen from the table given here (Table I.) that the very high and the very low rates in Dr Ogle's figures are also high and low in Dr Farr's. In the next place the rates in almost all industries for the 25-45 period in 1880-82 have declined since Dr Farr's inquiry, whereas in the second age period 45-65 there has been a fall in 35 but a rise in 38. This corresponds with what has taken place with all males irrespective of trade.

Of the various occupations the lowest mortality is to be found among the *clergy*. Of the other learned professions *lawyers*, *schoolmasters*, and *teachers* are much below the average, and *medical men* above. The low rate of schoolmasters is explained by the fact that only healthy men can now get into the profession. *Artists*, *engravers*, *sculptors*, and *architects* are below the average. *Musicians* have a very high figure, a large number of this class being street musicians, organ-grinders and broken-down men who are intemperate and in poverty.

Farmers, *graziers*, *agricultural labourers*, *gardeners*, and *nurserymen* are a very healthy class, owing no doubt to their active out-door employment. The same can be said of *fishermen*, among whom phthisis is only one half the average, and who principally suffer from diseases of the circulatory system, consequent probably on rheumatism, although accidents also raise their rate considerably.

Cabmen, *bargemen*, *carters*, *costermongers* and *street sellers* have all a very high mortality, chiefly from drink and exposure, but *grooms* and

private coachmen are below the average. *Commercial travellers* are above the average. Drink accounts for it.

Brewers, *innkeepers*, *publicans*, *inn* and *hotel servants* have all an exceedingly high rate, and drink is again the cause. The rate for *maltsters* is comparatively low. They have no connection with liquor.

The figure for *law clerks* and *commercial clerks* is high, but lower than formerly. Confinement to an office all day and probably irregular hours after office work may be regarded as the main influences inducing it.

Shopkeepers as a class do not seem particularly unhealthy, but *drapers*, *ironmongers*, *fishmongers*, *poulterers*, and *tobacconists* are above the average of healthy districts. *Milk*, *butter*, and *cheesemongers*, *chemists* and *greengrocers*, are above the average for all males, whilst *coal merchants*, *grocers*, *booksellers* and *stationers* are below the average for healthy districts. For only five of the whole class of shopkeepers were samples obtained for the registered cause of death, and grocers and drapers were the only two classes for which the numbers of samples abstracted, reached the least deemed prudent to calculate upon, namely 500, and from which (seen by Table III., not given here) it is found that drapers seem much more subject to phthisis than grocers (most likely from the air they breathe being vitiated through bad ventilation, dust, the burning of lights, etc., whereas the grocer's shop is as far as air is concerned very pure), but the grocers have a higher rate for those diseases generally arising from the abuse of alcohol. This is accounted for by numbers of them holding liquor licences and by their age on the whole being much greater than the body of drapers, therefore making them more subject to heart and liver affections.

Butchers have a very high figure, the causes of death being those common to intemperance. The rates for *bakers* and *confectioners* and for *millers* are 958 and 957 respectively. *Hatters* have a high mortality, the probable cause being drink.

The rate for *hairdressers* is above the average, caused largely (as shown by Table II., not given here) by abuse of alcohol. *Tailors* are an unhealthy class, largely owing to the inferior physique of those who enter the trade. Their tendency to disease is enhanced by a sedentary life, often in badly ventilated rooms. Dr Ogle's Table III. shows phthisis to be unusually prevalent among them, as also suicide. *Shoemakers* have a rate of 921, and therefore much above the average for healthy districts. The death-rate in *carriers*, *saddle and harness makers* is rather high. That for *tallow chandlers*, *soap-boilers*, and *those engaged in tallow*, *soap*, *glue*, and *manure manufacture*, also somewhat high, but far below the average for all males. The bad smells would not thus seem to have a very hurtful effect. *Printers* and *bookbinders* have a high figure, because of the heated and foul atmosphere they usually work in (phthisis being more common than in any of the other trades, excepting in costermongers and those employed in earthenware manufacture).

Glass workers are an unhealthy class, because of lung affections,

earthenware and *china workers* have an excessively high figure. Their employment is the unhealthiest of all trades. Phthisis and diseases of the respiratory and circulatory organs are responsible for this, the latter affection most probably following on the "potter's asthma," so common in this industry, and which results from inhalation of irritating dust and great changes of temperature. A few of them—very few—suffer from lead poisoning. *Cotton*, *woollen*, and *worsted workers* have likewise an unhealthy calling. Diseases of the respiratory organs from dust inhalation are accountable. In woollen manufacture, anthrax affects a few of the workers.

Carpet makers have a rate of 945, and dust inhalation is again the chief exciting cause of disease. *Silk*, *lace*, and *hosiery workers* are healthy. *Dyers*, *bleachers*, and *printers of textile fabrics* have a high rate. *Rope*, *cord*, and *twine makers* have a rate of 839, and therefore not high. *Builders*, *masons*, *bricklayers*, *slaters*, *tilers*, *plasterers*, and *white washers* have all of them a figure above the average of that for healthy districts, but do not quite reach the average for "all males."

Plumbers, *painters*, and *glaziers* show an excessive rate, principally attributed to their contact with lead, producing diseases of the nervous system, urinary and cardiac affections. Gout is frequent, and accidents are common, and alcoholism helps to increase the roll. The rate for *upholsterers*, *cabinetmakers*, and *French polishers* is somewhat high (cause not known). *Carpenters*, *joiners*, and *sawers* are healthy, but *wood-turners*, *boxmakers*, and *coopers* have a high mortality (why, is not determined).

Coach-builders are not a healthy class, but *wheel-wrights*, *ship-builders*, and *ship-wrights*, are particularly so. *Locksmiths*, *bell-hangers*, *gasfitters*, and *gunsmiths* have a high figure. Inhalation of iron dust is likely the cause. The mortality among *scissors* and *file makers* is excessively heavy, and due to phthisis, and lung affections caused by metallic dust and dust from the grindstones. File makers suffer also from lead poisoning, and consequently urinary disease. The lead is got from the lead cushions on which the workmen strike their files. The rate from diseases of the circulatory system is naturally high as well, but particularly so in file makers, on which account Dr Ogle suspects that lead poisoning has a special influence in this direction, especially as the same thing is noticed in printers. *Engine machine makers*, *boilermakers*, and other *workers in iron and steel* have a rate between that for healthy districts and that for all males, as have *workers in tin*, *copper*, *lead*, *zinc*, *brass*, etc.

With regard to *miners*, Dr Ogle tried to classify them according to the nature of their work, but found this quite impossible from deficiency in the certificates as to occupation, especially deficiency in cases of accident so common in miners. They have been returned merely as "miner" and not as coal miner, tin miner, etc. He therefore divided the groups geographically. As over 90 per cent. of the miners of West Riding, Durham, Northumberland, Derbyshire, Nottinghamshire, Monmouthshire, South Wales, Lancashire, and Staffordshire are coal miners, and 90 per cent. in North Riding and in the districts of

Ulverston and Barrow and the sub-districts of Harrington and Egremont in Whitehaven are ironstone miners, while 79 per cent. of the miners of Cornwall are tin miners (the remainder being miners of lead and copper), he took the rates in these districts as being roughly representative of three classes of mining, namely, coal, ironstone, and tin.

Coal-miners, notwithstanding their inhalation of coal dust, do not show a very high rate, and if accidents were excluded it would be almost as low as that for agriculturists. This is of course largely due to the fact that men retire from mining for other employment when they begin to fail in health, and that the majority of those who take to it as an occupation are strong and healthy subjects. Their general rate is raised by accidents, one fifth of the total deaths in the industry being due to this cause. The other factor mainly raising their rate, is disease of the respiratory organs, and here the rate is very high and due no doubt to inhalation of coal dust, although this mortality is not equal to that of pottery workers, cutlers, or file makers from the breathing of stone, iron, and steel particles which are sharper and therefore more irritating. Dr Ogle indeed thinks the rate may probably be understated, because of many cases of "miner's phthisis" being entered under phthisis in the returns. Notwithstanding this the rate for phthisis is exceedingly low, and if it really be the case that such transference ought to be made in a correct statement, then we must conclude that coal miners are specially exempt from tuberculosis. Why, is a matter for conjecture. It must however be borne in mind that the rates from accident being so high the other rates are in consequence considerably reduced.

Ironstone miners have a figure like that of coal miners, and the causes are similar. *Tin miners* have an enormous mortality, and this is largely due to phthisis and diseases of the respiratory organs. The rate for phthisis especially is very high. The two diseases together account for nearly two-thirds of the deaths. Accidents are numerous, but not so frequent as in coal and ironstone mining. The rate for *stone quarriers* is very high—1122. This is partly due to accidents, but chiefly to phthisis and diseases of the respiratory organs from inhalation of sharp particles. The same has to be said of *railway*, *road*, *clay*, and *sand labourers*—1025. The mortality among *coal heavers* is somewhat high. *Chimney sweeps* have an excessive rate. Cancer is a common disease among them, especially cancer of the scrotum, penis, testis, and groin.

Messengers, *porters*, *watchmen*, *costermongers*, *street sellers*, and *general labourers* in London show a very high death-rate. This is most likely in great part due to the broken-down class of men who take to these employments.

To show *the influence of fresh or foul air on mortality* Dr Ogle has given the following table of occupations with deaths from phthisis and affections of the respiratory organs, these being the diseases most frequently accompanying bad ventilation.

COMPARATIVE MORTALITY OF MALES WORKING IN AIR OF DIFFERENT DEGREES OF PURITY FROM PHTHISIS AND DISEASES OF THE RESPIRATORY ORGANS

Occupation.	Phthisis.	Diseases of Respiratory Organs.	Both together.
Fishermen	108	90	198
Agriculturists	115	122	237
Grocers	167	116	283
Drapers	301	129	430
Tailors	285	186	471
Printers	461	166	627

It will be seen from this what an enormous effect vitiated air seems to play in the production of disease.

In another table he shows *the influence of dust*. The figures are from the tables already mentioned—fishermen who breathe a pure atmosphere being added as a standard for comparison :—

COMPARATIVE MORTALITY OF MALES IN CERTAIN DUST INHALING OCCUPATIONS FROM PHTHISIS AND DISEASES OF RESPIRATORY ORGANS

Occupation.	Phthisis.	Diseases of Respiratory Organs.	Both together.
Coal miner	126	202	328
Carpenter, Joiner	204	133	337
Baker, Confectioner	212	186	398
Mason, Builder, Bricklayer	252	201	453
Wool Manufacture	257	205	462
Cotton Manufacture	272	271	543
Quarryman	308	274	582
Cutler *	371	389	760
File maker *	433	350	783
Earthenware Manufacture	473	645	1118
Cornish miner	690	458	1148
Fisherman	108	90	198

* Includes hafting, which is healthy.

The effect of lead poisoning in raising the death-rate is considerable in certain occupations, as will be seen from the following:—

ANNUAL MORTALITY FROM LEAD POISONING AMONG MALES OVER 15 PER 1,000,000 OF EACH TRADE LIVING*

File makers . . .	466	per 1,000,000	living
Painters, plumbers, glaziers	224	,, ,,	,,
Earthenware makers .	152	,, ,,	,,
Gasfitters . . .	62	,, ,,	,,
Printers	27	,, ,,	,,
All other males . .	4	,, ,,	,,

(4) LONGEVITY.—This is another element influencing movement of population. That duration of life is an important factor in this connection will perhaps be made more apparent from looking at it in this way—Suppose we have a population which but for duration of life change would stand still—a community in which the births and deaths exactly balanced one another and were each 1000. If the duration of life were 40 years, it is clear that the population would be 1000×40 or 40,000, but if the mean life-time were extended to 45 years the number would be 45,000.

Now the Mean Duration of Life is the expectation of life *at birth*, or the mean future or after life-time of one when born. To determinate it in a community a properly constructed "*Life Table*" is necessary—one based on the number of the living, their ages, the number of deaths and the ages, and the disturbances of the population, brought about by births, emigration and immigration, etc. Space will not allow going into the construction of a Life Table, but it may be constructed without any knowledge of the principles of the differential or of the integral calculus by means of which the formulæ have been deduced. Dr T. E. Hayward, M.O.H. for Haydock, Lancashire, has given† "working formulæ for the construction of a shortened Life Table, set forth with sufficient clearness to enable them to be practically used by anyone who understands ordinary arithmetic and the use of logarithms."

These tables so constructed by Dr Hayward are sufficient for all Public Health comparative statistics.

The mean duration of life by Dr Farr's No. III. Life Table (from data 1838-54) is for males 39·91, and for females 41·85 years. Since then it has been extended by 1·44 for males and 2·77 for females, for by Dr Ogle's New English Life Tables based upon data 1871-80, the expectation of life at birth is for males 41·35 and for females 44·62 years. It will thus be clear that the population of this country is increasing from *this* cause—extension of the duration of life.

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* Supplement to 45th Annual Report, p. lxiii.

† Papers published in *Journal of Hygiene*, Nos. 1, 2, and 3, Vol. II., and No. 1, Vol. V. Cambridge University Press.

A very crude method of arriving at an approximate estimate of expectation of life at birth of a whole community may be got from the corrected death-rate at all ages. Considering that the birth-rate has a very sensible effect upon the death-rate, we may take the latter alone as a basis for an estimate. If the reciprocal of the corrected death-rate for males is multiplied by 0·93 and that for females by 0·9 we get the duration of life or expectation of life at birth for both sexes—thus take the death-rates for three different periods, and treat them in this manner, and compare the results with life tables based on the same periods.

(1) The mean annual death-rate in England and Wales 1838-54 was 23·28 or 1 in every 42·95 for males; and for females 21·64 or 1 in every 46·21.

42·95 × 0·93 = 39·94	Farr's Tables 1838-54 = 39·91
46·21 × 0·9 = 41·58	Farr's Life Tables 41·85

(2) The mean annual death-rate for males 1876-80 was 22·2, or 1 in every 45·05, and that for females 19·6 or 1 in every 51·02.

45·05 × 0·93 = 41·89	Humphry's Tables 1876-80 = 41·92
51·02 × 0·9 = 45·91	,, ,, 1876-80 = 45·25

(3) The mean annual death-rate for males 1871-80 was 22·60 or 1 in every 44·24, and that for females 20·0 or 1 in every 50.

44·24 × 0·93 = 41·14	Dr Ogle's New Life Table 1871-80 = 41·35
50·00 × 0·9 = 45·00	,, ,, ,, ,, 44·62

The *expectation of life* at other ages than that of birth is given for the different ages in life tables. It is also termed the *mean after life-time*. It is constantly undergoing change.

It can be *approximately* found for any age without a life table by the aid of *Willick's Formula*, which is expectancy of life $= \frac{3}{4}(80 - x)$ where x is the age at which the future life-time is wanted. Thus the expectation at 20 years of age $= \frac{3}{4}(80 - 20) = 40$.*

The special term, *probable duration of life* (*vie probable* or *equation of life*), is used to designate the age at which any number born will be reduced to one half—the age when the chances are equal that they die before or after it.

The term *specific intensity* is applied to the quotient got by dividing the number of survivors at any age in a life table by the number dying at that age. The age of highest specific intensity is for both sexes 14.

(5) The last factor mentioned affecting movement of population is *morbidity*. Sickness checks marriage and so retards the birth-rate. It raises the death-rate not only by directly causing deaths but by

* The hypothesis of De Moivre was, that by the law of mortality, out of 86 persons, one died each year until all became extinct. By this hypothesis the expectation of life at birth is 43 years, the chances of living or dying before that age being equal, 43 being half of 86. At 40 years of age there are by the hypothesis, 46 still living. The half of 46 is 23, which is the expectation of life at the age 40.

lowering the vitality, thereby tending to premature old age. An attack of one sickness often predisposes to another of the same or a different kind, and increases the probability of dying. In many families it produces poverty, want, and starvation, and if parents be the victims, these (poverty, etc.), as well as neglect and filth, all of which are potent factors in augmenting mortality, tend to decrease the population.

The statistical information regarding morbidity is not very reliable, as the facts are only obtained from very limited sources, such as Friendly Societies, Army Reports, etc. The principal questions to be elicited by its study are—(1) the number of population constantly sick, grouped as to age, sex, and occupation, and diseases; (2) the proportion of one's life spent in illness of sufficient intensity to preclude work; and (3) the average duration of sickness.

APPENDIX C

FOOD

1. *Butcher Meat.*—Immediately after killing, meat has a neutral reaction, but becomes acid after a few hours. One of the reasons for giving animals about to be slaughtered complete rest for 24 hours is to delay this reaction, which is hastened by violent exertion. Post-mortem rigidity occurs very early if the animal before being killed has had much exertion.

"Setting" is complete in from 12 to 14 hours, but earlier with mutton.

The main characters of good meat are as follows:—(1) Marbled appearance on section from interstitial fat, showing that the animal has been well fed. (2) Muscles not too dark in colour, as is the case in animals unbled before death, nor too pale, when it indicates either that the animal was very young, and if the flesh is likewise very moist that the animal was unhealthy. The muscles of the lamb, of the calf, and of the pig are pale. (3) Muscles and fat should be firm and elastic, not sodden, and the fat should be white and free from hæmorrhagic points, but colour of the fat in the ox depends upon the nature of the feeding. (4) The surface of the meat should be dry and any *serous* exudation should be distinctly acid. (5) The odour of a knife plunged into the flesh should be faint and not unpleasant; if disagreeable, it points to putrefactive changes. (6) The brine of salted meat should not be sour.

2. *Horse-flesh.*—The flesh of the horse is coarser in the grain and much darker than that of the ox, and the fat much softer and of a distinctly yellowish hue. If unboned it is easy to recognise that it belongs to the horse, as the bones and joints are much larger than those in the ox, and the ribs of the horse are more numerous and more arched than in the ox (18 and 13 respectively).

3. *Poultry.*—The flesh should be firm, pinkish or yellow in colour, and free from unpleasant odour. The skin if very tender and of a bluish or greenish hue over the crop and abdomen indicates that the bird has been kept too long after killing.

4. *Game* should never be so "high" that its odour is offensive.

5. *Fish.*—The flesh of fish "sets" very rapidly. If the fish is limp and its tail markedly drooping when the head of the fish is grasped and its body held out horizontally, and if in addition there is an offensive odour, the flesh is unwholesome.

6. *Fruit and Vegetables.*—The principal signs of stale vegetables are discoloration and softening. Preserved vegetables, especially beans and peas, are often artificially coloured by the use of sulphate of copper. Potatoes should be firm, and on section show no sign of disease. "Frosted" potatoes are soft and unwholesome.

7. *Flour.*—Good flour should contain little bran. It should not be lumpy or gritty to the touch. Its colour should be white or very faintly yellow. It should be free from mustiness. Made into a dough it should be stringy. Its principal adulterations are, barley meal, rice flour, potato starch, rye flour, etc. These can be detected by the microscope. If *ergoted* rye flour is present, it may be detected by the peculiar odour of propylamine (herring-like smell) which is developed on adding liquor potassæ. When adulterated by mineral substances, such as chalk, carbonate of magnesium, gypsum, etc., incineration will show whether one or other is present, by excess of ash, that is anything beyond 2 per cent. by weight.

8. *Bread.*—Good wheaten bread should be agreeable to taste and smell, open in grain with minute cavities, not sodden, not containing by weight more than 46 per cent. of water nor more than 2 per cent. ash on incineration. Microscopically examined it should be free from other starches. When bread is made from inferior or damaged flour, alum is employed to whiten it ($CuSO_4$ is also employed for this purpose).

Alum is present to a small extent in good bread; when in considerable excess, as when used for the purpose above mentioned, it is detected by tincture of logwood. For the logwood test make a tincture by digesting 5 grammes of logwood chips in 100 c.c. strong alcohol, and make a solution of ammonia by dissolving 15 grammes ammonia carbonate in 100 c.c. distilled water. Put a teaspoonful of each into a wineglassful of water and place in the mixture about a cubic inch of the bread crumb, leaving it immersed for five minutes. Remove the bread and dry it at a very gentle heat. If much alum is present the bread crumb becomes dark blue; if only a small quantity is present it becomes lavender. If it dries a dirty brown, it is free from added alum. The presence of alum in small quantity is not necessarily injurious.

When rye meal is employed as an adulterant of the flour there is danger from ergotism if the rye has suffered from the ergot fungus.

9. *Milk.*—Dr Letheby gives the following approximate adulteration

of milk with water when specific gravity and percentage of cream are employed as the means of detection:—

	Sp. Gr.	Per cent. Volume Cream.	Sp. Gr. when Skimmed.
Genuine milk	1030	12·0	1032
Genuine milk, with 10 p. cent. water	1027	10·5	1029
,, 20 ,,	1024	8·5	1026
,, 30 ,,	1021	6·0	1023
,, 40 ,,	1018	5·0	1019
,, 50 ,,	1015	4·5	1016

Dr Winter Blyth gives the following table showing the average percentage composition by weight of human milk and cow's milk:—

	Human Milk.	Cow's Milk.
Fat	2·90	3·50
Casein	2·40	3·98
Albumens . . .	0·67	0·94
Milk sugar . . .	5·87	4·00
Salts	0·16	0·70
Total solids . .	12·00	13·12
Water	88·00	86·88

For the standard fixed by the Board of Agriculture, see p. 210.

Genuine cow's milk should be perfectly opaque when placed in a tall narrow glass vessel, and should yield from 6 to 12 per cent. of cream by volume on standing 12 hours. Boiling should not change its appearance. Two simple methods of judging of its quality without recourse to actual analysis may be employed, namely:—

(1) Using the lactometer, which will indicate it approximately as in Dr Letheby's table. The most common adulterant of milk is water, and when practised may be detected by taking the specific gravity. Watering lowers the specific gravity and lessens the percentage of cream. Abstracting cream raises the specific gravity and lessens the percentage of cream. Abstracting cream and adding water may cause the specific gravity to be normal, therefore the specific gravity *alone* is not a reliable test.

