

Examination of Cows for Tuberculous Disease of the Udder.

Details of Examination.	1st Period, 15th Dec. (1905)—17th March (1906).	2nd Period, 18th March— 12th June (1906).	3rd Period, 13th June— 12th Sept. (1906).	4th Period, 13th Sept— 12th Dec. (1906).
Total number of cows examined	4,026	4,333	3,773	3,908
Affected with disease or defects of the udder	239	265	253	238
Clinically affected with tuberculous disease of the udder... ..	1	1	—	—
Suspected cases of tuberculous disease of the udder	2	1	2	2
Subjects of acute mastitis	21	31	20	19
Affected with chronic induration of the udder	6	3	9	4
Atrophy of one or more quarters	155	156	160	163
Injuries, abscesses, simple eruptions, strictures and obliterations of milk ducts...	25	19	23	13
Hypertrophied udders without induration	2	7	3	—
Giving milk of poor quality, dried off cows	25	48	27	70
Presenting symptoms of tuberculosis	—	—	—	1
Suffering from chronic diarrhoea	—	—	—	—

veterinary inspector, and his assistant, with a view to the detection of cows suffering from tuberculous disease of the udder. Thus, during 1906, there were four periodical inspections of all the cows in the London cowsheds. The number of cows found by Mr. Shaw to be affected in one or another way is shown in the accompanying table.

Mr. Shaw's reports also show the action taken for the elimination of tuberculous cows from the London cowsheds, thus: *First Period.*—One cow, affected with tuberculous disease of the udder, was seized under the London County Council (General Powers) Act, 1904, and slaughtered, the carcass being destroyed.

A bacteriological examination of the milk from two cows suspected of having tuberculous disease of the udder was made by Sir J. McFadyean, who, in each case, reported the milk to be free from tubercle bacilli. The number of cases of mastitis and atrophy of one or more quarters of the udder was slightly less than on the occasion of the previous inspection. Two cows affected with general tuberculosis were ordered by the owner to be slaughtered.

Second Period.—A sample of milk was taken from one cow, the udder of which presented lesions of a suspicious character, and submitted for examination, the result of which proved the milk to contain tubercle bacilli. The animal was seized under the London County Council (General Powers) Act, and slaughtered, the carcass being destroyed and the owner compensated.

Third Period.—Samples of milk were taken from two cows and submitted for examination. Tubercle bacilli were found to be present in one of them. The cow from which this sample was taken died during the period the milk was under examination, the carcass being cut up, boiled and given to pigs. Mr. Shaw, in his report, particularly directs attention to the fact that at the time the sample was taken the cow's udder appeared to be perfectly healthy, although the cow presented symptoms of tuberculosis.

Fourth Period.—Samples of milk were taken from two cows suspected to be affected with tuberculous disease of the udder, and in both cases Sir J. McFadyean reported that they contained tubercle bacilli. One of the animals in question, before the result of the examination was known, was sent by the owner to the Islington Cattle Market to be slaughtered. In the other instance the animal was seized and slaughtered under the Council's General Powers Act. Upon *post-mortem* examination, Mr. Shaw found the carcass showed evidence of the presence of tuberculous disease of the udder. The carcass, offal, and hide were destroyed. A further sample of milk was taken from a cow affected with tuberculosis of the lungs, but which presented no clinical symptoms of tuberculous disease of the udder. The inoculation test showed that tubercle bacilli were present in the sample. Prior to the result being obtained, however, the animal was sent by the owner to the knackers to be slaughtered. Upon *post-mortem* examination, Mr. Shaw found that the lungs were tuberculous, but was unable to examine the udder, as it had been already disposed of.

THE MILK SUPPLY OF HOSPITALS.

THE Central Hospital Council for London, which represents twenty hospitals, last July appointed a committee consisting of Mr. A. Bingham Watson, Chairman; Mr. Willmott Evans, F.R.C.S., Mr. H. A. Harben, Mr. Arthur Lucas, and Dr. Lauriston Shaw, to consider whether the London hospitals should be advised to take joint action with a view of ensuring the purity of their milk supply. The Committee had the advantage of the views of

Dr. Arthur Saunders, Assistant Physician and Physician to the department for the Medical Diseases of Children, West London Hospital; Mr. Stokes, Public Analyst to the Borough of Paddington, and analyst to several London hospitals; Mr. Hopkins, the managing director of the Great Western and Metropolitan Dairies Company, Ltd.; and Mr. Arthur Barham, managing director of the Dairy Supply Company, Ltd.