(2) Another fairly accurate and simple method of arriving at an approximation to analytical results is by Vogel's instrument for determining percentage of fat, and which is described by the late Dr E. A. Parkes as follows:—

"Vogel's instrument consists of a little cup, formed by two parallel pieces of glass, distant half a centimetre (= 0·1968 inches, say $\frac{2}{10}$ths of an inch) from each other, and closed everywhere except at the top, so as to form a little vessel; a glass graduated to 100 c.c., and a little

pipette, which is divided to ½ c.c., are also required. Water (100 c.c.) is placed in the measure and 2 or 3 c.c. of milk (which should be at first agitated so as to mix any separate cream) are added to it. The parallel glass cup is then filled with this diluted milk, and a candle placed about one metre from the eye (= 39·37 inches) is looked at in a rather darkened room; if the flame of the candle is seen, the milk is poured back into the large measure; more milk is added to it, and it is poured again into the parallel glass, and the light is again looked at; the experiment ends when the contour of the light is completely obscured. The candle should be a good one, but the difference in the amount of light is not material. The percentage amount of fat in the milk is then calculated by the following formula (which has been determined by a comparison of the results of the instrument, and of chemical analysis): x being the quantity of fat sought, and m the number of c.c. of milk which added to the 100 c.c. of water suffice to obscure the light.

$$x = \frac{23{\cdot}2}{m} + 0{\cdot}23.$$

If, for example, 3 c.c. of milk, added to 100 of water, were sufficient to obscure the light, the percentage of fat is—

$$x = \frac{23{\cdot}2}{3} + 0{\cdot}23 = 7{\cdot}96 \text{ per cent.}$$

The principal adulterants of milk besides water are preservatives, such as boric and salicylic acids, formalin, and bicarbonate of soda. Chalk is sometimes used to neutralise acidity and give thickness and colour. Cream is adulterated with magnesium carbonate, tragacanth and arrowroot. The microscope can detect the latter. Yolk of egg is sometimes added to both cream and milk. Salicylic acid is detected by the deep purple colour produced on the addition of ferric chloride.

10. *Butter.*—Butter should have a pleasant taste. It may be adulterated with beef or mutton fat or with water. Fresh butter should not contain more than 15 per cent. water. If more, it has probably been beaten up with water to increase its weight. A simple method of detecting the amount of these without analysis is to melt the butter in a test-tube when the water, salt, and other substances remain at the bottom.

After separation of the casein by melting, good butter is entirely soluble in ether at 65° F., whereas mutton or beef fat is very insoluble. Butter is sometimes adulterated with starchy matters. Iodine will at once detect this by striking a blue colour. When butter is adulterated with other animal fats its melting point is raised. When adulterated with vegetable fats its melting point is lowered. The melting and solidifying of genuine butter and other fats is given by Parkes in degrees F. as follows :—

	Fusion.		Solidification.	
	Commencing.	Completed.	Commencing.	Completed.
	Degrees.	Degrees.	Degrees.	Degrees.
Butter oil . .	65-68	80-90	70-80	60-65
Lard . . .	76-80	100-115	90-100	71-75
Beef dripping . .	68-85	100-120	90-100	72-76
Mutton dripping .	86-100	140-150	120-130	86-92
Palm oil . . .	81-92	110	88	69

Butter is best preserved by pouring over it water that has been boiled or water slightly acidulated with pure vinegar or tartaric acid, and placing the whole in an air-tight vessel. Sugar mixed with a little salt is likewise a good preservative.

13. *Cheese.*—Cheese adulterated with starchy matter can be detected by iodine.

14. *Eggs.*—An ordinary egg weighs about 2 ounces, 10 parts are shell, 60 white and 30 yolk. Fresh eggs are more transparent in the centre, old ones at the top. If 1 ounce of salt is dissolved in 10 ounces water good eggs sink in it, indifferent ones swim. Bad eggs float in pure water. Eggs are preserved by any means which exclude air, such as by buttering or oiling the shell. Boiling for half a minute keeps them for some time.

15. *Tea.*—Dried black tea should not contain more than 8 per cent. of ash, nor less than 5 per cent. "Spent" tea contains only about 3 per cent. Ordinary black tea yields 10 per cent. water, green tea 8 per cent. Tea is sometimes artificially coloured, black tea with black lead, green tea with a mixture of Prussian blue, turmeric, and China clay; but this being declared an adulterant artificial colouring is now little employed. Some teas consist of "exhausted" tea leaves and leaves of other plants with iron filings, etc., added and mixed with a small amount of good tea. The ordinary tea test is to put some in a cup and pour over the tea, water at the boiling point. Good tea should yield a pleasant, fragrant aroma and good flavour, not harsh or bitter, and on standing until completely cooled it should yield a "cream." The infused leaves should be spread out and examined under the microscope. The pure tea leaf is serrated at the borders, nearly though not quite down to the stalk, and the primary veins run out from the midrib nearly to the border, then turn in leaving a distinct space between them and the border. This appearance distinguishes it from all other leaves. Good tea should contain many small and young leaves, and the leaves vary in length from 2 inches downwards to ¾ inch.

16. *Coffee.*—Coffee is often adulterated with chicory. Many prefer coffee mixed with chicory, but if coffee is asked for, pure coffee should

be received. The adulteration may be detected either by the microscope or simply by sprinkling the sample upon water, when chicory sinks, and coffee floats. If the packet of sample shows signs of caking chicory adulteration is indicated.

All samples of food *suspected* as not genuine should be handed over to the analyst of the district for analysis.

Effects of Unwholesome Food.—The use of flesh of animals suffering from anthrax has caused malignant pustule in man; measly pork (which contains the cysticercus cellulosus) produces a tapeworm in man—the tænia solium, and the cysticercus of the ox produces another—the tænia medio canellata; pork containing the trichina spiralis produces trichina disease in man; and the tænia of the dog swallowed by the ox or sheep produces the ecchinococcus disease which likewise affects man. Meats containing either of the above should be condemned notwithstanding that their bad effects may perchance be destroyed by proper cooking. Again, meat when infected with certain organisms contains poisonous ferments which cooking does not destroy. In this connection are the frequent poisonings that have arisen from pork pies, decaying fish, etc., etc.

How Dietaries are constructed.—The following table * gives the analyses of various constituents of foods :—

Articles.	In 100 Parts.				
	Water.	Albuminates.	Fats.	Carbohydrates.	Salts.
Beef and mutton as ordinarily supplied .	75	15	8·4	..	1·6
Bacon	15	8·8	73·3	..	2·9
Salt beef . . .	49·1	29·6	0·2	..	21·1
White fish . . .	78	18·1	2·9	..	1·0
Poultry . . .	74	21	3·8	..	1·2
Flour	15	11	2	70·3	1·7
Wheaten bread . .	40	8	1·5	49·2	1·3
Rice	10	5	0·8	83·2	0·5
Oatmeal . . .	15	12·6	5·6	63	3
Peas (dry) . . .	15	22	2	53	2·4
Potatoes . . .	74	2	0·16	21	1
Cabbage . . .	91	0·2	0·5	5·8	0·7
Eggs	73·5	13·5	11·6	..	1
Cheese	36·8	33·5	24·3	..	5·4
Milk	86·7	4	3·7	5	0·6
Butter	6	0·3	91	..	2·7
Sugar	3	..	..	96·5	0·5

In the next table are the quantities of the various constituents hitherto considered necessary under certain conditions, namely, subsistence, ordinary labour, and active labour.

* The above table is taken from "Handbook of Hygiene and Sanitary Science," by George Wilson, M.A., M.D., D.P.H., LL.D., F.R.S. (7th ed.)

Water-free Substances given Daily.	Subsistence.	Ordinary Labour.	Active Labour.
	Ounces Avoir.	Ounces Avoir.	Ounces Avoir.
Albuminates . .	2·0	4·5	6·5
Fats . . .	0·5	3·5	4·0
Carbohydrates .	12·0	14·0	17·0
Salts . . .	0·5	1·0	1·3
Total water-free food . .	15·0	23·0	28·8

It is found that 1 ounce of albuminates contains 70 grains of nitrogen and 212 of carbon; that 1 ounce of fat contains 336 grains of carbon; and that 1 ounce of carbohydrates contains 190 grains of carbon.

As seen from the last table the quantities necessary for diet vary according to the amount of labour performed, and that for a man having ordinary labour the following quantities per day are necessary, namely, albuminates, 4·5 ounces; fat, about 3 to 3·5; carbohydrates, 14 to 14·25, and salts, 1 ounce. Total dry food, 23 ounces. Or $4{\cdot}5 \times 70 = 315$ grains of nitrogen, $4{\cdot}5 \times 212 = 954$ grains of carbon; $3{\cdot}5 \times 336 = 1176$ grains of carbon; $14 \times 190 = 2660$ grains carbon; and $1 \times 16 = 16$ grains salts. Total, 315 grains nitrogen, 4790 grains carbon, and 16 grains of salts.

The distribution of quantities necessary in three meals a day is given by Dr Edward Smith, the total quantities differing somewhat from the table already given. Dr Smith's figures are as follows:—

	Carb.	Nit.	Carbonaceous.	Nitrogenous.
	Grs.	Grs.	Oz.	Oz.
For breakfast .	1500	70	6·62	1·04
For dinner . .	1800	90	7 85	1·34
For supper . .	1000	40	4·52	0·59
Total daily .	4300	200	18·99	2·97

The latest experiments of Professor Russell H. Chittenden, Yale University, would however seem to upset these relative and absolute quantities, and if his results are confirmed by others it will modify our present ideas as regards the quantity especially of albuminates, which is necessary.*

It is thus possible to calculate the quantities necessary for support of the body in large institutions, such as workhouses, prisons, asylums, etc.

Example.—How much oatmeal, milk, and butter of the following percentage composition would furnish the albuminates, fats, and carbohydrates for an average diet?

Would the salts be in the proper proportion or not?

* *Physiological Economy in Nutrition*. London: Heinemann, 1905.

	Water.	Albuminates.	Fats.	Carbohydrates.	Salts.
Oatmeal . . .	19	12	6	60	3
Milk . . .	87·3	4	3	5	0·7
Butter . . .	14	0	84	0	2

(*Cambridge Examination*, 1882.)

The answer is got as follows, taking albuminates, etc., necessary as per table—

Let x = number ounces oatmeal required

" y = " " milk "

" z = " " butter "

$$(1)\quad \frac{12x+4y}{100} = 4{\cdot}5$$

$$(2)\quad \frac{6x+3y+84z}{100} = 3$$

$$(3)\quad \frac{60x+5y}{100} = 14{\cdot}25$$

$$(1)\quad 12x + 4y = 450$$

$$(2)\quad 6x + 3y + 84z = 300$$

$$(3)\quad 60x + 5y = 1425$$

Multiply (1) by 5—$60x + 20y = 2250$

$$\underline{60x + 5y = 1425}$$

$$15y = 825$$

$$\therefore\ y = 55 \text{ oz. milk}$$

$$12x + 4y = 450$$

$$12x + 220\ (4 \times 55) = 450$$

$$12x = 450 - 220 = 230$$

$$\therefore\ x = \frac{230}{12} = 19{\cdot}16 \text{ oz. meal}$$

$$6x + 3y + 84z = 300$$

$$114{\cdot}96 + 165 + 84z = 300$$

$$84z = 300 - (114{\cdot}96 + 165)$$

$$\therefore\ z = 0{\cdot}24 \text{ oz. butter}$$

Salts 100 milk : 55 :: 7 : 0·385

100 meal : 19·16 :: 3 : 0·5748

100 butter : 0·24 :: 2 : 0·0048

0·9646

The quantity of salts is thus rather small.

APPENDIX D

WATER

The *quantities* of water used by a person in the middle class was estimated by Professor Parkes as follows:—For cooking, 0·75 gallon daily; fluids as drink, 0·33; ablution, including daily sponge, 5 gallons; share of utensil and house washing, 3; share of clothes washing, 3—total 12·08 for domestic supply (without baths or closets). Add for general baths, 4 gallons; for water-closets, 6; for unavoidable waste, 3; and the total house supply will be 25 gallons. For town and trade purposes and animals in non-manufacturing towns he puts down 5, and for exceptional manufacturing towns 5. Therefore the total daily amount for all purposes stated as per head of population is 35 gallons. There are few towns, however, so well supplied, and many manufacturing towns have a great deal less. Edinburgh has at present an available supply of about 38 gallons, but after completion of the Talla scheme should have enough for double its present population. Glasgow has 50, but some manufacturing towns in Lancashire and Yorkshire have less than 22. Cattle and horses require about 6 gallons per day each.

Sources of Water Supply.—The rainfall is the ultimate source of all water, and is collected either as it falls, as from roof-tops, or after percolation through or passing over soil. The rainfall is for purposes of drainage calculated on the maximum fall, and for water supply on the minimum fall and the longest period of drought. The ratio of the available to the total rainfall is influenced by the kind of soil—ease or difficulty of percolation, elevation of gathering ground and its steepness, prevailing winds, rapidity of the rainfall, conditions of weather influencing evaporation, etc. The gathering ground of Talla water, one of the upper tributaries of the Tweed, and taken for the additional supply to Edinburgh, extends to 6180 acres. The average rainfall has been estimated at 65 inches. To arrive at the available annual rainfall, there was then deducted from this quantity 12 inches (as fixed by the late Mr Mansergh, F.R.S., after a reference to him) to reduce the quantity to the average of the three driest consecutive years, and a further quantity of 15 inches, which had been agreed on by the authors * as the amount represented by evaporation and absorption, leaving 38 inches as the average amount of the *available* annual rainfall or a daily available quantity of over 14½ million gallons, one-third of which has to be given off as compensation to the stream, the remainder being appropriated for the purpose of supply.

The rainfall × 0·52 = gallons per square foot; × 22620 = gallons per

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* "Communication to Royal Society," Edinburgh, by Messrs Hall Blyth, C.E., and W. A. Tait, C.E., May 1905.

acre; × 14·5 = million gallons per square mile; × 3630 = cubic feet per acre; and × 2323200 = cubic feet per square mile. In calculating roof supply the ground area of the building is generally taken as the roof area.

Storage.—Water reservoirs should be large enough to supply a population for four to six months in case of great drought prevailing.

Yield of Small Stream.—This may be ascertained (1) By damming up the stream and conveying the water along a wooden trough of known length, and observing the depth of water in it, and the time a float takes to pass from one end to the other. (2) By a sluice of known size, and taking the difference of level of the water above and below the sluice. Multiply the breadth of opening by the height, which gives the area of the sluice. The discharge = area × 5 times the square root of head of water in feet, the head of water being the difference of level of the water above and below the dam if the sluice is entirely under the lower level; or the height of the upper level above the centre of the opening if the sluice be above the lower level. (3) By taking 15 yards or so of the stream, finding its average breadth and depth at several places to get its sectional area, and watching the time a minute spale of wood takes to travel the whole distance, so as to get the surface velocity. Four-fifths surface velocity × sectional area = yield per second. One cubic foot of water = 6·23 gallons.

In their sixth Report, the Rivers Pollution Commissioners classify waters as follows:—

1. In respect of wholesomeness, palatability, and general fitness for drinking and cooking:—

Wholesome { (1) Spring water, (2) Deep well water } very palatable.
{ (3) Upland surface water, (4) Stored rain water } moderately palatable.
(5) Surface water from cultivated land, (6) River water, to which sewage gains access, (7) Shallow well water } palatable.

2. Classified according to softness with regard to washing, etc., (1) Rain water; (2) Upland surface water; (3) Surface water from cultivated land; (4) Polluted river waters; (5) Spring water; (6) Deep well water; (7) Shallow well water.

3. As regards the influence of geological formation in rendering the water sparkling, colourless, palatable, and wholesome, the following water-bearing strata are the most efficient, (1) Chalk; (2) Oölite; (3) Greensand; (4) Hastings sand; (5) New red and conglomerate sandstone.

TABLE EXHIBITING THE CHARACTERISTICS OF DRINKING WATER.

(*From Parkes'* "Practical Hygiene.")

Character or Constituent.	1. Pure and Wholesome Water.	2. Usable Water.	3. Suspicious Water.	4. Impure Water.	Remarks.
Clearness, lustre, and aëration	Transparent, sparkling, and well aërated.	Transparent, sparkling, and well aërated.	Turbid.	Turbid and not easily purified by coarse filtration.	Turbidity, due to very fine mineral matter, is sometimes associated with pure waters; thus minutely divided calcium sulphate will not subside in distilled water.
Suspended matter	None detectable by the eye.	Absent, or easily separable by coarse filtration or subsidence.	Considerable.	Large.	
Colour	Colourless.	Colourless, or slightly greenish.	Yellowish.	Distinctly yellow or any marked colour.	Where the impurity is mostly vegetable, the colour may be very marked in good, or at least usable water.
Taste.....	Palatable.	Palatable.	Any marked taste.	Any marked taste.	
Smell.....	None.	None.	None.	Any marked odour	
Solids (dissolved): Total	Under 8 grs. per gal. (=114 parts per mil.).	Under 30 grs. per gal. (=428 parts per mil.).	Above 30 grs. per gal. (=428 parts per mil.).	Above 50 grs. per gal. (=714 parts per mil.).	In chalk waters of the 1st class the solids may reach 14 grains per gallon (=200 parts per million), the greater part being calcium carbonate.
Solids, volatile (capable of being dissipated by red heat)	Under 1 gr. per gal. (=14 parts per mil.). Solids on incineration should scarcely blacken.	Under 3 grs. per gal. (=43 parts per mil.). Solids may blacken a little, but no fumes should be given off.	3 to 5 grs. per gal. (=43 to 71 parts per mil.). Much blackening on incineration or nitrous fumes given off.	Above 5 grs. per gal. (=71 parts per mil.). Much blackening and nitrous fumes given off, or smell of burnt horn.	In peat waters the incinerated solids may blacken considerably.
Chlorine.....	Under 1 gr. per gal. (=14 parts per mil.).	Under 3 grs. per gal. (=43 parts per mil.).	Above 3 grs. per gal. (=43 parts per mil.).	Above 6 grs. per gal. (=86 parts per mil.).	Water, slightly contaminated with sea-water, may have a higher amount of chlorine and still be usable.

Nitrites	Absent.	Absent.	Present.	Marked.	These are generally indications of previous animal contamination, but they may occasionally come from vegetable matter.
Nitrates	Absent or very faint trace.	Present.	Marked.	Large.	
Oxygen required for oxidisable organic matter, determined by permanganate in presence of acid.	Under 0·07 grs. per gal. (=1 part per mil.).	Under 0·105 grs. per gal. (=1·5 parts per mil.).	Above 0·105 grs. per gal. (=1·5 parts per mil.).	Above 0·14 grs. per gal. (=2·0 parts per mil.).	The amount may be greater in good peat waters.
Ammonia: free or saline	Under 0·0014 grs. per gal. (=0·02 parts per mil.).	Under 0·0035 grs. per gal. (=0·05 parts per mil.).	Above 0·0035 grs. per gal. (=0·05 parts per mil.).	Above 0·0070 grs. per gal. (=0·10 parts per mil.).	Frankland's standard for good water is: 2 to 3 parts per million of organic carbon; 0·2 parts per million of organic nitrogen. He also gauges it by the "previous sewage contamination," as measured by the nitrogen existing as nitrates—about 1 part per million being the limit of inorganic nitrogen in "reasonably safe" waters.
Ammonia: albuminoid or organic	Under 0·0056 grs. per gal. (=0·08 parts per mil.).	Under 0·0070 grs. per gal. (=0·10 parts per mil.).	Above 0·0070 grs. per gal. (=0·10 parts per mil.).	Above 0·0105 grs. per gal. (=0·15 parts per mil.).	
Hardness, fixed ...	2° Clark's scale.	Under 4° Clark's scale.	Above 4° Clark's scale.	Above 6° Clark's scale.	
Metallic contamination	None.	Trace of iron.	Trace of iron.	Any metal except iron.	
Hydrogen or alkaline sulphides	Absent.	Absent.	Absent.	Present.	
Microscopic characters	Mineral matter: vegetable forms with endochrome; large animal forms; no organic débris.	Same as No. 1.	Vegetable and animal forms more or less pale and colourless: organic débris; fibres of clothing, or other evidence of house refuse.	Bacteria of any kind: Fungi; numerous vegetable and animal forms of low types; Epithelia or other animal structures; evidences of sewage; ova of parasites, etc.	*N.B.*—Frankland's numbers are stated per 100,000, instead of per million. (See "Rivers Pollution Commissioners Sixth Report," page 13 and *seq.*)

N.B.—"Parts per mil." mean "Parts per million," equal to "milligrammes per litre."

QUALITATIVE EXAMINATION OF DISSOLVED SOLIDS.

The water may be either at once treated, or, in the case of some constituents, it should be concentrated by evaporation.—(Parkes' "Practical Hygiene.")

WATER NOT CONCENTRATED.

Substance sought for.	Reagents to be used and effects.	Remarks.
Reaction	Litmus and turmeric papers; usual red or brown reactions.	Usually neutral. If acid and acidity disappears on boiling, it is due to carbonic acid. If alkaline and disappears on boiling, to ammonia (rare). If permanently alkaline, to sodium carbonate.
Lime	Oxalate of ammonium. White precipitate.	Six grains per gallon give turbidity; sixteen grains considerable precipitate.
Chlorine	Nitrate of silver, and dilute nitric acid. White precipitate becoming lead colour.	One grain per gallon gives a haze; four grains per gallon give a marked turbidity; ten grains a considerable precipitate.
Sulphuric Acid....	Chloride of barium and dilute hydrochloric acid. White precipitate.	One-and-a-half grains of sulphate give no precipitate until after standing; three grains give an immediate haze, and, after a time, a slight precipitate.
Nitric Acid.....	Brucine solution * and pure sulphuric acid. A pink and yellow zone.	The sulphuric acid should be poured gently down to form a layer under the mixed water and brucine solution; half a grain of nitric acid per gallon gives a marked pink and yellow zone; or, as recommended by Nicholson, 2 c.c. of the water may be evaporated to dryness; a drop of pure sulphuric acid and a minute crystal of brucine be dropped in; ·01 grain per gallon can be easily detected.
	Solution of sulphate of iron and pure sulphuric acid. Olive-coloured zone.	Add an equal bulk of pure sulphuric acid to the water, and after cooling pour in gently the iron solution, so as to float above the mixed acid and water.
	Solution of pyrogallic acid and pure sulphuric acid. A pink zone turning purple.	Add to the water and sulphuric acid (prepared as for the brucine test) a drop or two of the solution of pyrogallic acid (strength about 2½ per cent. slightly acidulated with sulphuric acid).

Nitrous Acid ..... Iodide of [illegible]

Nitrous Acid	Iodide of potassium † and starch in solution, and dilute sulphuric acid. An immediate blue colour.	Add the solution of iodide of potassium and starch, and then the acid; the blue colour should be immediate; make a comparative experiment with distilled water.
Ammonia	Nessler's solution. A yellow colour or a yellow-brown precipitate.	If in small quantity, several inches in depth of water should be looked down on a white ground.
Iron	Red and yellow prussiates of potash. Blue precipitate.	The red for ferrous and the yellow for ferric salts.
Sulphuretted Hydrogen	A salt of lead. Black precipitate.	When the water is heated the smell of sulphuretted hydrogen may be perceptible.
Sulphides	Nitroprusside of sodium. A beautiful violet-purple colour.	A black precipitate with lead, but no colour with nitroprusside shows that the sulphuretted hydrogen is uncombined.
Oxidisable matter, including organic matter.	Gold chloride:—colour varying from rose-pink through violet to olive; a dark violet to black precipitate.	The water, which should be neutral or feebly acid, must be boiled for 20 minutes with the gold chloride. If no nitrous acid be present, the reaction may generally be considered due to organic matter.
Ditto	Permanganate of potassium. Red colour disappears.	In the absence of nitrites, the reaction indicates organic matter; if action rapid, probably animal; if slow, probably vegetable.
Lead or Copper...	Ammonium sulphide. Dark colour, not cleared up by hydrochloric acid.	Place some water (100 c.c.) in a white dish, and stir up with a rod dipped in ammonia sulphide; wait till colour produced, then add a drop or two of hydrochloric acid. If the colour disappears, it is due to iron; if not, to lead or copper.‡
Zinc	Sulphuretted hydrogen. A white precipitate.	This test is not available if there be iron present, should the water be alkaline. It forms, however, in perfectly neutral waters, but not in acid.

* Brucine solution is made by dissolving one gramme in 1000 c.c. of distilled water. The test may be used in another way: mix a crystal of brucine with a drop of sulphuric acid on a watch-glass, and then let a drop of water run down into it.

† Iodide of potassium, 1 part; starch, 20 parts; water, 500 parts; make the starch first and filter when cold, and add to the solution of iodide of potassium.

‡ Wanklyn.

Collection of Water for Analysis.—When water is to be analysed it is most conveniently collected in Winchester quarts, which have been rendered absolutely clean by chemical means, then washed with distilled water, and afterwards repeatedly washed with the water to be examined; plunged into the water below the surface before withdrawing the stopper and then filled. The quantity necessary for examination is at least one-half gallon. In drawing from a pipe, the pipe should first be allowed to run for a little before collecting the water. The analyst should receive full information regarding (*a*) source; (*b*) position, depth and construction of a well if its water is to be examined; (*c*) chances of pollution; (*d*) whether a surface water or rain water, and information as full as possible regarding other possible channels for impurities to reach the water.

As analysts make out reports on water in various terms, the following is a table for their conversion, one into another.

To convert parts per 1,000,000 (= mgr. per litre) into grs. per gal. multiply by 0·07.
To convert parts per 100,000 into grs. per gal. multiply by 0·7.
To convert parts per 100,000 into parts per 1,000,000 multiply by 10·0.
To convert grammes per litre into grs. per gal. multiply by 70.
To convert grs. per gal. (= parts per 70,000) into parts per 100,000 divide by 0·7.
To convert grs. per gal. into parts per 1,000,000 (= mgr. per litre) divide by 0·07.

Effects of Using Impure Water.—The diseases that are water-borne are principally cholera, typhoid fever, and the following entozoal: (1) Bothriocephalus latus (tænia lata), developing in the body from the embryo or eggs that exist in river water. (2) Distoma hepaticum, not probable but possible. (3) Round worms (ascaris lumbricoides). (4) Dochmius duodenalis (strongylus duodenalis, anchylostomum seu, sclerostoma duodenale)—this last has appeared lately in Scotland as the coal miner's worm; oxyuris vermicularis (probably), filaria dracunculus or guinea worm, filaria sanguinis hominis, finding its way to man through the agency of a mosquito's stomach, where it develops and is thence transferred to water, and reaches man, causing elephantiasis and chyluria—such at any rate is the suggestion of Dr Manson (Army Med. Rep., vol. xii., p. 504); bilharzia hæmatobia, through water containing the embryo, and leeches which settle upon the pharynx, causing coughs, nausea, and hæmorrhage.

Purification of Water.—Purification is effected by filtration. (*a*) On a large scale through sand and gravel made up as follows:—Sand 2 feet (not too fine) placed upon gravel 3 feet thick, increasing in coarseness from the size of a pea to that of a hen's egg. The quantity of water passing through should be regulated according to depth of water on the top. The rate of filtration should be about 60 gallons per square foot in 24 hours. (*b*) Purification by Reeve's filter for small towns, as employed successfully at Innerleithen, Peeblesshire. Here by reversing

the current of water and opening and closing of valves, the filter is rapidly cleaned whenever clogging begins. (c) The best anti-germ filter is the Pasteur-Chamberland.

APPENDIX E

AIR AND VENTILATION

The average composition of pure air per cent. by volume is as follows :— Oxygen (O) 20·96, nitrogen (N) 79·0, carbonic acid (CO_2) 0·04; with traces of ozone, ammonia, and watery vapour. In air vitiated by breathing, burning of gas, etc., the CO_2 present is taken as an index of impurity.

The average amount of CO_2 exhaled by a mixed community is 0·6 cubic feet per hour per person, and is rich in organic substances. It is the organic matter that is really the impurity. When in an inhabited room CO_2 amounts to 0·7 per 1000 cubic feet of air the impurities become distinctly perceptible to smell. De Chaumont says they give a little smell when 0·8 CO_2 is present, a close or disagreeable smell when 1·0 is present, a very close or offensive and oppressive smell when they reach 1·23, and extremely close (when the sense of smell can no longer differentiate) when reaching 1·28 per 1000 volumes of air. The standard of admissible impurity is 0·6 per 1000 volumes, (that is, initial CO_2 in air+0·2 of CO_2 from respiration). The exact quantity of CO_2 in an inhabited room is found as follows :—

First notice temperature of the air and barometric pressure.

Apparatus required by Pettenkoffer's Method.—(1) Wide-mouthed bottle with indiarubber cap having a capacity of 4 to 5 litres, with a cock at the bottom; (2) a 100 c.c. pipette; (3) a 25 c.c. pipette; (4) four 100 c.c. flasks; (5) one 4 ounce stoppered bottle; (6) one funnel; (7) a small bottle of phenolphthalein; (8) solution oxalic acid 1·41 grammes *

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* The reason why exactly 1·41 grammes to a litre is taken is this: Oxalic acid is a dibasic acid and so is carbonic acid. They both unite with barium, thus BaC_2O_4 and $BaCO_3$.

The formula for oxalic acid is $C_2H_2O_4$, $2H_2O$.
,, ,, ,, carbonic acid is CO_2.

That is, 126 parts by weight of oxalic acid are equivalent to 44 parts carbonic acid. Now from Avogadro's Law—which is, that the density of any gas is directly proportional to its molecular weight, the temperature and pressure being constant—we can deduce rules for finding the volume occupied by a given quantity of a gas when the molecular weight, the temperature, and the pressure of the gas are given. The volume occupied by 2 grammes of hydrogen (1 molecule) at 0° C and 760 m.m. is 22·33 litres. Now the density of hydrogen is 1. ∴ density of CO_2 is 22, and therefore 22·33 litres of CO_2 weigh 2×22 or 44 grammes, and so 1 litre CO_2 weighs $44\div22{\cdot}33$ or 1·97 grammes. The equivalent of oxalic acid for this amount of carbonic acid must therefore be $126\div22{\cdot}33$ or 5·64 grammes. If this quantity (5·64) oxalic acid is dissolved in 1 litre water, 1 c.c. of it=1 c.c. of CO_2, and if one fourth part of it or 1·41 grammes be dissolved in 1 litre water, then 4 c.c.=1 c.c. CO_2.

to 1 litre distilled water; each 4 c.c. of this solution = 1 c.c. CO_2 at 0° C. and 760 mil. pressure; (9) solution baryta water, 2·8 grammes to 1 litre; (10) a graduated burette for holding the oxalic acid solution.

Process.—Fill the bottle quite full of water, place it in position where the air is wanted for examination, run off the water by the cock at the bottom, to allow the air to fill the bottle, close the cock at the bottom. Put on the cap and remove the bottle. With the 100 c.c. pipette put into the bottle quickly 100 c.c. baryta water and shake thoroughly for 15 minutes. Then pour the contents into the stoppered 4 ounce bottles and allow them to stand for six or eight hours. Next by means of the 25 c.c. pipette draw away three portions or all four, if four can be got, placing each portion in one of the four 100 c.c. flasks. Add to the flasks a few drops of phenolphthalein, which strikes a beautiful pink colour. Drop in oxalic acid from the graduated burette into the flasks until the pink colour disappears, and note the number of c.c. required for this, for each flask, and take the average. Next find the number of c.c. required to neutralise 25 c.c. of baryta water. The difference between the two represents the amount of CO_2 that has combined with the baryta water to form carbonate of baryta. Thus—the causticity of the baryta water ($Ba(HO)$) was 18 c.c. (that is, 18 c.c. oxalic solution were required to neutralise 25 c.c. of it). The average amount required for three portions (after CO_2 contact) was for each 25 c.c. 16·5 c.c. Therefore the difference is 1·5 c.c. That is, there is 1·5 c.c. CO_2, in our jar (for each 4 c.c. oxalic acid solution = 1 c.c. CO_2, and the total quantity of oxalic required was 1·5 for 25, or 6 for the whole quantity in the jar, whose capacity was 4090 c.c. and $\frac{6}{4} = 1{\cdot}5$ c.c.). In calculating the quantity of the air we must first deduct 100 c.c. (the quantity baryta put in, displacing the air) and then we find the volume it would occupy at 0° C. and 760 m.m. pressure. The barometer at the time of filling was 29·755, and the thermometer was 15·5° C.

Therefore calculation is as follows :—

$$4090 \text{ c.c.} - 100 = 3990 \text{ c.c.}$$

$$30 : 29{\cdot}855 :: 3990 : 3950 \text{ c.c.}$$

$$\frac{3950 \times 273}{273 + 15{\cdot}5} = 3737 \text{ c.c.}$$

Then 3737 : 1000 :: 1·5 :: 0·42 per 1000 volumes.

To find Capacity of Jar.—Weigh it. Suppose it = 1000 grammes. Then 5000 − 1000 = 4000 grammes or 4000 c.c. or 4 litres capacity.

Amount of Fresh Air required.—As mentioned above, the permissible impurity of the air of a room is fixed at 0·6 volume CO_2 per 1000 volumes—0·4 volume being the average amount of CO_2 in 1000 volumes of air, and 0·2 the amount from respiration. The limit of permissible respiratory impurity is therefore 0·2 CO_2 per 1000 cubic feet or 0·0002 per cubic foot. This being so, 3000 cubic feet of fresh air per head per hour are required to prevent the air of a room from exceeding

0·6 CO_2 per 1000, because $0·0002 \times 3000 = 0·6$, the average amount, as we have already seen exhaled per hour by each inmate. This is expressed by the equation $\frac{e}{r} = d$, thus $d = \frac{0·6}{0·0002} = 3000$, where e represents the CO_2 exhaled, r the respiratory impurity per cubic foot of air, and d the delivery of fresh air required. Or it may be expressed thus: $\frac{0·6}{0·2} = 3$ = number of *thousands* of cubic feet of air required per head per hour. From this it is evident that if e and r are known, we can calculate d, and if d and e are known, we can calculate r.

The cubic space per individual necessary to prevent the exceeding of 0·6 CO_2 per 1000 volumes is, in a room permanently occupied, 1000 cubic feet (having ordinary means of ventilation). Less may answer where artificial means of ventilation are employed and when the air is heated before admission, but with ordinary natural ventilation 1000 feet are necessary to allow of complete change of air three times per hour; for more frequent change cannot be borne in this climate without causing draughts. It should be noted that any height of an inhabited room beyond 12 or 14 feet should not be taken into account when considering cubic space, because it is found that the organic impurities of respiration tend to accumulate in the lower strata of the room air. Thus the necessity of sufficient floor space in buildings like hospitals and schools, and for byres and stables when the health of the lower animals are considered.

(As regards estimation of cubic capacity, see Rules at p. 392.)

When gas is used for lighting purposes, consideration of impurity from its combustion must be taken into account, for 1 cubic foot of gas gives off 2 oz. of CO_2 and 0·2 to 0·5 grains of sulphurous acid (SO_2) requiring 1800 cubic feet of air to properly dilute its products. The ordinary gas burner consumes 3 to 5 cubic feet of gas per hour, thus requiring 5000 to 9000 cubic feet of air equal to that required for two or three adult persons.

Temperature of Air.—This is ascertained by thermometers. The three scales in use are the Fahrenheit, used in this country; the Centigrade, used in this country and on the continent, and the Reaumur. The scale of one is converted to either of the others by the formula—

$$\frac{F - 32°}{9} = \frac{C}{5} = \frac{R}{4}.$$

Hygrometry.—By hygrometers we obtain the quantity of moisture in the air. They are constructed on either the principle of absorption, of condensation or evaporation. Saussure's hair hygrometer* is one

* A human hair freed from fat by digestion in ether is stretched between a fixed point and a small needle which traverses a scale divided into 100 parts. The scale is graduated by wetting the hair for complete saturation, and by placing it over sulphuric acid of known strength for different degrees of saturation. (Hair shortens when dry, and elongates when moist). It is a most delicate instrument, indicating every momentary change of moisture.

of the best of the absorption class. Another is Deluc's whalebone hygrometer on the same principle. The best of those on the condensation principle are Daniells', Regnault's, and Dyne's, giving directly the *Dew Point* (that is, the temperature of the air when it is so saturated with moisture that the least cooling will cause condensation or deposit of water). From the dew point the actual quantity of moisture contained in a cubic foot of air is found from the empirical formula—

$$\text{Weight of moisture in grains} = \frac{5656{\cdot}2}{448 + t} \times p;$$

where t is the temperature of the air at time of observation, and p elasticity of vapour at the temperature of the dew point.

The most useful hygrometer is really two thermometers, known as the *Wet* and *Dry Bulb Thermometer*, the one bulb is bare and indicates the air temperature, the other has its bulb covered with muslin, kept wet by having a cotton wick dipping into distilled water. Evaporation causes cooling of this bulb, the cooling being in proportion to the dryness of the air, the difference between the readings of the two thermometers being greatest when the air is driest, and being zero when it is completely saturated. By this thermometer the dew point is found in Glaisher's tables or by Apjohn's formula, founded on Regnault's tabular determinations of the elastic tension of vapour in inches of mercury at different temperatures.

Here we note the readings of the dry bulb and the wet bulb. Let us say the dry bulb reading = 65° and wet bulb 56·5°. Then by Glaisher 65° − 56·5° = 8·5°, the difference. Multiply 8·5° by 1·82, the factor opposite the dry bulb temperature in the table, and we get 15·47. 65° (dry bulb temp.) − 15·47° = 49·53°, or the *Dew Point*. Or again, having taken the readings of the thermometer, we can calculate the dew point by Apjohn's formula, which is—

$$(1)\quad F = f - \frac{d}{87} \times \frac{h}{30} \qquad (2)\quad F = f - \frac{d}{96} \times \frac{h}{30}$$

the first to be used when the wet bulb thermometer is above, and the second when it is below, the freezing point (32°).

Here F is the elastic force of the vapour at the dew point (determined at different temperatures by Regnault and seen in tables); f, elastic force at the temperature of evaporation (*i.e.*, reading of wet bulb thermometer); d, difference between the readings of the wet and dry bulb thermometers, and h the height of the barometer. The $\frac{h}{30}$ differs so little from unity that it is usually neglected, and the first formula is thus simplified to $F = f - \frac{d}{87}$. Then taking the readings as before, namely, 65° and 56·5°,

$$\text{Elastic tension of vapour at dew point} = {\cdot}458 \text{ (as per table)} - \frac{65 - 56{\cdot}5}{87}$$
$$= {\cdot}458 - {\cdot}0977 = {\cdot}3603.$$

Then looking at the table we find the dew point is 49.

The Apjohn formula is most necessary in very dry states of the atmosphere, such as occasionally occurs on Ben Nevis.

Relative Humidity.—This is calculated on the assumption that dry air=0, and air absolutely saturated=100, and the proportion is as follows:—

The tension of aqueous vapour at air temp. : ditto at dew point : : 100 : x

Thus ·617 : ·348 : : 100 : 56·4=relative humidity.

About 70 to 75 per cent. is in this climate most pleasant to healthy people. With invalids suffering from chest affections causing dry cough, a greater amount of saturation is more agreeable.

Condition of the Air as Determined by the Barometer.—The exact height of the mercury represents the weight of the oxygen, nitrogen, carbonic acid and watery vapour taken together. The mercury of a barometer falls 0·001 inch for every foot of ascent from sea-level. When great accuracy is required, the temperature of the air has likewise to be considered. Advantage is taken of this to measure heights. As the diminution in ascent is not quite uniform, the following table is employed:—

To lower from	Feet must be ascended	To lower from	Feet must be ascended
31 inches to 30	857	28 inches to 27	951
30 ,, 29	886	27 ,, 26	986
29 ,, 28	918	26 ,, 25	1025

To lower from	Feet must be ascended	To lower from	Feet must be ascended
25 inches to 24	1068	22 inches to 21	1216
24 ,, 23	1113	21 ,, 20	1276
23 ,, 22	1161	20 ,, 19	1341
		19 ,, 18	1413

The height is found from this table by calculating the number of feet which must have been ascended to cause the observed fall in the barometer, and then correcting for temperature by multiplying the number obtained from the table, which may be called A, by the formula,

$$\left(1 + \frac{t + t' - 64}{900}\right) \times A,$$

where t is the temperature of the lower and t' of the upper station.

Air as affected by Temperature.—All gases and air expand equally $\frac{1}{491}$ (·002) of their volume for every degree Fahrenheit.

Air as affected by Pressure.—The temperature remaining the same, the volume of a given quantity of gas is inversely as the pressure which it bears; or, for the same temperature, the density of a gas is proportional to its pressure. This is known as Boyle's or Mariotte's Law.

We are now in a position to consider ventilation, which is either natural or artificial.

Natural Ventilation.—This is carried on by three forces, (1) *diffusion*, (2) *winds*, and (3) *the difference in weight of masses of air of unequal temperature.*

(1) *Diffusion.*—All gases and air diffuse inversely as the square root of their density. It acts but to a small extent in natural ventilation of a room.

(2) *Winds.*—The wind is a powerful ventilating agent, and is taken advantage of in natural ventilation by many devices as, for instance, by windows opening at the top on opposite sides of a room—cross window ventilation, and by the erection of cowls, so that they may act by perflation or aspiration.

(3) *Difference of Weight of Masses of Air of Unequal Temperatures.*—In taking advantage of this method of ventilation the difficulty met with is exclusion of the action of the wind. Openings should be such that their size can be lessened when the difference of the external and internal temperatures is great. These openings are termed *inlets* and *outlets.* Warm air is lighter than cold air, and hence a constant change of air is effected through these openings.

The laws governing ventilation are those that apply to falling bodies, and the volume passing through any special opening is approximately known by means of *Montgolfier's formula.* The velocity in feet of a falling body = eight times the square root of the height through which it has fallen. In the case of natural ventilation, the height fallen is represented by the difference of pressure between the inside and outside air, and this is based on the difference between the inside and outside temperature. The ratio of an expansion for every degree Fahrenheit was, as mentioned, $\frac{1}{491}$ of its volume. The formula as given by De Chaumont is as follows:—

$$V = \frac{8\sqrt{(h - h')(t - t')}}{491}$$

where V = velocity in feet per second; h = height of exit aperture from ground; h' = height of entrance aperture from ground; t = temperature of inside air; and t' = temperature of outside air.

Having found the velocity per second, multiply it by the sectional area of the tube or flue in decimals of a foot, and the product = the number of cubic feet of air ascending the flue per second, without making allowance for friction, for which from fourth to half has to be deducted. The loss by friction in tubes or flues of similar size and sectional area is directly as the length of the tube or flue, and if they are dissimilar in size, it will be inversely as the cross section of each. Bends of the tube and its shape influence the amount of friction. Thus a bend of a right angle diminishes the current by one half.

Example.—Suppose two ventilating shafts—the distance from the floor

of the room to the point of exit being 50 feet in both cases. Shaft A is straight, circular in section, diameter being 8 inches; shaft B is bent twice at a right angle, the cross section being rectangular, 10 inches by 5 inches. The inside temperature of room in each case is 65° F., outside temperature 46° F.

What are the respective quantities of air per hour that may be expected to pass out of the shafts?

N.B.—Show the working of your calculation.—(*Cambridge Exam.*, 1885.)

Ans.—Here the height of the heated column is 50 feet, and difference of temperature 16° F.

$\therefore \quad \frac{50 \times 16}{491} = 1{\cdot}71$ and velocity $= 8\sqrt{1{\cdot}71} = 10{\cdot}4$ feet per second.

Now the velocity × sectional area in feet gives the discharge in cubic feet per second $\therefore$ area* $= D^2 \times {\cdot}7854$ or ${\cdot}\dot{6} \times {\cdot}\dot{6} \times {\cdot}7854$ or ${\cdot}35$ feet. And ${\cdot}35 \times 10{\cdot}4 = 3{\cdot}64$ cubic feet per second $= 218{\cdot}4$ cubic feet per minute $= 13104$ cubic feet per hour. But about $\frac{1}{4}$th has to be deducted for friction; $\therefore$ $\frac{3}{4}$th $(13104) = 9928$ cubic feet per hour from shaft A.

Shaft B as before—

$$\text{Velocity} = \sqrt{1{\cdot}71} \times 8 = 10{\cdot}4.$$

Sectional area $= 10 \times 5 = 50$ square inches $= {\cdot}347$ square foot. ${\cdot}347 \times 10{\cdot}4 = 3{\cdot}6$ cubic feet per second $= 216{\cdot}0$ cubic feet per minute $= 12960$ cubic feet per hour. But each right angle diminishes quantity by $\frac{1}{2}$, so that making allowance for friction, we have $\frac{12960}{4} = 3240$ cubic feet per hour.

For calculating the size of outlets and inlets of air for effective ventilation, the following is De Chaumont's formula:—

$$\frac{D}{100\sqrt{H\,(T - t) \times {\cdot}002}} = A.$$

D = delivery required per hour. H = height of heated column of air, T = temp. of column, t = temp. of external air. A = area of outlet and inlet in square inches. ·002 = ratio of expansion for 1° F. 100 = a constant.

To calculate the delivery per hour, the area of inlet being given.

$$D = 200\left(\sqrt{H\,(T - t) \times {\cdot}002\ A}\right)$$

200 = constant, obtained by multiplying the number of seconds in an hour by twice $\sqrt{16{\cdot}09} = 8$ nearly, and dividing by 144 square inches. A = area of inlet. H, T, t, as in preceding formula.

In this country, 24 square inches of outlet and of inlet per head are deemed sufficient.

The most accurate way of estimating velocity of current in ventilation is by Casella's anemometer.

* For area of a circle, see p. 392, *post*.

The necessity of being able to calculate area and cubic space has now been shown. The rules for doing so are as follows :—

Area of square . . . = Square of one of the sides.
Area of rectangle . . . = Multiply length by width.
Area of triangle . . . = Multiply base by one-half height, or height by one-half base.
Area of any figure bounded by straight lines = Divide into triangles and take the sum of their areas.
Area of circle . . . . = Multiply square of diameter (D^2) by ·7854, or square of circumference (C^2) by ·0796.
Circumference of circle . . = $D \times 3{\cdot}1416$.
Area of an ellipse . . . = Multiply the product of the two diameters by ·7854.
Area of segment of circle . = To two-thirds of the product of chord and height add the cube of the height divided by twice the chord = $\frac{2}{3}(Ch \times H) + \frac{H^3}{2\,Ch}$.

As regards cubic capacity, the following rules or examples may be given :—

Cubic capacity of a cube or solid rectangle = Multiply together the length, width, and height.
Cubic capacity of a solid triangle = Multiply area of section (triangle) by depth.
Cubic capacity of a dome . = Multiply area of base by two-thirds height.
Cubic capacity of a cylinder . = Multiply area of base (circle) by height.
Cubic capacity of a cone or pyramid = Multiply area of base by one-third height.

Irregularly-shaped rooms or spaces should be divided into sections and their cubic capacity taken separately.

Corrections must always be made in estimating cubic space of a room for the largest pieces of furniture, for instance, bed and bedding = say 10 cubic feet. Each body of an adult = his weight ÷ 4. Thus a man of 12 stones occupies 3 cubic feet.

The cubic space required by statute or recommended in their model bye-laws by the Local Government Board of Scotland is as follows: For common lodging-houses where ventilation is good, 300 cubic feet at least; For houses let in lodgings, 400 (2 children under 10 counting as one; For infectious diseases hospitals, 2000; For workshops, 250 (during overtime, 400); (For workshops occupied as sleeping apartments, it is proposed by Secretary of State to make the space 400); In a domestic factory, 250 (overtime 400). The cubic space laid down by the Scotch Educational Department, Whitehall, is 80 cubic feet with 8 square feet of area for each child, an utterly insufficient allowance unless a system like Key's ventilation is used (see page 393).

Artificial ventilation is effected by either forcing air into a room—*propulsion* or *plenum* method, or by drawing the exhausted air out of a room—*extraction* or *vacuum* method. The former is used for public buildings when the incoming air is driven by fans either by means of electricity, water turbines, or other motor power. For the latter or exhaust system, exhaust fans are similarly employed, but the exhaust system is practically in daily use in every house by means of ordinary grates and chimneys, although special grates (such as Galton's) are employed to advantage as they heat the incoming air for the room as well as furnish the heat for the exhaust chimney. Mines are ventilated on the extraction system by means of a furnace at the bottom of the upshaft, the air being drawn down another shaft and made to pass through the galleries by an arrangement of partitions and double doors.

Both methods are employed in the ventilation of the Houses of Parliament at Westminster.

One of the best systems of propulsion combined with warming in winter (or cooling in summer) for public buildings is that of Mr William Key. It may be seen at Leith Academy, Victoria Hospital, Glasgow, Mitchell Hall, Aberdeen University, at several board schools in Glasgow and Aberdeen, at West Fife Fever Hospital, Dunfermline, at Cupar-Fife Asylum, and in many churches and other buildings in Scotland.

The air is purified by trickling down a screen of jute threads at one central inlet. It is then warmed in winter by passing through "batteries" of steam or hot water pipes, or cooled in summer by passing through the same "batteries" filled with cold water or iced water. A powerful wheel fan propels it along horizontal and vertical air ducts into every apartment which it enters in a direction upwards and under sufficient pressure to force the foul air through outlets placed near the floors from which it finds its way by means of outlet ducts to central outlets on the roof ridge, fitted with light valves to prevent down draught. The inlets are about $\frac{1}{4}$th larger than the outlets to provide sufficient fresh air to pass away through any chinks or openings in walls, windows, doors, etc., and thereby preventing cold draughts entering through such chinks or through the doors on their being opened. It is claimed for it that air can be changed 6 to 12 times per hour as occasion requires without perceptible draughts. The screen removes $\frac{9}{10}$ths of the air impurities that would otherwise enter.

Among other mechanical arrangements to assist natural ventilating powers may be mentioned, (1) windows having their upper parts swing and opening inwards, (2) putting louvres in place of the top pane (Moore), (3) Double panes, the outer having an opening at lower edge and the inner at upper edge. (4) Pott's perforated panes. (5) Bird's method of raising lower sash of window, and placing a board in the opening thus allowing a space in the middle of the window between the sashes. (6) Ellison's conical bricks. (7) Tobin-tubes as inlets (air heated or not heated). (8) Mica or talc valve opening in the chimney

breast. (9) M'Kinnell's double tubes in ridge of roof, inlet tube being outside exit tube and flanges, directing air along the insides of the roof, the outlet tube being inside the inlet tube and taller and protected at its top, etc., etc.

APPENDIX F

USEFUL TABLES AND MISCELLANEOUS MEMORANDA

Measure of Length

12 inches = 1 foot. 36 inches = 1 yard. 72 inches = 6 feet or 1 fathom. 110 yards = 1 furlong. 1760 yards = 8 furlongs = 1 mile.

Land Measure

7·92 inches = 1 link. 100 links = 1 chain. 8000 links = 80 chains = 1 mile.

Square Measure

144 sq. inches = 1 sq. foot. 1296 sq. inches = 9 sq. feet = 1 sq. yard. 30¼ sq. yards = 1 sq. pole or perch. 1210 sq. yards = 40 sq. poles = 1 rood. 4 sq. roods = 1 sq. acre. 640 sq. acres = 1 sq. mile.

Square Land Measure

625 sq. links = 1 sq. perch. 10,000 sq. links = 1 sq. chain. 25,000 sq. links = 2·5 sq. chains = 1 sq. rood. 100,000 sq. links = 10 sq. chains = 4 sq. roods = 1 sq. acre.

Measure of Capacity

1 pint = 34·66 cubic inches. 2 pints = 1 quart = 69·318 inches. 4 quarts = 1 gallon = 277·274 cubic inches. 1 gallon = 10 lbs. of water at 62° F. 6·232 gallons = 1 cubic foot. 224 gallons = 1 ton.

Measurement of Cubic Space (see p. 392)

Metrical Weights and Measures (from Parkes)

(a) Length

1 metre = 39·37 English inches = 3·28 feet.
1 decimetre = 3·94 ,, = (4 inches nearly).
1 centimetre = 0·39 ,, = ($\frac{4}{10}$th inch nearly).

N.B.—The *Latin* prefix indicates division. The *Greek* prefix indicates multiplication.

Kilometre = 1000 metres = 1094 yards = $\frac{5}{8}$th mile (nearly).

(b) Area

1 square metre = 10·76 square feet = 15·42 square inches.
1 square centimetre = 0·154 square inch = $\frac{2}{13}$ square inch (nearly).
1 square millimetre = 0·0015 square inch = $\frac{1}{650}$ square inch (nearly).
100 square metres = 1 are = 119·7 square yards.
100 ares = 1 hectare = 11967 square yards = 2·47 acres.
100 hectares = 1 square kilometre = 247 acres = 0·386 square mile.

(c) *Capacity*

1 decimetre cubed = 1 litre = 1000 cubic centimetres = 61 cubic inches = 35·3 ounces = 0·22 gallon.
1 cubic centimetre = 0·061 cubic inch.
1 cubic inch = 16·4 cubic centimetres.
28·35 cubic centimetres = 1·733 cubic inches = 1 ounce.
1,000,000 cubic centimetres = 1000 litres = 1 cubic metre = 1 stere = 35·3 cubic feet.

(d) *Weight*

1 cubic centimetre distilled water at 4° C. (39·2° F.) weighs 1 gramme.
1 gramme = 15·432 grains.
1 decigramme = 1·548 grains (= 1½ grains nearly).
1 centigramme = 0·154 grains (= $\frac{2}{13}$ grains nearly).
1 milligramme = 0·015 grains (= $\frac{1}{65}$ grains nearly).
1 kilogramme = 1000 grammes = 15·432 grains = 2·2 lbs. *avoir.* = 35·3 ounces.

French *livre* and German *pfund* = 500 grammes = 1·1 lbs. = 17·6 ounces. The German *loth* = 16⅔ grammes = ½ ounce nearly.

Thermometer Scales

$$\frac{\text{Centigrade}}{5} = \frac{\text{Réaumur}}{4} = \frac{\text{Fahrenheit} - 32}{9}$$

Mercury freezes at − 40·0° C., − 32·0° R., and − 40·0° F.
Zero of Fahr. = − 17·7 C. − 14·2 R., 0·0 F.
Water freezes at 0·0 C., 0·0 R., and at 32° F.
Mean temperature for specific gravities 15·5 C.; 12·4 R.; 60·0 F.
Alcohol boils at 78·3 C.; 62·7 R.; 173·0 F.
Water boils at 100° C.; 80° R.; 212° F.
Mercury boils at 360 C.; 288·0 R.; 680·0 F.

Normal Bodily Temperatures

Man 98·4° F.; sheep 99·4°-102°; horse 100°-102°; pig 102·2°-104·4°; ass 100·4°-101·3°; goat 101·3°-103·1°; cow 102°; calf 102·4°; cat 102°; mouse 102°; rat 102·2°-103·1°; fowl 105·8°-107·6°.

Steam-pressures and Corresponding Temperatures

Steam at 212° F. = 0 lbs.; at 228 = 5 lbs.; at 240 = 10 lbs.; at 251 = 15 lbs.; at 260 = 20 lbs.; at 287 = 40 lbs.

Barometer Scales

Standard pressure = 760 millimetres = 29·922 inches.

30 inches = 762 ,,
29·5 ,, = 749 ,,
29·0 ,, = 737 ,,
28·5 ,, = 724 ,,
28·0 ,, = 711 ,,
1·0 ,, = 25·4 ,,

Barometer as a Weather Glass in our Climate

31 inches very dry; 30⅔ settled; 30⅓ fine; 30 variable; 29⅔ rain or wind; 29⅓ much rain; 29 gale.

Conversion of Analytical Results (see p. 384)

Weight, etc., of Money

1 penny-piece weighs 145·7 grains. 1 half-penny 87·4 grains. 1 farthing 43·7 grains. The diameter of a half-penny = 1 inch.

Calculation of Discharge from Sewers (Wicksteed)

$V = 55 \times (\sqrt{D \times 2\ F}) \times A$. Here V = velocity in cubic feet per minute; D = hydraulic mean depth; F = fall in feet per mile; A = section area of current of fluid.

"To use this formula, the hydraulic mean depth when the sewage is flowing, and the amount of fall in feet per mile must be ascertained. The hydraulic mean depth is ¼th the diameter if the pipe is running full; if the pipe is not full, it is the section area of current fluid divided by the wetted perimeter. The wetted perimeter is that part of the circle of the pipe wetted by the fluid. The fall in feet per mile is easily obtained, as the fall in 50 or 100 or 200 feet can be measured, and the fall per mile calculated (5280 feet = 1 mile). Having got these numbers, multiply the hyrdaulic mean depth by twice the fall in feet per mile, and take out the square root. Multiply this by 55, and the result by the section area. The number obtained gives the amount in cubic feet per minute."—(*De Chaumont.*)

Sewers.

Diameter.	Velocity in Feet per Minute.	Gradient required.
4 inches	240	1 in 36
6 ,,	220	1 ,, 65
8 ,,	220	1 ,, 87
9 ,,	220	1 ,, 98
10 ,,	210	1 ,, 119
15 ,,	180	1 ,, 244
18 ,,	180	1 ,, 294
21 ,,	180	1 ,, 343
24 ,,	180	1 ,, 392
30 ,,	180	1 ,, 490
36 ,,	180	1 ,, 588
48 ,,	180	1 ,, 784

The following table is by Latham. In it the velocity in feet multiplied by the inclination equals the length of the sewer to which the calculation applies. For example, if the velocity is 6 feet per second in a pipe whose diameter is 4 inches, then 6×24 = 144 feet is the length of the sewer.

Diam. in inches.	Rate of Inclination for Velocity per Second.				
	2 Feet.	3 Feet.	4 Feet.	5 Feet.	6 Feet.
4	1 : 194	1 : 92	1 : 53	1 : 34	1 : 24
6	292	137	80	51	36
8	389	183	106	69	48
9	437	206	119	77	54
10	486	229	133	86	60
12	583	275	159	103	72

Ground (properly prepared) required for Sewage Irrigation

For broad irrigation on an average 1 acre to 100 persons = 70 yards of the side of a square and will take 2000 gallons in 24 hours.

For intermittent downward filtration 20 acres of land at Merthyr-Tydval are used for 15,000 of a population.

Composition of Principal Sewage Precipitants

Ferrozone consists of ferrous sulphate 26·64 per cent., moisture 24·14 per cent., magnetic oxide of iron 19·01 per cent., silica 11·35 per cent., combined water 8·20 per cent., magnesium sulphate 5·17 per cent., calcium sulphate 3·30 per cent., alumin. sulph. 2·19 per cent.

Polarite consists of magnetic oxide of iron 53·85 per cent., silica 25·5 per cent., lime 2· per cent., alumina 5·68 per cent., magnesia 7·55 per cent., and carbonaceous matter and moisture 5·41 per cent.

The Ferrozone precipitation process (working well) can be seen at Loanhead, near Edinburgh.

Symbols and Atomic Weights of the Commoner Elements

Name.	Symbol.	Combing Weight.	Name.	Symbol.	Combing Weight.
Aluminium	Al	27·5	Lead (Plumbum)	Pb	207
Antimony (Stibium)	St	122	Magnesium	Mg	24
Arsenic	As	75	Manganese	Mn	55
Barium	Ba	137	Mercury (Hydrargyrum)	Hg	200
Bismuth	Bi	210	Nitrogen	N	14
Bromine	Br	80	Oxygen	O	16
Calcium	Ca	40	Phosphorus	P	31
Carbon	C	12	Platinum	Pt	197·1
Chlorine	Cl	35·5	Potassium (Kalium)	K	39·1
Chromium	Cr	52·5	Silicon	Si	28
Copper (Cuprum)	Cu	63·4	Silver (Argentum)	Ag	108
Gold (Aurum)	Au	196	Sodium (Natrium)	Na	23
Hydrogen	H	1	Sulphur	S	32
Iodine	I	127	Tin (Stannum)	Sn	118
Iron (Ferrum)	Fe	56	Zinc	Zn	65

APPENDIX G

SYNOPSIS OF THE SUBJECTS OF EXAMINATION FOR DIPLOMA IN PUBLIC HEALTH OF CONJOINT BOARD OF EDINBURGH AND GLASGOW.

For the Degree in Public Health more subjects are necessary and the standard altogether higher.

First Examination

The Laboratory Examinations shall be in Chemistry and Bacteriology.

(1) Analysis of Air—Temperature, Pressure, Humidity, Carbonic Acid, Ozone, Micro-organisms, Organic Matter, Noxious Emanations.

(2) Analysis of Water for Drinking Purposes, including qualitative and quantitative estimation of total solids (Lime, Magnesia, Chlorides, Sulphates, Nitrates and Nitrites, Ammonia, and Lead), and loss on ignition of solids—determination of Hardness, of Organic Impurities, and of Acidity and Alkalinity—Physical and Biological Examination.

(3) Examination of Foods—Milk, Butter, Margarine, Flour, Bread, Starchy Foods, Sugar, Honey, Butcher Meat, Fish, Vegetables.

(4) Examination of Beverages—Tea, Coffee, Cocoa, Alcoholic Beverages, Aërated Waters.

(5) Examination of Condiment—Salt, Pepper, Mustard, Vinegar, and Preserves.

(6) Examination of Building Materials.

(7) Gases—their Chemical Properties.

(8) Detection of Poisons in articles of Dress, Decorations, and Food.

(9) Sewage—Analysis of Sewage and Effluents after treatment, and Chemistry of Sewage treatment.

(10) Soils—Temperature, Humidity, Permeability, Chemical Composition, Gases of the Soil, Micro-organisms.

(11) Disinfectants and Deodorisers—Chemical examination of the Materials, Determination of their comparative power.

(12) Examination of Parasites and other Organisms infecting the Body and Human Food Stuffs.

(13) Bacteriology and Bacteriological Methods—Modes of culture—Culture media—Culture and recognition of the principal pathogenic organisms—Bacteriological examination of Water, Air, and Foods—Antitoxins—Principles of Serumtherapy and Immunization—Cultivation and recognition of Micro-organisms in relation to Epidemic and other Diseases.

Physics and Meteorology:—

(*a*) Physics.—*Gases*—Pressure, Volume, Temperature, Solubility in Liquids, Absorption of Solids, Diffusion, Movements of Air in

relation to Ventilation, Instruments employed in relation thereto, Levers, Use of the Balance, of the Spectroscope, and Photometry.

Liquids—Effects of Variations of temperature, Pressure, Capillarity, Osmosis, Solution, Vapour, Movements of Liquids, Specific Gravity.

Heat—Temperature, Latent Heat, Specific Heat, Fusion, Boiling, Evaporation, Radiation, Conduction, Convection.

Electricity—Elementary facts regarding Electrical Currents; how developed by Galvanic Cells, or by induction, with their chief effects. The dangers of Currents at a high voltage. Electrolysis. The Hermite process.

(*b*) METEOROLOGY.—Topographical, Atmospheric, and Climatic Influences in their relations to Health and Disease.

SECOND EXAMINATION

I. Epidemiology and Endemiology.—The causes, pathology, clinical history, diagnosis, prognosis, and prevention of Epidemic and Endemic Diseases, as well as of the Epizootics which affect man; of the Contagious or Infectious Diseases; and of those incidental to particular trades, or otherwise produced by the surroundings of the patient. Candidates will be examined practically in a Hospital for Infectious Diseases.

II. Practical Sanitation.—(1) *Dwellings and Public Institutions*—Site and Environment; Influence of Soil, Position, Aspect, and Climate; Meteorological and Geological Conditions. Principles of Design and Construction. Characters, Fitness, and Qualities of Materials (Brick, Cement, Earthenware, Iron, Lead). Warming and Ventilation; Principles and suitability of various methods. House Sanitary Appliances (Water-closets, Sinks, Cisterns, etc.). Sanitary Principles in their special Application to Schools, Barracks, Common Lodging-Houses, Workshops, and Factories. (2) *Water Supply*—Relative Eligibility of various Sources of Supply. Estimation of Yield. Methods of utilising various Sources of Supply. Storage. Purification. Distribution. Amount required. Modes of Pollution and their Detection. (3) *Refuse and Sewage Disposal*—Character and Quantity of matters to be disposed of in Urban and Rural Districts. Various Methods of Collection and Disposal, with practical Details as to their relative advantages and disadvantages. Sewage Purification; various methods, with design and general principles of necessary works. Disposal of Dry Refuse. House Drainage; Principles and Practical Details; Testing of Drains and Sanitary Appliances. Sewers; Construction and Ventilation. (4) *Establishments connected with Food Supply—e.g.*, Dairies and Cowsheds, Creameries, Bakehouses, Ice Cream Shops, Slaughter-houses. (5) *Meat and Food Inspection*—(Candidates will be examined practically on Meat Inspection). (6) *Communicable Diseases*—Epidemic and Endemic—Epizootic Diseases—Means of Prevention;

Precautions advisable where outbreaks are threatened; Port Sanitary measures; Quarantine. (7) *Hospitals for Infectious Diseases*—Principles of Design; Accommodation required; Hospital Administration. (8) *Disinfection*—Disinfectants and Disinfecting Apparatus, their selection and practical application. (9) *Disposal of the Dead*—Burial; Cremation. (10) *Nuisances and Offensive Trades.* (11) *Dangerous and Unhealthy Occupations*—Methods of preventing or mitigating their effects. (12) *Effects upon Health of*—Overcrowding, Air Pollution, Impure Water, Defective Drainage, general Insanitary Surroundings, Insufficient or Unsound Food. (13) Examination of and Written Report upon the Sanitary Condition of Premises to which the Candidate may be sent.

III. Sanitary Law*—Sanitary Administration.†

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* The Acts of Parliament, etc., embraced are

SCOTLAND ONLY

Public Health (Scotland) Acts, 1891 and 1897.
Burgh Police (Scotland) Act, 1892.
Part IV. Cleansing—Plans of new buildings and Regulations—Ventilation—Drainage of houses—Soil-pipes and Water-Closets.—Supply of water—Slaughter-houses—Bye-laws, secs. 316 B and 318.
Burgh Sewage, Drainage, and Water Supply (Scotland) Act, 1901.
Vaccination (Scotland) Act, 1863.
Dairies, Cowsheds, and Milkshops Orders, 1885, 1887, 1889.
Regulations as to Cholera, Yellow Fever, and Plague, 1898.
Rats Order, 1902; Signals Order, 1902.

UNITED KINGDOM

Sale of Food and Drugs Acts, 1875 to 1899; Margarine Act, 1887; Board of Agriculture, Sale of Milk Regulations, 1901; and Sale of Butter Regulation, 1902.
Factories and Workshops Act, 1901.—The provisions with which Local Authorities have to deal, and on which, by section 132, Medical Officers of Health must report. Generally speaking, these are:—Part I. (i.) Health; (ii.) Secs. 14, 15, 18. Part V. (iii.) Bakehouses; (iv.) Laundries. Part VI. Home Work. Part VIII. Administration. Part X. Supplementary. Sixth Schedule.
Alkali Acts, 1881-1892; Housing of the Working Classes Act, 1890; Contagious Diseases (Animals) Acts, sec. 34 of 1878, and sec. 9 of 1886; Diseases of Animals Act, 1894; Sale of Horse Flesh Regulation Act, 1889; Infectious Disease (Notification) Act, 1889; Rivers Pollution Prevention Acts, 1876, 1893.

ENGLAND ONLY

Public Health Act, 1875; Public Health Acts Amendments Act, 1890; Infectious Diseases (Prevention) Acts, 1890; Vaccination Act, 1867, and amending Acts, 1871, 1874, and 1898; Canal Boats Acts, 1877, 1884; Public Health (Interments) Act, 1879; Regulations as to Cholera, Yellow Fever, and Plague, 1896; Signals Order, 1902; Dairies, Cow-sheds, and Milk-shops Orders, 1885, 1886, 1899.
(N.B.—*Only the last differs from Scotch Orders.*)
Model Bye-laws issued by Local Government Board.

† Sanitary Administration—Duties of Medical Officers of Health and Inspectors of Nuisances.

IV. Vital Statistics and Statistical Methods.—Leading facts as regards Population, Birth and Death Rates, Distribution of Diseases.

N.B.—The Examination in above subjects is both Written and Oral.

SYLLABUS OF REQUIREMENTS FOR THE EXAMINATION OF THE INCORPORATED SANITARY ASSOCIATION OF SCOTLAND FOR A SANITARY INSPECTOR'S CERTIFICATE.

I. A knowledge of the following subjects, viz.:—

(1) Nuisances, and methods of dealing therewith.

(2) Offensive trades.

(3) Scavenging and the disposal of refuse.

(4) Sewerage. Sewage disposal, and methods of purification.

(5) The prevention of infectious disease. Disinfection.

(6) Ventilation and heating. Composition of the Air. Methods of detecting and testing impure air.

(7) The physical characteristics of different waters. Sources and methods of water supply. Water pollution. Means of preventing pollution, and methods of purification.

(8) Food inspection. Unsound food. Adulterated food—solid and liquid. Diseases of animals in relation to food supply.

(9) The sanitary aspects of house construction. Sanitary appliances for houses. Building regulations. Inspection of builders' and plumbers' work.

(10) The construction and inspection of dairies, cowsheds, milkshops, markets, and slaughter-houses.

(11) Measurement of cubic space.

II. A knowledge of the following Acts of Parliament, viz.:—

(1) "Public Health (Scotland) Act, 1897." (*Price 1s.*)

(2) "Burgh Police (Scotland) Act, 1892." Sections 107 to 127, 166 to 185, 215 to 256, and 278 to 287 (all inclusive), with Schedule IV. (*Price of Act, 2s. 11d.*)

(3) "Infectious Disease (Notification) Act, 1889." (*Price 3d.*)

(4) "Cleansing of Persons Act, 1897." (*Price 2d.*)

(5) "Sale of Food and Drugs Acts, 1875, 1879, and 1899" (*Price 1s. 2d.*), and "Margarine Act, 1887." (*Price 2d.*)

(6) "Cattle Sheds in Burghs (Scotland) Act, 1866." (*Price 3d.*)

(7) "Dairies, Cowsheds, and Milkshops Orders, 1885, 1886, and 1899." (*Price 7d.*)

(8) "The Factory and Workshop Act, 1901." Sections 1 to 9, 97 to 102, 107 to 115 (all inclusive), 126, and 131 to 138, and 155 to 159 (both inclusive). (*Price of Act, 1s. 2d.*)

NOTE.—The Acts prescribed may be obtained separately from Messrs P. S. King & Son, 2 Great Smith Street, Westminster, London, at the prices given above, which include Postage. The whole Collection can be had post free for 6s. 9d.

EXAMINATION PAPERS

A Reprint of all the Examination Papers from 1890 to date may be obtained from the Secretary. Price 1s. 1d., post free.

APPENDIX H

DIGEST OF DECISIONS ON THE SANITARY LAWS

Public Health Act, 1897

COURT OF SESSION

[1] Secs. 3, 12, and L.G.A., 1889, secs. 11, 17, 44, 105.—*Lower Ward of Lanarkshire D.C.* v. *Magistrates of Rutherglen*, 1902, 4 F. (H.L.) 35, 39 S.L.R. 857, 9 C.C.C. 65.

Held that the P.H.A. 1897 had not altered the boundaries between County L.A. and Burgh L.A. as defined by the L.G.A. 1889, and that accordingly the area included within the royalty but outwith the police boundaries of a royal burgh was for the purposes of public health administration under the jurisdiction of the D.C.

[2] Secs. 3 and 131 (1).—*Kenneth & Sons* v. *Ayrshire C.C.*, 1900, 2 F. 511, 37 S.L.R. 366, 7 C.C.C. 16.

Held (1) that "district" means the whole district under the L.A., and is not restricted to either the original water supply district plus the area to be added, or to the latter area only; and (2) that resolutions to form a S.W.S.D. must be advertised in a local newspaper having a circulation in the district.

[3] Sec. 32; B.P.A. 1892, sec. 284.—*Wishaw Burgh Commissioners* v. *Cleland Co-operative Society, Limited*, 1899, 2 F. 58, 37 S.L.R. 46, 7 C.C.C. 8.

Held that the Burgh Commissioners are entitled to interdict the erection of a slaughter-house licensed by the L.A. under the P.H.A.,

when such slaughter-house is attempted to be placed within the prohibited area defined in the B.P.A. (*v.* also B.P.A. 1903 schedule).

[4] Sec. 32 (1), (2), (3).—*Darney & Son* v. *Calder D.C. of Midlothian C.C.*, 1904, 7 F. 239; 42 S.L.R. 182, 11 C.C.C. 27.

Where a L.A. by Order sanctioned the establishment of an offensive trade under a certain condition, held that an action of reduction of the Order in so far as it imposed the condition, and a declarator that the said Order should be valid as if the condition had not been inserted, was incompetent, as the Court had no power to convert the conditional sanction into an unconditional sanction.

[5] Secs. 32 (3) and 183, 185.—*Rae* v. *Hamilton*, 1904, 6 F. (J.C.) 42, 41 S.L.R. 633, 11 C.C.C. 43.

A L.A. made the following bye-laws:—"(1) Every tallow melter shall cause all material used, or offensive material or refuse from the boiling pans, and all refuse, residue, or other matter from which any offensive effluvium, vapour or gas is evolved, or is liable to be evolved, to be placed in properly closed receptacles, or to be otherwise dealt with in such manner as to prevent any such effluvium, vapour or gas, escaping into the external atmosphere." "(2) Every tallow melter shall cause every process of his business in which any offensive effluvium, vapour or gas is generated, to be carried off in such manner that no offensive effluvium, vapour or gas shall escape into the external air, and he shall cause all such offensive effluvium, vapour or gas to be effectually destroyed," which the Board confirmed. Held that such bye-laws were neither repugnant to the general law of Scotland, nor unreasonable, nor *ultra vires* of the L.A. Also held that burgh magistrates sitting in the Police Court had jurisdiction under the Summary Jurisdiction Acts to try proceedings under this section, and that a magistrate although he was a member of the sanitary committee of the town council which authorised the proceedings, was not disqualified from sitting as a member of the Court.

[6] Sec. 33 (1).—*Renfrew C.C.* v. *Anderson*, 1899, 1 F. (J.C.) 48, 36 S.L.R. 321, 6 C.C.C. 36.

Held that a butcher, accustomed to kill cattle on farms for payment, who had killed two pigs for A in the garden behind A's house, was not in breach of this section, as he had not "carried on the business of a slaughterer by using premises in or near the garden."

[7] Sec. 33 (7), and B.P.A. sec. 279.—*Paton* v. *Wood*, 1899, 1 F. (J.C.) 38, 36 S.L.R. 314, 6 C.C.C. 34.

Where butchers who, prior to the passing of the P.H.A. 1897, had used unlicensed premises, and who thereafter, on applying for a licence, were given six months within which to obtain other premises, appealed under sec. 33 (7) to the L.G.B. on the eve of the expiry of the six months, it was held that such appeal was no barrier to their being prosecuted for using unlicensed premises in breach of sec. 279.

[8] Secs. 39 and 150.—*Spiers & Knox* v. *Marshall's Trustees*, 1904, 41 S.L.R. 249, 11 C.C.C. 10.

Where a C.C. paved a private street, held that they were entitled to recover a share of the cost thereof, on default of the owner, from bondholders who had entered into possession of the property.

[9] Sec. 43.—*Ogilvy* v. *Mitchell*, 1903, 5 F. (J.C.) 92; 40 S.L.R. 841.

In a summary complaint for a breach of this section, two M.O.H. who were examined as to the condition of the carcase, referred to their reports, on which the magistrate had ordered the carcase to be destroyed. The accused was convicted. On appeal the conviction was sustained, it being held that it was unnecessary to produce the magistrate's Order at the trial, or to note in the record of the proceedings the reports of the M.O.H.

[10] Sec. 43.—*Braid* v. *John Swan & Sons, Limited*, 1903, 5 F. 579, 40 S.L.R. 426, 10 C.C.C. 12.

Held that in proceedings under this section, it is necessary to libel not only that the diseased meat was intended for human food, but also that it was exposed for sale, or was deposited in some place, or was in course of transit, for sale or for preparation for sale.

See also Phillips *v.* Auld, 1892, 19 R. (J.C.) 29, 29 S.L.R. 299, 1 C.C.C. 30, on sec. 26 of the P.H.A. 1867.

[11] Secs. 47 (4), 145 (11), and 164.—*Mull D.C. of the Argyll C.C.* v. *L.G.B. and Mackay*, 1902, 9 S.L.T. 484, 9 C.C.C. 29.

Held that a claim for damages in respect that a L.A. failed to exercise powers conferred upon them, or to perform duties laid upon them by the Act, was not a claim which fell within sec. 164, as it was not a claim based on the "exercise of any of the powers of this Act."

[12] Secs. 60, 145, and 164.—*Barbour v. The D.C. of the Lower District of the County of Renfrew*, 1905, 13 S.L.T. 302.

The L.A. of Greenock during an epidemic applied to the defenders to pronounce an Order stopping the pursuer from supplying milk within the burgh of Greenock. The defenders declined to do so, whereupon the L.A. of Greenock appealed to the sheriff, who pronounced an Order under section 60. On the withdrawal of the Order, defenders declined to compensate pursuer, on the ground that the L.A. of Greenock were the parties responsible. The latter, however, denied liability also. In an action against the defenders, held that they, as the L.A. exercising the powers under the P.H.A., were liable in compensation, the amount to be determined by arbitration, in terms of secs. 145 and 164.

[13] Secs. 103, 107, 144, 145, and 164.—*Caledonian Railway Company* v. *Perth D.C.*, 1901, 3 F. 1029, 38 S.L.R. 748, 8 C.C.C. 19.

Held that a L.A. does not require, under sec. 144, to purchase lands through which a sewer is to be laid, and therefore that they have power under sec. 103 to carry a sewer under a railway, on paying compensation.

[14] Secs. 103 and 164.—*Crichton and Others (Campbell's Trustees)* v. *Ayr D.C. of Ayr C.C.*, 1900, 7 C.C.C. 35.

Held that an action to recover a sum as being a reasonable estimate of the value of the wayleave for certain sewers constructed by the L.A. under sec. 103 on the pursuer's lands was incompetent, as not being the proper method provided by sec. 164 for settling compensation.

[15] Sec. 133.—*Inverarity* v. *Forfarshire C.C.*, 1904, 6 F. 553, 41 S.L.R. 434, 11 C.C.C. 12.

Held that on the formation of a S.D.D., the C.C. may levy within it an assessment to defray the cost of forming it, and the necessary legal expenses of doing so, incurred prior to the formation.

[16] Secs. 134 and 136, and B.P.A. 1892, sec. 347.—*Hawick Police Commissioners* v. *Watson & Sons*, 1901, 3 F. 885, 38 S.L.R. 650.

Held that the water assessment in burghs under the B.P.A. can be levied on factories only on a valuation of one-fourth their annual value, and opinion expressed by Lord Moncrieff that even if the water supply could be regarded as established under the P.H.A., 1897, the assessment would fall to be made on one-fourth and not on the whole annual value of the subjects, as entered in the valuation roll.

[17] Secs. 134, 135, 136.—*Dumbartonshire C.C.* v. *Caledonian Railway Company*, 1901, 3 F. 1093, 38 S.L.R. 784, 8 C.C.C. 22.

Where a canal passed through a burgh contained within a S.W.S.D., the authority administering which was the C.C., it was held that the canal was liable for the S.W.S. assessment on its full valuation, the part of the canal passing through the burgh being, for the purposes of assessment, part of the S.W.S.D.

[18] Sec. 166.—*Duncan* v. *Hamilton Magistrates*, 1902, 5 F. 160, 40 S.L.R. 140, 10 C.C.C. 5.

Where in a hospital under the L.A., a child met with injuries through the carelessness of the hospital servants, held that an action for damages at the instance of the child's father against the L.A. was barred, as it had not been begun within two months from the date of the accident.

[19] Sec. 166.—*Gilillan* v. *Lanark C.C.*, 1902, 9 S.L.T. 432, 10 S.L.T. 274, 9 C.C.C. 19, 10 C.C.C. 3.

If a L.A. removes a child to hospital without a warrant and without the parents' consent, an action of damages against them will not be excluded by the time limit specified in this section. After proof, held parents' consent proved.

[20] Sec. 181.—*Glasgow and South-Western Railway Company* v. *Renfrew C.C.*, 1900, 8 S.L.T. 12, 7 C.C.C. 26.

Judgment by Lord Low on the object and effect of the bye-laws as to buildings, the circumstances in which they will apply, and the nature of the buildings to which they are applicable.

Sheriff Court

[21] Secs. 16 (1 and 5) and 22.—*Suburban D.C. of Midlothian C.C.* v. *The Caledonian Railway Company*, 1898, 5 C.C.C. 50.

A petition under sec. 22 to establish a nuisance under sec. 16 in respect of manure in uncovered trucks near a railway station was dismissed, but in the sheriff's note will be found useful observations on the law of nuisance, under the P.H.A.

[22] Sec. 16 (3).—*Robertson* v. *Smith*, 1899, 15 S.L.Rev. 238, 6 C.C.C. 65.

A water supply being defective in construction, and owing to pollution being injurious to health, held to be a nuisance, and remedial works ordered.

[23] Sec. 16 (5).—*Anderson* v. *Roxburgh*, 1901, 8 C.C.C. 84.

Contravention of this section in respect of a deposit of offensive matter constituting a nuisance, held established.

[24] Sec. 16 (5).—*Dobson* v. *Merry & Cunninghame*, 1905, 21 S.L.Rev. 75.

A county S.I. brought a summary complaint against a colliery company praying for a finding that a "burning bing" was a nuisance under this section, and for an Order on them to remove and discontinue it. The sheriff in holding that a nuisance had not been proved, expressed the views, (1) that the cost of abatement of the nuisance and the absence of the right of appeal under the P.H.A. would not justify the refusal of the statutory remedy, and (2) that the duty of a complainer, where the nuisance is one of magnitude, is to show that the Order he asks can be implemented and enforced.

[25] Sec. 16 (11).—*Petition: Paisley Magistrates*, 1902, 18 S.L.Rev. 273, 9 C.C.C. 109.

Where a churchyard was closed as being a nuisance under this section, the rights of certain parties to make ordinary interments at the sight of the S.I. were reserved, and a reservation was also made of "right to all parties whose rights of sepulture are by virtue of this Order brought to an end," to apply for authority to inter cremated remains.

[26] Sec. 33.—*Lanarkshire County Council* v. *Magistrates of Lanark*, 1898, 14 S.L.Rev. 186, 5 C.C.C. 56.

Held that public slaughter-houses erected by the Police Commissioners of the burgh under the B.P.A. 1892, beyond the burgh boundaries, do not require to be licensed under the P.H.A., by the L.A. of the district in which the slaughter-houses are situated.

[27] Sec. 39.—*D.C. of the Lower Ward of Lanarkshire* v. *Marshall*, 1904, 11 C.C.C. 147.

Where a L.A. had put a private street within a S.D.D. into proper order, held that a proprietor of a property in the street was liable for the proportion of the expense thereof, assessed according to the frontage

and *whole* valuation of his property, although there were entrances to it from other streets.

[28] Secs. 111, 156, 157, and B.P.A. 234.—*Leggat and Others* v. *Burgh of Barrhead*, 1902, 19 S.L.Rev. 7, 10 C.C.C. 73.

Held that under sec. 111 it was competent to apply to the sheriff to fix the terms and conditions upon which proprietors outside the burgh might connect their drains with the burgh sewers, and that an appeal under sec. 156 against his decision to the sheriff-principal was incompetent.

[29] Sec. 122.—*Montrose Lunatic Asylum* v. *Brechin D.C. of Forfarshire C.C.*, 1900, 16 S.L.Rev. 336, 7 C.C.C. 83.

In the formation of a S.D.D., observed by the sheriff that the general guiding principle is "that the area should contain all those subjects which can reasonably be said to have an interest or concern in one another's sanitation, and therefore a common interest or concern in the sanitation of the whole."

[30] Sec. 122.—*Caledonian Railway Company* v. *D.C. of the Middle Ward of Lanark*, 1901, 9 C.C.C. 110.

Considerations relative to the formation of a S.D.D., and the inclusion within it of public works. There are various grounds upon which it may be contended that a public work should be included. One of these, and an important one, is that it lies naturally within the proposed limits; another, that it is instrumental in bringing a population to the locality. Again, that it contributes to the drainage, or at least ought, if sanitation is properly attended to, so to contribute.

[31] Secs. 126 and 131.—*Glenluce Ratepayers* v. *Wigtownshire C.C.*, 1898, 14 S.L.Rev. 313, 5 C.C.C. 60.

Circumstances which were held inadequate to justify the formation of a S.W.S.D. Points for consideration in forming S.W.S.D., (1) protection of public health; (2) wishes of ratepayers.

[32] Sec. 126 (1) and (2).—*Provost and Magistrates of Paisley* v. *Watson*, 1903, 19 S.L.Rev. 183, 10 C.C.C. 75.

Held that water supplied to a papermill within a S.W.S.D., and only used for drinking, cooking, and sanitary arrangements by the mill employees, was water supplied "for domestic purposes," and that as the millowners had been assessed as owners and occupiers for the special water assessment applicable thereto, they were not liable to pay for the same water under the guise of "water supplied for purposes other than domestic."

[33] Sec. 131.—*Jevons* v. *Argyll C.C.*, 1899, 15 S.L.Rev. 198, 6 C.C.C. 64.

Circumstances in which a proposed S.W.S.D. was restricted in area, owing to the objecting area being reasonably supplied, and its inclusion not necessary to the utility of the scheme as applicable to the remainder.

[34] Sec. 131.—*Proprietors of Templehall* v. *Roxburghshire C.C.*, 1903, 19 S.L.Rev. 181, 10 C.C.C. 81.

Circumstances where a property which was amply supplied with water, and which, if included in the S.W.S.D., would be liable for one-fifteenth of the water-rate, was included within the S.W.S.D. It was for the public good, and the property would be placed on a proper sanitary footing.

[35] Sec. 131.—*Elgin C.C.* v. *Hogarth*, 1903, 11 S.L.T. 316, 10 C.C.C. 85.

Resolution to form a S.W.S.D. disapproved of, where the object of the scheme was to include along with a village a large sea area, for the purpose of obtaining an assessment on a rental of £1000 a year for salmon fishings. By limiting the S.W.S.D. to the village, the cost would fall on those interested who would directly benefit by it.

[36] Sec. 131.—*Glengarnock Iron and Steel Company Limited* v. *Northern D.C. of Ayrshire C.C.*, 1904, 11 C.C.C. 150.

Circumstances in which the extension of a S.W.S.D. and the combination of two S.W.S.D. were approved of, in order to include large public works.

[37] Secs. 164 and 166.—*Cessford* v. *Millport Commissioners*, 1899, 15 S.L.Rev. 362, 6 C.C.C. 67.

Circumstances where the claim for compensation of a householder, who, under arrangement with the L.A. removed from his house, which was infected, was held irrelevant, there being no averment that the L.A. had not acted in *bona fide* in the execution of the Act. See opinion by Sheriff Cheyne on the construction of secs. 164 and 166 as to compensation and damages.

[38] Sec. 164.—*Gordon* v. *Maxwelltown Town Council*, 1901, 17 S.L.Rev. 114, 8 C.C.C. 82.

In dismissing an action against a L.A., observed by the sheriff that the L.A. have a duty to investigate into each case coming under sec. 54, and where the patient comes under that section, a duty to remove. To found a claim for compensation the pursuer must aver that the L.A. "had never investigated the case at all, or had investigated it and come to a wrong conclusion, and in doing so were not *in bona fide*."

[39] Sec. 164.—*Thomson* v. *Broughty Ferry Commissioners*, 1898, 14 S.L.Rev. 365, 5 C.C.C. 62.

A dairyman claimed damages for loss owing to the L.A. having stopped him supplying milk under an order under sec. 60. Held that he had no relevant claim for damages under the 164th section, which was intended to provide compensation, not damages.

[40] Sec. 164.—*Christie* v. *Broughty Ferry Commissioners*, 1898, 14 S.L.Rev. 368.

Held that a farmer whose contract to supply milk to a certain dairy

was broken, owing to the L.A. having closed that dairy under an order under sec. 60, had no relevant claim against the L.A. for damages under sec. 164 for loss occasioned through the closing of the dairy.

[41] Sec. 164.—*Sclanders* v. *Partick Police Commissioners*, 1901, 17 S.L.Rev. 227.

Held that an application before the sheriff under this section for compensation for meat seized and destroyed by the L.A. should be brought in the form prescribed by the Sheriff Court Act, 1876, sec. 52.

[42] Sec. 164.—*Black* v. *Northern D.C. of Ayr C.C.*, 1903, 11 S.L.T. 371, 11 C.C.C. 125.

Where a party sued a L.A. for damages for injury to his lands through their operations in constructing a reservoir, held that the action was excluded by sec. 164, under which he could claim compensation, subject to arbitration.

Burgh Police Act, 1892

Court of Session

[43] Sec. 45.—*Russell* v. *Magistrates of Hamilton*, 1897, 25 R. 350, 35 S.L.R. 313.

Where, on the extension of a burgh which had a common good, there was a statutory reservation of the benefit of the common good to the old burgh, and the magistrates subsequently applied to the Secretary for Scotland for power to utilise the common good for the extended burgh, the Court, in granting interim interdict against an inquiry ordered by the Secretary for Scotland, expressed the opinion that such an application did not fall within this section, and that a Provisional Order for the purposes asked would be illegal.

[44] Sec. 54.—*Brown* v. *Magistrates of Leith*, 1896, 23 R. 654; 33 S.L.R. 475.

Held that under this section the commissioners may delegate to a committee the power of hearing and deciding appeals under sec. 368 against assessments. *v.* also Town Councils (Scot.) Act, 1900, sec. 74.

[45] Secs. 107, 109, etc., and L.G.A. 1894, sec. 44 (1) (*b*) and (2)—*Hill* v. *Grant*, 1899, 1 F. (J.C.) 42, 36 S.L.R. 317, 6 C.C.C. 38.

After a requisition under the L.G.A., sec. 44, a resolution to adopt the B.P.A., secs. 108-127 and 253-255, was passed at a meeting of the D.C., and a S.S.D. was formed. The D.C. then issued a notice under sec. 109, requiring owners, etc., to put their refuse every morning in a box for removal. Thereafter the D.C., on their own initiative, passed a resolution adopting sec. 107. A householder, who had not complied with the notice under sec. 109, was prosecuted by the D.C. Held that the D.C. had no title to prosecute, as they were not vested in the house refuse under sec. 107, that section not having been competently adopted. The adoption of that section should have proceeded on a fresh requisition.

[46] Sec. 115.—*Main* v. *Husband*, 1902, 5 F. (J.C.) 3, 40 S.L.R. 29.

Held that occupiers of main-door houses in a tenement, who had access to a back green by a door opening on a common back passage, connected with the common passage between the street and the common stair, were not liable to clean the latter passage, as it was not an "entrance" to their houses within the meaning of this sec.

[47] Sec. 167.—*Macgregor* v. *Leith Magistrates*, 1897, 24 R. 971; 34 S.L.R. 707.

Where it was shown from plans that the light and ventilation of an existing house would be improved by proposed alterations, it was held that the Dean of Guild Court were not entitled to refuse a warrant on the ground that they were not satisfied that the plans provided suitably for light and ventilation.

[48] Sec. 167.—*Lindsay* v. *Duke*, 1898, 25 R. 874; 35 S.L.R. 689.

When the Dean of Guild Court refuse a petition for warrant to erect buildings, in respect that the plans do not conform to the requirements of this section as to light and ventilation, they should intimate to the petitioner the precise nature of the grounds on which they have done so, that he may consider with a view to amending his plans.

[49] Sec. 169.—*Wright* v. *Gardner*, 1903, 5 F. (J.C.) 96; 40 S.L.R. 840.

Held that commissioners of burghs, possessing a Dean of Guild Court, are not entitled under this section to grant a warrant, or to prosecute a party who has not obtained a warrant, for alteration of buildings.

[50] Sec. 170.—*Hoy* v. *Magistrates of Portobello*, 1896, 23 R. 1039, 33 S.L.R. 763.

Held that the whole of the back ground lying between and separating two parallel rows of buildings, each facing a public street, was "open space" directly attached to each row within the meaning of this section.

See also *Bryce* v. *Lindsay and Miller*, 1901, 4 F. 241; 39 S.L.R. 141.

[51] Sec. 170.—*M'Lelland* v. *Moncur*, 1897, 25 R. 238, 35 S.L.R. 188.

Held that in computing the "open space" required by this section, it was incompetent to take into account ground belonging to parties other than the party proposing to build.

[52] Sec. 170.—*Brown* v. *Young*, 1900, 2 F. 647, 37 S.L.R. 466, 7 C.C.C. 22.

Held that, where the requirements of the statute as to "open space" are complied with, the Dean of Guild Court is not entitled to refuse a lining on the ground that, looking to the character of the locality, the buildings already existing on the ground, and the possible class of tenants, the arrangements for light and ventilation are insufficient. The "open space" may be on any side of the tenement.

[53] Sec. 170.—*M'Kellar* v. *Bryce*, 1904, 6 F. 313, 41 S.L.R. 246, 11 C.C.C. 8.

Where the Dean of Guild Court granted a lining for the erection of two tenements on condition that the "open space" was of the statutory dimen-

sions, held that the Dean of Guild Court were right in refusing a lining for a third tenement, the building of which would encroach upon the "open space" previously reserved for the two tenements.

Note.—Although secs. 169 and 170 have been replaced by secs. 41 and 63 of the B.P.A. 1903, the decisions on the former may be of use in the construction of the latter. The precise requirements as to "open space" contained in sec. 63 are apparently founded on the decisions on sec. 170.

[54] Secs. 172 and 173.—*Young* v. *Hill*, 1902, 4 F. 629, 39 S.L.R. 415.

Held that proposed attic rooms, 6 ft. high, with windows and fireplaces, which were to be used as box rooms, were "habitable rooms" under sec. 172, and therefore must be constructed of the statutory dimensions.

[55] Sec. 180.—*Downie* v. *Fraser*, 1901, 3 F. 1044, 38 S.L.R. 769.

Held that the owner of a new house, who had permitted tenants to store their furniture in it, on the understanding, however, that they were not to live there until the burgh surveyor's certificate had been obtained, was guilty of a technical breach of this section, and the full penalty of £5, imposed by the magistrate, reduced to 2s. 6d.

[56] Sec. 215.—*Glasgow, Yoker, and Clydebank Railway Co.* v. *Macindoe*, 1896, 24 R. 160, 34 S.L.R. 127, 4 C.C.C. 48.

Held that an open burn passing through land in a burgh, and which was to some extent polluted by sewage, was not a "sewer" within the meaning of this section.

[57] Sec. 285.—*Simpson* v. *Proctor*, 1896, 23 R. (J.C.) 22, 33 S.L.R. 270, 3 C.C.C. 27.

Held that a horse slaughterer, who had deposited for a night in unlicensed premises within the burgh, the carcase of a horse in course of transit to his licensed premises situated outwith the burgh, was not in breach of this section.

[58] Sec. 339.—*Brown* v. *Leith Magistrates*, 1896, 23 R. 654, 33 S.L.R. 475.

Where an owner of property appealed under sec. 368 to the Burgh Commissioners the question of his liability to pay an assessment for "private improvement expenditure," held that he was not entitled under sec. 339 to appeal from their judgment to the Court of Session.

[59] Sec. 339.—*Laurenson* v. *Police Commissioners of Lerwick*, 1896, 24 R. 135; 34 S.L.R. 75.

Held that a party who had no right of appeal against an Order of the Commissioners under sec. 143, B.P.A., in respect that his property was not affected by the Order, had a right of appeal under this section to the Court of Session.

Sheriff Court

[60] Sec. 170.—*Tait* v. *Scott*, 1893, 10 S.L.Rev. 43.

Held (1) that under sec. 170, where a dwelling-house is partially venti-

lated from an adjoining street, the "open space" directly attached thereto, necessary for ventilation, must belong to the owner of the dwelling-houses.

[61] Secs. 170 and 339.—*Walker* v. *Saltcoats Commissioners*, 1898, 14 S.L.Rev. 361, 15 S.L.Rev. 151.

Where behind a building of three storeys—the ground one being occupied as shops, and the two upper as dwelling-houses—there was a saloon and store, the ceiling of which was not higher than the floor of the second storey, held that the "open space" covered by the saloon and store was not part of the area of the building occupied as dwelling-houses, and that the "open space" above the saloon and stores was "space" attached to the two storeys used as dwelling-houses, and was sufficient for light and ventilation under sec. 170. Held also that in a burgh where there is no Dean of Guild Court, a refusal by the Burgh Police Commissioners to grant a warrant to erect buildings, is appealable to the sheriff under sec. 339.

[62] Sec. 218.—*Petition: Coatbridge Town Council*, 1898, 15 S.L.Rev. 126.

Where certain ratepayers objected to their inclusion in a S.D.D., on the ground that they were already provided with sufficient drains, but it appeared that their exclusion would inflict greater hardship on existing districts, held on a consideration of "conflicting equities" that the objections should not be given effect to.

[63] Secs. 219 and 238.—*Commissioners of Grangemouth* v. *Steele*, 1897, 13 S.L.Rev. 281.

Where the burgh commissioners under sec. 238 (B.P.A. 1903, sec. 104 (2)) constructed a branch drain between houses in a private street and main sewer 100 yards off, held that they were not barred by sec. 219 from recovering the cost thereof from the owner of the houses.

[64] Secs. 251 and 339.—*Kinnear* v. *Dumfries Magistrates*, 1902, 18 S.L.Rev. 313.

An appeal under sec. 339 against an Order of the Commissioners under sec. 251 as to the introduction of water-closets into tenements dismissed, the sheriff observing—"The legislature has given the commissioners absolute power to order the introduction of water and water-closets into every dwelling, and the proviso must be read with some relation to that wide power. I look upon the jurisdiction given to this Court as limited to cases where it is averred that the Commissioners are abusing the power and the discretion which has been conferred upon them, and acting unfairly or with gross extravagance."

See also *Campbeltown Building Company* v. *Campbeltown Burgh Commissioners*, 1893, 10 S.L.Rev. 16.

[65] Sec. 262.—*Elgin C.C.* v. *Lossiemouth Magistrates*, 1903, 10 C.C.C. 88.

Circumstances in which petition to put in force Lands Clauses Acts for the purpose of obtaining a water supply, granted. The interlocutor of the sheriff shows the precise regulations imposed for the protection of the Road Authorities during the laying down of the water-pipes.

[66] Secs. 267 and 339.—*Jack* v. *Lanark Police Commissioners*, 1895, 12 S.L.Rev. 7.

Held that the water-rate for shops should under sec. 267 be chargeable only on one-fourth of the rental thereof. Expenses of an appeal under sec. 339 to the sheriff may be granted though not prayed for.

[67] Sec. 267.—*Cumming* v. *Leven Police Commissioners*, 1896, 13 S.L.Rev. 96, 4 C.C.C. 55.

Held that under this section, the restriction of the assessment on shops to one-fourth of the rental, is not confined to the rates necessary to meet expenditure incurred subsequent to the Act of 1892, but applies to the whole water-rate levied for domestic and ordinary purposes.

v. also terms of sec. 2 of B.S.D. & W.S.A., 1901.

Local Government Act, 1889

[68] Secs. 11 and 17.—*Lanarkshire C.C.* v. *Inland Revenue*, 1895, 22 R. 615, 32 S.L.R. 480, 2 C.C.C. 38.

Held that under the L.G.A. the C.C. in each county is the L.A. for purposes of borrowing money to execute the P.H. Acts, and that accordingly bonds granted by a C.C. for money borrowed for public health purposes were under P.H.A. 1867, sec. 120, exempted from stamp duty.

Note P.H.A. 1897, secs. 12 (4) and 168.

[69] Secs. 11, 17, and 26.—*Northern D.C. of Ayr C.C.* v. *Knox and Others*, 1895, 2 S.L.T. 568, 4 C.C.C. 32.

Held that it is competent to sue a D.C. See also *D.C. of Middle Ward of Lanarkshire* v. *Marshall*, 1896, 24 R. 139, 34 S.L.R. 130, 4 C.C.C. 37.

[70] Secs. 11 and 81.—*Dumbartonshire C.C.* v. *Clydebank Police Commissioners*, 1894, 22 R. 64, 32 S.L.R. 56, 2 C.C.C. 9.

Where part of a S.W.S.D. was formed into a parliamentary burgh, held (1) that although the Police Commissioners were the L.A. in the burgh for general purposes under the P.H. Acts, the D.C. of the C.C. was under sec. 81, the L.A., with reference to water supply, for the whole S.W.S.D., inclusive of the portion in the burgh; (2) that the right to levy water assessments within the S.W.S.D. belonged to the C.C.; and (3) that the expenses connected with the S.W.S.D. were payable by the C.C. out of the county funds on the requisition of the D.C.

[71] Secs. 81 and 99.—*Kirkcaldy D.C.* v. *Buckhaven Police Commissioners*, 1895, 23 R. 107, 33 S.L.R. 70, 3 C.C.C. 16.

Where in 1891 a district of a parish was created a police burgh, and thereafter was formed into a S.W.S.D. and in 1892 the remainder of the parish was formed into a S.W.S.D., held that the sub-committee of the D.C. under sec. 81, and the Police Commissioners, were entitled to jointly

administer the water supply, each authority exercising its own assessing powers within its own area.

[72] Sec. 81 (2).—*Eastern D.C. of Dumbartonshire C.C.* v. *Police Commissioners of Clydebank*, 1893, 21 R. 12, 31 S.L.R. 22, 1 C.C.C. 49.

Where a S.W.S.D. was partly within a county and partly within a burgh, it was held that a determination by the Secretary for Scotland that the county and the burgh should be represented on the committee charged with the management of the water supply works within the S.W.S.D., in the proportion of six to eight respectively, was *ultra vires*.

[73] Sec. 105.—*Wick and Pulteneytown Harbour Trustees* v. *Caithness C.C.*, 1900, 7 S.L.T. 329, 7 C.C.C. 11.

Opinion expressed that the parliamentary area of a royal burgh is not included in "parliamentary burgh" under this section.

Local Government Act, 1894

[74] Sec. 44; B.P.A., sec. 99.—*Fleming* v. *Liddesdale D.C.*, 1897, 5 S.L.T. 191.

Held that a D.C. were not entitled to form a parish into a special lighting district, under sec. 44, with the object, not of lighting said district, but of lighting a village situated in the parish.

[75] Sec. 44.—*North British Railway Company* v. *Eastern D.C. of Berwick C.C.*, 1899, 16 S.L.Rev. 161, 7 C.C.C. 76.

Where a L.A. formed a special lighting district, held that a railway station which would not derive any advantage from the lighting, etc., did not fall to be excluded, as the proposed improvement was not in the interests of the railway company, but in the general interest of the inhabitants of the district of which the railway company's property formed a part.

Vaccination (Scotland) Act, 1883

[76] Secs. 8 and 18.—*Skene* v. *Falconer*, 1889, 16 R. (J.C.) 72, 2 White 240.

Where a person has failed to transmit to the Registrar of Births a certificate of vaccination of his child, under sec. 8, held that his name must be re-entered on the registrar's list under sec. 18, during each successive period of six months during which such failure may subsist, and that an offence under sec. 18 is committed on each occasion on which he disobeys a fresh Order of the Board (the Parish Council).

[77] Secs. 1, 5, 18, and 30.—*Wallace* v. *Summers*, 1900, 3 F. (J.C.) 27, 38 S.L.R. 176.

Under sec. 18 the Board of Supervision issued in December 1864 a regulation to the effect that if a child named in the registrar's list leaves the parish for another in Scotland before the Order to vaccinate has been

executed, the Inspector of the Poor shall notify that fact to the inspector of the parish to which the child has gone, whose duty it will be to endeavour to have the child vaccinated. Held that the Board were entitled to make this regulation, and that the Parish Council of the parish to which the child had gone could competently take proceedings under sec. 18. Held also that it was incompetent for a Parish Council to take proceedings when the child had left the parish.

[78] Sec. 18.—*Anderson* v. *Robertson*, 1897, 13 S.L.Rev. 182, 4 C.C.C. 57.

Held that a parent is under no obligation to have his child vaccinated on a Sunday.

Housing of Working Classes Act, 1890

[79] Secs. 32-34, and 38.—*Lang* v. *Fleming's Trustees*, 1893, 10 S.L.Rev. 47.

Closing Order against tenement unfit for human habitation; Order for demolition of same tenement. Held (1) that a petition by the clerk to the L.A. under the H.W.Cl.A. was competent; (2) that a building was a "dwelling-house," although between the date of service of notice to make it fit for human habitation and the date of the petition for a closing Order, the owner had removed the tenants and re-let the buildings as a store; and (3) that the proceedings under secs. 32-34, under which no compensation was payable to the owner, were competent, the building not being an "obstructive building," the demolition of which under sec. 38 would entitle the owner to compensation.

[80] Sec. 32.—*Lindsay* v. *Wright*, 1902, 19 S.L.Rev. 86, 10 C.C.C. 68.

Held (1) that a resolution by a L.A. to close premises is not inconsistent with a statutory notice, served by them, to make the premises habitable; and (2) that the L.A. is not required in such statutory notice to specify the nature of the work which should be executed. It might be incompetent to add to the terms of the notice, but the L.A. should assist the owner by information as to what is expected.

English

[81] Secs. 29 and 32.—*Robertson* v. *King*, 1901, 2 K.B. 265, 8 C.C.C. 51.

Held that the definition of dwelling-house in sec. 29 was not intended to negative secs. 32 and 33, and that non-occupancy of a building for five and a half years, and the intention of the owner not to use it for human habitation, were not reasons which in themselves should prevent the making of a closing Order.

Factory and Workshops Act, 1901

[82] Sec. 14 (2).—*Toller* v. *Spiers*, 1903, 1 Ch. 362, 72 L.J., Ch. 191.

Where a factory is not provided with adequate means for escape in case of fire, the owner may be required to provide them, and is entitled, in order to execute works, to enter the factory, "notwithstanding any agree-

ment with the occupier" thereof. "The statute gives him, as against his tenant, the right to enter and do works required in respect of the property included in the demise, but it gives him no other rights." In this case, certain buildings were held not to constitute a "tenement factory."

[83] Secs. 14 and 149.—*Brass* v. *London County Council*, 1904, 2 K.B., 336, 11 C.C.C. 86.

Held that "supplied to different parts of the same building" means "supplied from one common source" to the different parts of the building, and that, therefore, a building let out in different parts as factories, each of which had its own mechanical power, was not a "tenement factory," and did not come within the provisions of sec. 14.

[84] Sec. 101.—*Evans* v. *Gallon*, 68 J.P. 537.

The use of underground bakehouses is absolutely prohibited after 1st January 1904, unless certified as suitable for the purpose by the L.A.

Margarine Act, 1887

[85] Sec. 6.—*M'Nair* v. *Horan*, 1904, 91 L.T.R. 555.

A dealer in margarine had in his shop, at the back of the counter, where customers could see them, several tubs open at the top, and containing margarine. Held that these tubs were packages within the meaning of this section, which should have been "branded or durably marked 'Margarine,'" in the manner prescribed by this section.

On the words "exposed for sale" in this section, see *Crane* v. *Lawrence*, 1890, 25 Q.B.D., 152, which decided "that margarine which cannot in any sense be seen by the purchaser is not 'exposed for sale,' and therefore requires no label." See also *Wheat* v. *Brown*, 1892, 1 Q.B. 418; *Moore* v. *Pearce's Dining and Refreshment Rooms, Ltd.*, 1895, 2 Q.B. 657.

See also Nos. [112, 113, 117, 119, 132].

Food and Drugs Acts

Scottish

Court of Session

[86] 1875, Sec. 6 (4).—*Warnock* v. *Johnston*, 1881, 8 R. (J.C.) 55; 4 Couper 509.

Where a party was prosecuted for selling buttermilk containing 30 per cent. of added water, and it was proved that in the process of manufacture a certain quantity of water, varying with the state of the temperature, required to be added, it was held that he was entitled to the benefit of sub-sec. (4).

[87] 1875, Sec. 6; 1879, Sec. 2.—*Morton* v. *Green*, 1881, 8 R. (J.C.) 36, 4 Couper 437.

Held that the sale of an inferior though pure quality of cream, at a low price, is not an offence within the meaning of sec. 6.

[88] 1875, Sec. 6; 1879, Sec. 2.—*Macaulay* v. *Mackirdy*, 1893, 20 R. (J.C.) 58, 30 S.L.R. 607, 1 C.C.C. 48.

An article alleged to have been adulterated, was libelled as having been purchased by complainer (an inspector). Held that a conviction under sec. 6 was not invalidated through the proof having shown that it was purchased by his assistant. See also *Garforth* v. *Esam*, 1892, 56 J.P. 521.

[89] 1875, Sec. 6; 1879, Sec. 2.—*Frew* v. *Gunning*, 1901, 3 F. (J.C.) 51, 38 S.L.R. 555; 8 C.C.C. 33.

Where an inspector insists on purchasing an article (in this case, sweet milk) after due warning that it may not be of the nature, substance, and quality demanded, in respect that its genuineness is not within the personal knowledge of the seller, he is not entitled, on the article turning out to be adulterated, to obtain a conviction under sec. 6.

[90] 1875, Sec. 6.—*Wilson* v. *M'Cutcheon*, 1902, 5 F. (J.C.) 6, 40 S.L.R. 31, 10 C.C.C. 20.

Where a complaint charges a breach of this section in respect of the sale of a compounded article of food (in this case, marmalade) for which there is no fixed standard, it is not sufficient to libel that the sale was to the prejudice of the purchaser in that it was not of the nature, substance, and quality demanded, it having been mixed with extraneous matter, and thus adulterated. The complaint should further set forth "such specification of the nature of the article said to have been adulterated, and of the effect of the introduction of the alleged extraneous substance as will make it clear that, if what is alleged is true, the accused did sell to a purchaser an article which was not of the nature, substance, and quality of the article demanded by him." See also *Wilson* v. *M'Phee and Wilson*, 1903, 6 F. (J.C.) 10; 41 S.L.R. 195; 11 C.C.C. 33.

[91] 1875, Sec. 6.—*Hamilton* v. *Morrison*, 1903, 5 F. (J.C.) 80, 40 S.L.R. 573, 10 C.C.C. 22.

A complaint charging a contravention of this section must not only set forth the grounds on which the article sold was not of the nature, substance, and quality demanded, but must also specify what was demanded by the purchaser.

[92] 1875, Secs. 6, 13, and 14; 1879, Sec. 3.—*Morton* v. *Fyfe*, 1896, 24 R. (J.C.) 9, 34 S.L.R. 55, 4 C.C.C. 1.

Held that an officer taking a sample of milk in course of delivery, for analysis under sec. 3 of the 1879 Act, does not require to comply with the provisions of sec. 14 of the 1875 Act. In this case the English

cases of *Rouch* v. *Hall*, 1880, 6 Q.B.D. 17; and *Rolfe* v. *Thomson*, 1892, 2 Q.B. 196, were followed, though after much hesitation. See also F. & D.A., 1899, sec. 10.

[93] 1875, Secs. 6 and 8; 1899, Sec. 4.—*Souter* v. *Lean*, 1903, 6 F. (J.C.) 20, 41 S.L.R. 192, 11 C.C.C. 35.

A regulation of the B. of A., 5th August 1901, provided that—milk containing less than 3 per cent. of milk fat is to be presumed not genuine until the contrary is proved. A dairyman sold to a purchaser, who asked for sweet milk, milk from a can on which were engraved the words, "not guaranteed 3 per cent.," and which the purchaser understood to mean "milk not guaranteed to contain 3 per cent. of milk fat." An analysis disclosed that the milk sold was not of the nature, substance, and quality of sweet milk, but was sweet milk plus skimmed milk. Held that the dairyman was in breach of sec. 6, as the words on the can were not a sufficient notice under sec. 8 that the milk was anything else than sweet milk.

[94] 1875, Secs. 6, 14, 21, 22; 1899, Sec. 21.—*Hutchison* v. *Stevenson*, 1902, 4 F. (J.C.) 69, 39 S.L.R. 789, 9 C.C.C. 39.

Held that to entitle the prosecutor to obtain a conviction for a breach of sec. 6, he must, if the accused demands it, produce the sample of the article sent to Somerset House for analysis, and the obligation to do so is not discharged by the accidental loss of the sample.

[95] 1875, Sec. 22.—*Dargie* v. *Dunbar*, 1884, 11 R. (J.C.) 37, 21 S.L.R. 536.

Held that a remit to the chemical officers at Somerset House is for the sole purpose of obtaining the result of an analysis, and that an opinion expressed in their certificate, on the minimum percentage of fat which new milk ought to contain, is not relevant evidence.

[96] 1875, Sec. 21; 1899, Secs. 4 and 22 (1)—*Todd* v. *Cochrane*, 1901, 38 S.L.R. 801, 8 C.C.C. 35.

Held that in the absence of a standard under sec. 4 of the F. & D.A. 1899, analysts' certificates are not conclusive evidence upon which to base a conviction. A sheriff in arriving at his decision may hold them to be rebutted by other evidence. See also *Fyfe* v. *Hamilton*, 1894, 1 Adam 484.

[97] 1879, Sec. 3.—*Semple* v. *Dunbar*, 1904, 6 F. (J.C.) 65, 41 S.L.R. 858, 11 C.C.C. 47.

Where under a contract milk was poured by A. into B.'s cans, in the latter's shop, in the presence of an inspector, who thereafter purchased from B.'s cans a sample which on analysis proved to be not of the nature, substance, and quality demanded, held that the prosecution was properly directed against A., as, when the sample was taken, the milk was still in "course of delivery," within the meaning of this section.

[98] 1899, Sec. 7 (1) and (3) (*b*).—*Hart* v. *Cohen and Vander Laan*, 1902, 4 F. 445, 39 S.L.R. 322, 9 C.C.C. 11.

Held that this section confers not only a power to enter and inspect a margarine factory, but also the right to take notes, and that margarine dealers who had produced their register but refused to permit the inspector to take notes therefrom, were properly convicted of failure "to produce the register."

Sheriff Court

[99] 1875, Secs. 6, 21 and 25.—*Burns* v. *R. & J. Templeton*, 1903, 11 S.L.T. 568, 11 C.C.C. 127.

(1) Held that an analyst's certificate which contained in addition to the necessary information, an interpretation of the B.A.'s regulations, was not invalid.

(2) Held that respondents were not entitled to the protection of a warranty dated a month after the sale to the complainers, and which was only a warranty by their agent, there being no evidence of the identity of the real seller of the butter to the respondents.

English

[100] 1875, Sec. 3.—*Hull* v. *Horsnell*, 1904, 21 T.L.R. 32.

Where a foreign ingredient has been mixed with an article of food, it must be proved that the latter has been rendered injurious to health by the former, before a conviction under this section can take place. It is not enough that the foreign ingredient is in itself injurious to health. The analyst's certificate on which the proceedings are founded, does not require to state that the article is injurious to health.

[101] 1875, Sec. 6.—*Heywood* v. *Whitehead*, 1897, 76 L.T.R. 781, 4 C.C.C. 5.

Where an offence under this section is committed, it is not a defence that the purchaser must have known from the price that he was not getting what he asked for.

[102] 1875, Sec. 6.—*Smith* v. *Wisden*, 1901, 85 L.T.R. 760, 9 C.C.C. 77.

Where it was proved that it was common amongst makers to use glucose in the manufacture of marmalade, that glucose in the quantities used was harmless, that it had a preservative effect, and that there was no legal standard for making marmalade, held that the sale of marmalade so made, to a purchaser who asked for marmalade, believing it to be made of oranges preserved with sugar, was not to his prejudice within the meaning of this section.

[103] 1875, Sec. 6.—*Goulder* v. *Rook*, 1901, 2 K.B. 290, 70 L.J.K.B. 747.

A party who sells beer which contains such an admixture of arsenic as to be injurious to health, is liable under this section, even although he

may not know, and cannot reasonably be expected to know, that the beer contains arsenic.

[104] 1875, Sec. 6.—*Pearks, Ltd.* v. *Ward*, 1902, 2 K.B. 1, 71 L.J.K.B. 656.

Held that a sale may be to the prejudice of a purchaser, although he may know, from information derived from some source other than through the seller, that the article sold is not of the nature, substance, and quality demanded by him. The question is—"What would be the position, not of a skilled purchaser like an inspector, but of an ordinary person purchasing the article without any special knowledge?"

A limited company is a "person" within the meaning of sec. 6.

[105] 1875, Sec. 6.—*Smithies* v. *Bridge*, 1902, 2 K.B. 13, 9 C.C.C. 97.

An owner of cows allowed an interval of sixteen hours to elapse between the morning milking, at which the milk complained of was obtained, and the previous milking, which unusual mode of milking he had been informed by a V.S. would make it deficient in fat. Held that selling such milk was an offence under this section.

[106] 1875, Sec. 6.—*Friend* v. *Map*, 1904, 68 J.P. 589.

Where a party asked for preserved peas, and was supplied with peas coloured with sulphate of copper, of so small a quantity, however, as not to be injurious to health, and it was proved that peas were habitually so sold, held that the seller was not in breach of this section.

See also *Summers* v. *Grist*, 1896, 60 J.P. 346, where a conviction was obtained under sec. 3 of the 1875 Act, for the sale of a 1 lb. bottle of peas containing 3 grains of sulphate of copper.

[107] 1875, Sec. 6.—*Boots, Cash Chemists, Ltd.*, v. *Cowling*, 1903, 88 L.T.R. 539.

Where a complaint is made that a drug purchased is not of the nature, substance, and quality demanded, in respect that, being mentioned in the *British Pharmacopœia*, it is not in accordance with the prescription therein, it is relevant to prove that there is a commercial standard of the article differing from that prescribed in the *British Pharmacopœia*.

See also, *Dickins* v. *Randerson*, 1901, 1 K.B. 437; 70 L.J.K.B. 344; and *Hudson* v. *Bridge*, 1903, 88 L.T.R. 550.

[108] 1875, Secs. 6 and 7.—*Beardsley* v. *Walton & Co.*, 1900, 2 Q.B. 1; 69 L.J.Q.B. 344.

A sale under sec. 7 to the prejudice of a purchaser of a compounded drug which is not of the nature, substance, and quality of the article demanded, is an offence under section 6.

[109] 1875, Secs. 6 and 8.—*Pearks, Gunston & Tee, Ltd.* v. *Houghton*, 1902, 1 K.B. 889, 71 L.J.K.B. 385, 9 C.C.C. 81.

Where grocers sold only blended butter, and there was notice exhibited in the shop and on the wrapper round the butter to the effect that the butter was blended, held that there was no sale to the prejudice of the purchaser under sec. 6. Opinion expressed that the "delivery of the

article, with a notice printed on an inner label, would not be a sufficient notice under sec. 8."

See also *Otter* v. *Edgley*, 1893, 57 J.P. 457, *Jones* v. *Jones*, 1894, 58 J.P. 653, and *Hayes* v. *Rule and Law*, 87 L.T.R. 133, where held sellers protected by label.

[110] 1875, Sec. 6; 1879, sec. 2.—*Hunter* v. *Wintrup*, 1904, 11 C.C.C. 51.

In prosecutions with reference to butter, or any article liable to decomposition, the Court will insist that the analyst must specially report in his certificate whether any change has taken place in the constitution of the article that will interfere with the analysis.

See also *Hudson* v. *Bridge*, 1903, 88 L.T.R. 550.

[111] 1875, Sec. 6; 1879, Sec. 3.—*Parker* v. *Alder*, 1899, 1 Q.B. 20, 68 L.J.Q.B. 7, 5 C.C.C. 41.

Where milk was adulterated in course of transit by rail, without the knowledge or default of the seller, held that, nevertheless, he was liable. An innocent seller is responsible for acts committed not only by his servants but by strangers.

See also *Brown* v. *Foot*, 1892, 61 L.J.M.C. 110, where master held liable for the unauthorised acts of his servant; and *Hotchin* v. *Hindmarsh*, 1891, 2 Q.B. 181, where servant of seller held liable under sec. 6.

[112] 1875, Secs. 6 and 21; Margarine Act, 1887, Sec. 6.—*Tyler* v. *Kingham & Son, Ltd.*, 1900, 2 Q.B. 413, 69 L.J.Q.B. 630, 7 C.C.C. 58.

Held that a public analyst's certificate, obtained for the purpose of a prosecution against a retail dealer in butter, was not admissible in evidence in subsequent proceedings under the Margarine Act against the wholesale dealer in butter.

[113] 1875, Sec. 6; Margarine Act, 1887, Sec. 3.—*Burton* v. *Mattinson*, 1902, 86 L.T.R. 770, 9 C.C.C. 92.

Where an analysis showed that margarine contained 5 per cent. too much water, held that the article sold was not margarine, but margarine and water, and therefore that there had been a breach of this section.

[114] 1875, Sec. 9.—*Spiers & Pond* v. *Bennett*, 1896, 2 Q.B. 65, 65 L.J.M.C. 144.

In refreshment rooms, milk was supplied in glasses, on which were clearly written the words, "Not guaranteed as new or pure milk, or with all its cream; see notices," and in a prominent place was fixed a notice, as follows—"Milk Notice. Spiers & Pond, Ltd., purchase all milk sold by them under a warranty of its purity and genuine quality, and take all possible precautions to ensure its supply to their customers in proper condition, but they are unable to guarantee it as either new, pure, or with all its cream, and (to meet the requirements of the Sale of Food and Drugs Acts) do not therefore sell it as such." In a prosecution for sale of this milk, from which 17 per cent. of cream had been extracted, held that any alteration in the quality of the milk had been disclosed, in terms of sec. 9.

See also *Jones* v. *Davies*, 1893, 69 L.T.R, 497, and *Petchey* v. *Taylor*, 1898; 78 L.T.R. 501, on what is "sufficient disclosure" under sec. 9.

[115] 1875, Sec. 9.—*Pain* v. *Boughtwood*, 1890, 24 Q.B.D., 353, 59 L.J.M.C. 45.

Where a milk-seller had sold milk from which 28 per cent. of the fat had been abstracted "without making disclosure," held that his ignorance of the abstraction did not exonerate him from liability under this section. Sec. 25 afforded him a means of protecting himself.

See also *Dyke* v. *Gower*, 1892, 1 Q.B. 220; 61 L.J.M.C. 70.

[116] 1875, sec. 14.—*Mason* v. *Cowdary*, 1900, 2 Q.B.D. 419, 69 L.J.Q.B. 667, 7 C.C.C. 61.

Where an inspector, after purchasing from the respondent six twopenny bottles of camphorated oil, divided them into three lots of two bottles each, sealing each lot in a separate bag, and then handed one lot to the respondent, sent one lot to be analysed, and retained one lot, held that in dividing the bottles he had not complied with this section. He should have divided each bottle into three parts. He bought six bottles, but did not divide any of them.

[117] 1875, Sec. 14; Margarine Act, 1887, Secs. 6 and 12.—*Buckler* v. *Wilson*, 1896, 1 Q.B. 83, 65 L.J.M.C. 18, 3 C.C.C. 5.

Under a contract, "good fresh butter, English," was supplied to a board of guardians. An analysis of it disclosed that it contained margarine. The article was not enclosed in wrappers marked "margarine." Held that the butter not having been purchased for analysis, compliance with sec. 14 was not necessary before the adoption of proceedings under the Margarine Act.

[118] 1875, Sec. 14.—*Smith* v. *Savage*, 1905, 2 K.B. 88, 13 S.L.T. 24.

On being asked for cream of tartar, a grocer produced a box containing penny packets labelled "cream of tartar," all being similar in appearance. Having bought four, the purchaser emptied the four packets into one heap, divided that into three parts, gave one to the seller, sent one to the public analyst, and kept one. Held that each packet was not a separate article for the purposes of the Act, and that the method of division adopted, complied with the terms of this section.

[119] 1875, Sec. 14 and Margarine Act 1887; Secs. 6 and 12.—*Smart* v. *Watts*, 1895, 1 Q.B. 219; 64 L.J.M.C. 89.

Held that in the case of a purchase by an inspector, notification must be given, and an analysis made under sec. 14 even where the vendor has admitted that the article sold has been adulterated, prior to proceedings under the Margarine Act.

[120] 1875, Sec. 17.—*Payne* v. *Hack*, 1894, 58 J.P. 165.

An inspector after buying a glass of rum, which he tasted, demanded a half pint of rum out of the same bottle as that out of which he had

received the glassful, stating that he was an inspector, and that the rum was for analysis. The publican refused to supply it. Held that he was guilty of a breach of this section.

[121] 1875, Sec. 18.—*Sneath* v. *Taylor*, 1901, 2 K.B. 376; 17 L.J.K.B. 872.

The omission by a public analyst to state in the certificate the weight of a sample of butter does not render the conviction invalid, if the justices have found the omission was immaterial. The words in the form of certificate may sometimes be treated as directory.

See also *Partick S.I.* v. *Sclanders*, 1900, 17 S.L.Rev. 6; 8 C.C.C. 80.

[122] 1875, Sec. 18.—*Bridge* v. *Howard*, 1897, 1 Q.B. 80; 65 L.J.M C. 229.

An analyst gave a certificate, in which he stated—"I am of opinion that the sample contains the parts as under: milk 94 per cent., added water 6 per cent. This opinion is based on the fact that the sample contained 7·97 solids not fat, whereas genuine milk contains not less than 8·5 solids not fat." Held that the certificate was good, as what the analyst had done was not only to state the percentage of added water, but also to give the scientific basis on which his conclusion rested.

See also *Bakewell* v. *Davies*, 1894, 1 Q.B. 296; 63 L.J.M.C. 93 (certificate held good); *Newby* v. *Sims*, 1894, 1 Q.B. 478; 63 L.J.M.C. 228; *Fortune* v. *Hanson*, 1896, 1 Q.B. 202, 65 L.J.M.C. 71 (certificate held bad).

[123] 1875, Secs. 6, 12, and 13; 1879, Sec. 3.—*M'Nair* v. *Cave*, 1903, 1 K.B. 24, 72 L.J.K.B. 26; 10 C.C.C. 49.

Held that an inspector is not entitled under sec. 3 of F. and D.A., 1879, to take a sample outside the district to which he is appointed, for the purpose of, having it analysed, and taking proceedings, under the F. and D.A., 1875.

[124] 1879, Sec. 6; 1875, Secs. 6 and 20.—*Findley* v. *Haas*, 1903, 88 L.T.R. 465; 10 C.C.C. 51.

Where brandy had been reduced from 25 degrees under proof to 27·6 degrees under proof, and sold to a purchaser as brandy, held that an offence had been committed under sec. 6 of the 1879 Act. Held also that the analyst's certificate which stated the above facts as to the strength of the brandy was a good certificate.

[125] 1875, Sec. 21.—*Hewitt* v. *Taylor*, 1896, 1 Q.B. 287, 3 C.C.C. 7; 65 L.J.M.C. 68.

The analyst's certificate is not conclusive, and may be contradicted by evidence.

[126] 1875, Secs. 9 and 25.—*Elliot* v. *Pilcher*, 1901, 2 K.B. 817, 8 C.C.C. 63.

Held that a warranty in these terms, "We hereby warrant that each and every supply of milk sent by us to you shall be new milk, unadulterated and with all its cream," was a sufficient warranty within sec. 25, and that it was unnecessary that the warrant should, on the face of it, show that it applied to the particular sale of milk, the subject matter of the prosecution, as there was evidence to show the connection.

See also *Farmer's, etc., Dairy Company* v. *Stevenson*, 1890, 60 L.J.M.C. 70, *Laidlaw* v. *Wilson*, 1894, 1 Q.B. 74, 63 L.J.M.C. 37; *Lindsay* v. *Rook*, 1894, 63 L.J.M.C. 231; *Hawkins* v. *Williams*, 1895, 59 J.P. 533 (where warranty held good); *Robertson* v. *Harris*, 1900, 2 Q.B. 117; 69 L.J.Q.B. 526 (where warranty held bad); but which case adversely commented on in *Elliot* v. *Pilcher*, *supra*; *Jiorns* v. *Van Tromp*, 1895, 64 L.J.M.C. 171; and *S.I. of Glasgow* v. *Binnie*, 1894, 2 S.L.T. 32, 2 C.C.C. 147 (where warranty held bad).

[127] 1875, Sec. 25; 1899, Sec. 20 (1).—*Irvine* v. *Callow Park Dairy Company, Limited*, 1902, 87 L.T.R., 70 9 C.C.C. 95.

In a prosecution for selling milk, from which 40 per cent. of the fat had been extracted, in breach of the F. and D.A., 1875, sec. 25, a dairy company relied on a warranty written on a label tied to a churn in which the milk was delivered to them, in these terms—"Warranted pure new milk, with all its cream; delivered under contract." The company sold the milk in the same condition as when they received it. Held that this warranty was within sec. 25.

The contract and warranty (other than what was written on the labels) in this case was contained in several letters. When giving notice of the defence of warranty, the company sent a copy of the label on the can, but not a copy of the correspondence. Held that the notice sent was sufficient compliance with sec. 20 (1).

See also *Farthings* v. *Parkinson*, 1904, 90 L.T.R. 783.

[128] 1875, Sec. 25.—*Hennen* v. *Long*, 1904, 90 L.T.R. 387.

Held that a retail dealer in milk, who after receiving it from a wholesale dealer under a contract containing a warranty, added boric acid to it, was not entitled to plead the vendor's warranty as a defence to a prosecution for selling milk deficient in fat and containing added water. He did not sell it in the same condition as when he purchased it.

[129] 1875, Sec. 25.—*Wilson* v. *Playle*, 1903, 88 L.T.R. 554.

The addition to a warranty of the words, "but without accepting any responsibility after delivery," do not affect a warranty so as to make it unavailable as a defence under this section.

[130] 1879, Sec. 3.—*Filshie* v. *Evington*, 1892, 2 Q.B. 200.

Where under contract, milk was to be delivered at such station as the purchasers might appoint, they also to pay the carriage from the vendor's station, held that, notwithstanding the latter provision, the place appointed by the purchasers, was the "place of delivery" under this section.

[131] 1879, Sec. 3.—*Fecitt* v. *Walsh*, 1891, 2 Q.B. 304.

Where an inspector under this section took samples from several cans of milk, held that the procuring of each sample was a separate transaction, that the seller had committed a separate offence as to each can which was deficient, that two informations could be laid, and two convictions obtained.

[132] Margarine Act, 1887, Sec. 3; 1899, Sec. 8.—*Bayley* v. *Pearks, Gunston & Tee, Limited*, 1902; 87 L.T.R. 67, 9 C.C.C. 93.

Held that butter blended with milk is not margarine under sec. 8, and may be sold as blended butter, although it contains over 10 per cent. of butter fat, if sold as such.

[133] 1899, Sec. 9.—*Crabtree* v. *Skelton*, 1901, 70 L.J.K.B. 560.

Held that this section requires a person selling milk to have his name and address upon the cart when the milk is sold from the cart, and upon the can when the milk is sold from the can. The name and address on the cart alone, will not protect a party selling milk from a can on which the name and address is not inscribed.

Dairies, Cow-sheds, and Milk-shops Orders, 1885 and 1887, issued under C.D.A.A., 1878 and 1886

[134] Sec. 6 (1).—*Lang* v. *Pianta*, 1894, 21 R. (J.C.) 20, 31 S.L.R. 335, 1 C.C.C. 67.

Held that a seller of ice-cream was not a purveyor of milk within the meaning of this section.

[135] Sec. 11 of 1885 Order.—*Lindsay* v. *M'Dougall*, 1897, 13 S.L.Rev. 259, 4 C.C.C. 10.

Where a dwelling-house and dairy were separated from each other by a passage from 3 to 4 feet wide, the doors of each being opposite each other, held that there was no direct communication between them in the sense of the "Glasgow Regulations of 1892,"—"No purveyor of milk, or person selling milk by retail, shall use or occupy any milkshop, milkstore, dairy, or place or premises where milk is kept, stored, or exposed for sale, which is in direct communication by door, window, or otherwise with a dwelling room or sleeping apartment."

[136] Sec. 34 C.D.A.A. 1876 (2) (5); Dairies, etc., Order, 1885, arts. 7, 8, and 13 (*b*).—*Baker* v. *Williams*, 1897, 66 L.J.Q.B. 880, 5 C.C.C. 29.

Under article 13 (*b*), the Southport Corporation made a regulation requiring that in all cowsheds there should be a free "air space" of 800 cubic feet for each animal. The appellant having been convicted of a breach of this regulation, it was argued that the regulation was *ultra vires* of the corporation, who were only entitled to regulate ventilation. Held that the regulation was valid, as art. 13 incorporated art. 8, where ventilation included "air space."

Diseases of Animals Act, 1894

[137] Sec. 32, and Markets and Fairs Clauses Act, 1847.—*Scott* v. *Glasgow Corporation*, 1899, 1 F. (H.L.) 51 and 665, 36 S.L.R. 965 and 458.

Under these Acts a L.A. enacted the following bye-law for regulating the public market—"The sale rings shall be used only for public sales of cattle

by auction on conditions of sale which shall be equally applicable to all bidders and buyers. The sale rings shall not be used for private sales, or for sales to any limited number of persons, or for sales in which any class of the public are excluded from bidding and buying." Held that this bye-law was *intra vires* of the L.A. as it was for regulating the use of the market place and fair. In this case in the Court of Session this further point was decided, viz.: that the B.A. may approve of a bye-law framed by the L.A. under these Acts for regulating the use of the sale rings in a foreign animals wharf, without hearing objectors.

[138] Sec. 4, 1 (*b*), and Anthrax Order, 1899, Sec. 16.—*Clark* v. *Wood*, 1900, 2 F. (J.C.) 62, 37 S.L.R. 929, 7 C.C.C. 46.

A cow died, and on the removal of the carcase to a public slaughter-house it was ascertained that it had died from anthrax. In the case on appeal it was stated that it was not proved that the dairyman did not know, or could not with reasonable diligence have ascertained that the cow died of anthrax. Two days after the cow's death the dairyman informed a constable who had been sent to him that the carcase had been condemned. Held that the dairyman had been properly convicted of a breach of sec. 4, 1 (*b*). Specification of Acts of Parliament in virtue of which the Anthrax Order of 1899 was passed, not necessary in the indictment.

[139] Secs. 51 and 52.—*M'Tavish* v. *Neilson*, 1903, 6 F. (J.C.) 6.

Held that the Police Court has jurisdiction to try a complaint alleging a breach of the D.A.A.

[140] Secs. 2, 60, 1 (*b*) and 64 (1).—*Dumfriesshire C.C.* v. *Graham*, 1903, 10 S.L.Rev. 276, 10 C.C.C. 79.

Held that a complaint under this Act was competently brought at the instance of the C.C., with concurrence of the County Procurator Fiscal, and without adding the name of the County Clerk or other individual officer of the council.

Infectious Diseases Notification Act, 1889

[141] Secs. 3 (1) (*a*), (*b*), and (2) and 4.—*Edmiston* v. *Govan Police Commissioners*, 1893, 9 S.L.Rev. 160.

Where a M.P., called in to visit a patient, sent to the M.O.H. a certificate that he was suffering from an infectious disease to which the Act applied, and it turned out that another M.P. had previously notified the M.O.H., held that he was not entitled to the fee prescribed by statute.

Note.—On this point conflicting decisions have been given in County Courts in England, but the Law Officers of the Crown consider that "if more than one medical practitioner is attending on, or called in to visit the patient, each practitioner is bound to send a certificate and is entitled

to the prescribed fee." (*Handy Guide to Public Health*, by Dr Hime, Appendix, pp. 42, 190.)

Alkali, etc., Works Regulation Act, 1881

[142] 1881, Secs. 3 and 22.—*Fletcher* v. *Eglinton Chemical Coy. Ltd.*, 1886, 14 R. (J.C.) 9, 1 White 259.

In a complaint under these sections, an objection to the relevancy, on the ground that the Company was not liable to imprisonment under sec. 22, repelled. Held also proceedings for recovery of fines under sec. 22 fall under the sheriff's criminal jurisdiction, and are competently brought under the Summary Jurisdiction Acts, 1864 and 1881.

Rivers Pollution Prevention Acts, 1876 and 1893

Court of Session

[143] 1876, 1893, Secs. 6 and 13.—*County Council of Midlothian* v. *Oakbank Oil Coy. Ltd.*, 1903, 5 F. 700, 40 S.L.R. 519, 10 C.C.C. 16.

Held that notice of the intention to take proceedings under sec. 13 cannot be given effectively until the Secretary for Scotland, after due enquiry and consideration, has given his consent to the proceedings, and that the offending party is entitled to have the two months' notice after it has been definitely fixed that proceedings are to be instituted, during which time, objection to such proceedings may be taken before the sanitary authorities.

[144] 1876, Sec. 7. and P.H.A. 1867, Sec. 77 (P.H.A. 1897, Sec. 110).—*Guthrie, Craig, Peter & Co.* v. *Brechin Magistrates*, 1885, 15 R. 385.

A L.A. are bound to permit manufacturers to discharge the refuse from their manufactories into the sewers of the burgh, provided such discharge will not "prejudicially affect such sewers," within the meaning of sec. 7, and the sewer pipes are large enough to carry the additional refuse.

[145] Sec. 7.—*Cowie & Sons* v. *Dufftown Burgh Commissioners*, 1900, 3 F. 257, 38 S.L.R. 191, 8 C.C.C. 6.

Where it was proved that a liquid refuse was of such a nature, as that its discharge into the public sewer would "prejudicially affect" the disposal of the sewage, held that there was no obligation on the L.A. so to treat the liquid as to render it innocuous, or to show that it was impossible to do so.

Sheriff Court

[146] Secs. 3 and 13.—*Highland D.C. of Perth C.C.* v. *Aberfeldy Police Commissioners*, 1898, 14 S.L.Rev. 330, 3 C.C.C. 69.

Held that an application to the Secretary for Scotland for delay under sec. 3 is not a "proceeding" within sec. 13, such as will postpone an action for interdict of sewage pollution.

Held also that the Secretary for Scotland "has no power to grant an

Order in reference to sewage matter not falling or flowing along a channel used, constructed, or in process of construction at the date of the passing of this Act," in terms of sec. 3.

English

[147] 1876, Sec. 7.—*Eastwood Bros. Ltd.*, v. *Honley Urban District Council*, 1900, 70 L.J.Ch. 313—1901, 1 Ch. 645, 7 C.C.C. 74.

Where a L.A. intimated their intention to disconnect a drain from the public sewer, on the ground that the discharge from the former "prejudicially affected" the disposal of the sewage matter, the Court, in granting an injunction against the L.A., expressed the view that sec. 7 of the R.P.A. did not justify the defendants in cutting off the connection with their sewer, unless it could be proved that the trade effluent "prejudicially affected" the disposal of the sewage matter carried through the sewer, or was injurious from a sanitary point of view, or that the L.A.'s sewers were not large enough.

[148] Sec. 7.—*Pasmore* v. *Oswaldtwistle Urban D.C.*, 1898, A.C. 387.

In this case where it was held that the remedy for the failure of a L.A. to provide sewers under the P.H.A. 1875, sec. 15, was a complaint to the L.G.B. under sec. 299, the Lord Chancellor referring to the last clause of sec. 7 of the R.P.A. 1876, said:—"That seems to me a very intelligible provision and a very just one, otherwise a manufacturer might come to some very small district, might establish a large manufactory there, which would involve, with reference to the law of nuisance, the necessity of getting rid of the refuse created by that manufactory, and there would be no individual obligation upon the person creating it."

Public Health Act (Scotland), 1897, and Public Health Act (England), 1875

Decisions on Sections or Parts of Sections in Public Health (England) Act, 1875, *corresponding to Sections in Public Health (Scotland) Act*, 1897

[149] P.H.A. (Scot.) 1897, 16 (5); P.H.A. (Eng.) 1875, 91 (4).—*Bishop Auckland Local Board* v. *Bishop Auckland Iron Company*, 1882, 10 Q.B.D. 138.

Held that effluvia from an offensive trade which interfered with the personal comfort of persons living in the neighbourhood, but did not cause injury to health, was an offence under this section.

[150] P.H.A. (Scot.) 1897, 41; P.H.A. (Eng.) 1875, 48.—*Woburn Sanitary Authority* v. *Newport Pagnell S.A.*, 1887, 51 J.P. 356.

Where a L.A., "X," polluted a boundary ditch, lying wholly within the lands of another L.A., "Y," held that an Order on "X" to cleanse the ditch entitled them to enter the lands of "Y." Plea by L.A. "X" that entry would be trespass repelled.

[151] P.H.A. (Scot.) 1897, 43 (1), (2); P.H.A. (Eng.) 1875, 116, 117.—*Vinter* v. *Hind*, 1882, 10 Q.B.D. 63.

Unsound meat bought by private person and handed to an inspector, and finally condemned by a justice, is not meat "seized" as prescribed by section 116. The seller in this case is not liable as the "person to whom the same did belong at the time of exposure for sale."

[152] P.H.A. (Scot.) 1897, 54; P.H.A. (Eng.) 1875, 124.—*Warwick* v. *Graham*, 1899, 2 Q.B. 191, 6 C.C.C. 52.

Where a person suffering from a dangerous infectious disorder had "proper lodging and accommodation," so far as he himself was concerned, at his father's house, but owing to the difficulty of properly isolating him, there was danger of other people getting infection, it was held that he was without "proper lodging and accommodation" within the meaning of sec. 124.

See also *Reg.* v. *Davey*, 1899, 2 Q.B. 301.

[153] P.H.A. (Scot.) 1897, 66; P.H.A. (Eng.) 1875, 131.—*Attorney-General* v. *Manchester Corporation*, 1893, 2 Ch. 87.

Where the corporation proposed to establish a smallpox hospital on their own land within 240 yards of two public roads, and within 256 yards of the nearest residence, held that, looking to the present state of science, the probability that the hospital would create a public nuisance dangerous to the health of the neighbourhood had not been established.

See also *Attorney General* v. *The Guildford, etc., Joint Hospital*, 1895, 12 T.L.R. 54; and *Harrop* v. *Corporation of Ossett*, 1898, 14 T.L.R., 308.

[154] P.H.A (Scot.) 1897, 66-7; P.H.A. (Eng.) 1875, 131-133.—*Reg.* v. *Rawtenstall Corporation*, 1894, 10 T.L.R. 643.

Held that where the L.A. have provided hospitals for "the use of the inhabitants of their district," they are bound to admit all patients, whether paupers or not, having, however, the right to recover payment from such as can pay, under sec. 132.

[155] P.H.A. (Scot.) 1897, 18; P.H.A. (Eng.) 1875, 102, 306.—*Consett Urban D.C.* v. *Crawford*, 1903, 2 K.B. 183, 10 C.C.C. 58.

Held that members and officers of D.C. have no right to enter private premises without either asking permission of the occupier, or obtaining a magistrate's Order.

[156] P.H.A. (Scot.) 1897, 103, 146; P.H.A. (Eng.) 1875, 15, 16, 19, 299.—*Baron* v. *Portslade-by-Sea Urban D.C.*, 1900, 2 Q.B. 588, 6 C.C.C. 54, 7 C.C.C. 68.

Held that a L.A may be sued for damages, where injury caused through their negligence in failing to cleanse sewers vested in them, under sec. 19. The remedy of complaining to the L.G.B. under sec. 299 is inapplicable in such a case.

[157] P.H.A. (Scot.) 1897, 103, 146; P.H.A. (Eng.) 1875, 15, 299.—*Robinson* v. *Mayor, etc., of Workington*, 1897, 13 T.L.R. 148.

Held that a L.A. are not liable in damages for failure to provide sufficient sewers under sec. 15. The proper remedy for such a contravention of their statutory duties is a complaint to the L.G.B. under sec. 299.

Public Health Act (Scotland), 1867 and 1897

Cases on Sections, or parts of Sections, in the P.H. (Scot.) Act, 1867, corresponding to Sections in the P.H. (Scot.) Act, 1897.

[158] P.H.A. 1897, 16 (7); P.H.A. 1867, 16 (*f*).—*Home* v. *Kelso L.A.*, 1876, 3 Couper 239.

A landlord is not the joint author of a nuisance arising out of the overcrowding of a dwelling leased to and under the control of his tenant.

[159] P.H.A. 1897, 16 (9); P.H.A. 1867, 16 (*h*).—*Dumfries L.A.* v. *Murphy*, 1884, 11 R. 694.

Held that to constitute a nuisance under this section, a furnace must be shown not to consume its own smoke, either through faulty construction or a bad system of working.

[160] P.H.A. 1897, Secs. 16, 20 (1); P.H.A. 1867, Secs. 16, 18, 24.—*Govan Police Commissioners* v. *Mackinnon*, 1885, 22 S.L.R. 843.

Held that the owners of land on which a sewage nuisance actually existed, were the "authors of the nuisance," although it was proved that it was caused by higher riparian proprietors.

[161] P.H.A. 1897, 26; P.H.A. 1867, 22.—*Cadder L.A.* v. *U.K. Temperance Institution*, 1877, 4 R. (J.C.) 39.

Before granting warrant to a L.A. to remove a nuisance, a sheriff should first give the author of it an opportunity to do so, otherwise he will not be liable in the expense of removal to the L.A. See also *Barony Parochial Board* v. *Cadder Parochial Board*, 1883, 10 R. 510.

[162] P.H.A. 1897, 28; P.H.A. 1867, 24.—*Selkirk L.A.* v. *Brodie*, 1877, 4 R. (J.C.) 21.

Where an owner declined to pay his share of the assessment imposed to defray the expense of covering in a foul watercourse under sec. 24, held that it could be recovered under sec. 105 (154 P.H.A. 1897).

[163] P.H.A. 1897, 54; P.H.A. 1867, 42.—*Petition: L.A. Aberdeen*, 1893, 1 S.L.T. 210, 2 C.C.C. 123.

A petition for an Order to remove an infected person to hospital, refused, where it was proved that the removal could not be accomplished without danger to the patient's life. The primary consideration of the Act is the safety of the public, but in a particular case the life or the health of the patient may come to be the prevailing element in the interpretation of the Act.

[164] P.H.A. 1897, 56 and 59; P.H.A. 1867, 49 and 48.—*Kelso D.C.* v. *Fairbairn*, 1891, 29 S.L.R. 284.

The offence under the section consists in the act of placing the infected person in the public conveyance. It is not an offence continuing throughout the journey, and therefore the L.A. of a district through which the conveyance has passed, has no title to prosecute under the section.

[165] P.H.A. 1897, 66 (3); P.H.A. 1867, 39.—*Edinburgh Magistrates* v. *Leith Magistrates*, 1896, 23 R. 383, 33 S.L.R. 285.

Held that the conditional approval of the L.G.B. to plans for the construction of a hospital was a valid approval under sec. 39.

[166] P.H.A. 1897, 69 (2); P.H.A. 1867, 43.—*Bowie* v. *Dunfermline D.C.*, P.L.M. 1892, p. 613.

On the death of a person who had no means, but who was not a pauper in the sense of the Act, held that the expense of burial fell not upon the inspector of the poor of the parish where the death took place, but upon the D.C. of the C.C. See also *Alyth Police Commissioners* v. *Inspector of Alyth*, P.L.M. 1880, p. 602; *Bothwell* v. *Shotts*, P.L.M. 1886, p. 87.

[167] P.H.A. 1897, 98; P.H.A. 1867, 68.—*Gunn* v. *Cadenhead*, 15 R. (J.C.) 57.

Held that the keeper of a C.L.H. is not entitled to refuse the officers of the L.A. access to an unregistered room opening off a registered room. Opinion given (1) that a C.L.H. keeper is not entitled, "after having got a licence for his house to cut off two rooms, shutting up the communicating door and leaving them to be entered from the close by the separate access"; (2) that a C.L.H. keeper "cannot alter the conditions of his licence by using a part of the house" for a different purpose than that for which it was licensed.

[168] P.H.A. 1897, 103; P.H.A. 1867, 73.—*Steel* v. *Gourock Police Commissioners*, 1872, 10 M. 954.

The Court will not review a L.A.'s resolution adopting a drainage system, merely because it is alleged that such a system may create a nuisance.

[169] P.H.A. 1897, 111; P.H.A. 1867, 78.—*Allan* v. *Partick Commissioners*, P.L.M. 1887, p. 541.

Held that proprietors outside a burgh are entitled to drain into burgh sewers, on terms fixed by the sheriff.

[170] P.H.A. 1897, 126 (1); P H.A. 1867, 89 (1).—*Peterhead Burgh Commissioners* v. *Forbes*, 1895, 22 R. 852, 32 S.L.R. 645.

A L.A., which has by agreement acquired right to take water from a stream on the land of an upper heritor, cannot, under this section, divert water from the stream to the loss of a lower riparian owner without obtaining a right to do so under section 90. (Sec. 145 of P.H.A. 1897.)

[171] P.H.A. 1897, 126; P.H.A. 1867, 89.—*Macfarlane, Strang, & Co.* v. *Motion*, 1884, P.L.M., p. 638.

A L.A. may enter into an agreement with a Water Company to supply part of their district, without "having acquired the undertaking of such company," if the Act of the Company gives them power "to make an agreement with any L.A. for a supply of water."

[172] P.H.A. 1897, 126 (3); P.H.A. 1867, 89 (4).—*Smith* v. *Denny Police Commissioners*, 1880, 7 R. (H.L). 28.

Held that a L.A. may preserve the sanitary condition of a public well, even though it be situated on private property, provided they do not interfere with the owner's rights of property in the *solum*.

[173] P.H.A. 1897, 147; P.H.A. 1867, 97.—*L.G.B.* v. *Elgin C.C.*, 1897, 24 R. 512, 34 S.L.R. 383.

The L.G.B. presented a Petition under sec. 97 to have a L.A. ordained to provide a water supply. The L.A. stated in answer, that the cost of a water supply would greatly exceed any sum which could be raised by levying the maximum assessment, and that they were not entitled to borrow a larger sum on the security of the general assessments of the whole county. Petition dismissed on these grounds, and because the petitioners did not suggest any adequate scheme, the cost of which would be within the maximum assessment.

See also *Board of Supervision* v. *Lochmaben L.A.*, 1893, 20 R. 434.

[174] P.H.A. 1897, 166; P.H.A. 1867, 118.—*Mitchell* v. *Aberdeen Magistrates*, 1893, 20 R. 253.

Held that if a L.A.'s officer had removed a child to hospital in face of the parent's opposition, and without a warrant, they, the L.A., would not be protected by sec. 118, as the "irregularity" had not occurred while the officer was acting within the scope of the Act.

[175] P.H.A. 1897, 166; P.H.A. 1867, 118.—*Edwards* v. *Kinloss Parochial Board*, 1891, 18 R. 867, 28 S.L.R. 669.

Held that a L.A. will not be protected by the time limit within which an action may be raised against them, if their actings which are the foundation of the action were outwith their duties under the statute.

[176] P.H.A. 1897, 166; P.H.A. 1867, 118—*White* v. *Kirriemuir Police Commissioners*, 1896, 12 S.L. Rev. 315, 3 C.C.C. 79.

Held that the terms of sec. 118 protected a L.A. whose proceedings under the P.H.A. 1867, for the disposal of unsound meat, previously seized by them in a public slaughter-house, were irregular. Held also, that an action for the value of the unsound meat fell to be dismissed, in respect that it had not been raised against the L.A., within the time limit specified in sec. 118.

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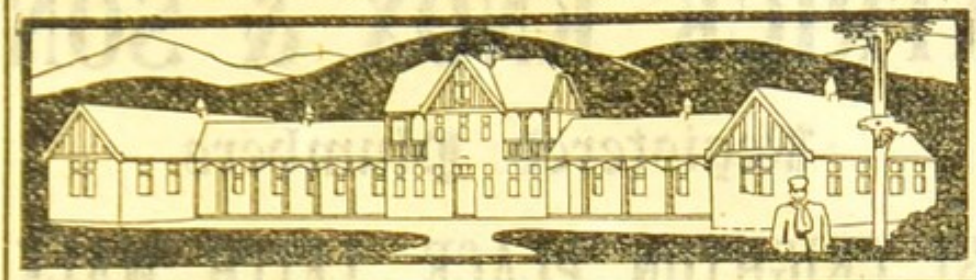
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