The information obtained from the constituent hospitals showed considerable divergence of practice; one hospital had no form of tender for milk; twelve merely required the supplying firm to contract to supply milk containing certain percentages of solids and fats; eight, in addition to requiring certain percentages in the constituents of the milk, made special provision to ensure the notification of the farms from which the milk was supplied, or the periodical certification of the cows and farms as being in satisfactory condition, or for dealing with milk in certain specified ways at the farms, or to have milk brought from the cows under the inspection of the hospital when so desired.

The committee advises that the council should recommend the constituent hospitals to require their respective milk contractors to agree to the following conditions, which should be embodied in the forms of tender or contract. The committee are advised that every one of the conditions is reasonable, and such as may fairly be required of contractors, in fact, each one of them has been adopted by some one or more of the hospitals.

1. That the milk shall be pure, genuine, with all its cream as yielded by the cow, absolutely free from any and every kind of adulteration (including preservatives), and shall be of such quality as will, between the months of August and January, both inclusive, produce at least 3 5 per cent. of butter fat, and for the remainder of the year 3 25 per cent. of butter fat.
2. That the milk shall be supplied from a farm or farms, whose name or names and locality are to be notified by the contractor to the hospital.
3. That it shall be permissible for an authorized representative of the hospital to visit and inspect such farm or farms and the herds there at any reasonable times.
4. That the cows supplying the milk shall be in a good state of health, and that the contractor shall give the hospital a certificate by a veterinary surgeon to the effect [in the annexed form] without cost to the hospital in the first instance, and shall give subsequent certificates whenever required by the hospital, at the hospital's expense.
5. That the milk shall be strained and cooled to the temperature of cold water—not exceeding 60°—at the farm, and there canned and sealed with a die to be supplied by the hospital, and that all cans shall be dust and rain proof.
6. That the contractors shall guarantee the cleanliness of the milking operation and of the men's hands and of all receptacles into which the milk is put, all of which receptacles shall be properly cleansed with a solution of boiling water and soda.
7. That the cans shall not be opened in transit except at the London railway station by the public sanitary inspectors, and if so opened shall be immediately re-sealed for delivery to the hospital, and shall in every case be delivered direct from the London railway station to the hospital.
8. That the milk shall not be pasteurized or treated otherwise than mentioned in Clause 5 without the written sanction of the hospital authorities.

The committee is further of opinion that the following precautions outside the contract are all reasonable, and that in the majority of cases there should be no difficulty in carrying them into effect:

(a) The medical officer of health of the district in which the farm from which the supply of milk comes is situate should be furnished by the hospital in question with a copy of the contract, and should be requested to further as far as possible the carrying out of its terms, so far as they relate to the condition of the cows and the dairy buildings, etc.

(b) The hospital should obtain a report, either from the medical officer of health or from a member of the hospital's own staff or other expert, as to the state of the sheds, milking-places, dairy, and water supply to the farm. It is, of course, most important that no hospital should be supplied with milk from a farm without a proper water supply.

(c) Wherever possible the hospital should endeavour to make an arrangement with the medical officer of health of the district to notify, at a fixed fee, to the hospital, any cases of contagious or infectious illness in the families of the men employed at the farm of supply. (We find this is already done in some cases at a fee of one guinea for each report. In some cases it may not be practicable, but it could, in our opinion, be achieved in the majority of cases, with the assent of the contractor, who can, of course, require his farmer to agree.)

(d) All milk should be inspected by some practical official on arrival at hospital.

(e) The milk should be chemically analysed at least once a week, but at irregular intervals, to ascertain the percentages of total solids and fats. Where it is thought inexpedient to engage the services of a skilled analyst in the first instance, a Gerber fat tester is recommended as the best apparatus to use. If the results of the test are unsatisfactory, a complete analysis should be made. The sample to be analysed should always be taken in duplicate in the presence of the contractor's representative, and one sample handed to him. We are advised that it is of little value to take the specific gravity of the milk except as part of a fuller analysis, and that the use of a creamometer is misleading. We are also advised that there is little practical utility in bacteriological tests.

(f) The employment of an inspector or inspectors to visit farms and test the milk either there or in transit would be an expensive undertaking for each hospital to carry out separately, but it may be worth while to consider whether the hospitals could combine for this purpose.

(g) In case of a yearly contract we are advised that the tender should provide two prices—one from October 1st to March 31st, and one from April 1st to September 30th. (In the event of the contract, at an average price for the year, having to be terminated prematurely in the summer months, the contractor would gain considerably, while an average price is unfair to the contractor if for any reason a larger supply is required in the winter or a smaller supply in the summer.)

The committee states that one hospital at least has secured a report upon the condition of the farm from a member of its visiting staff, who volunteered to undertake it, and it is believed that most other hospitals would encounter no difficulty in securing similar reports. The committee recommend that no condition should be inserted in the contract which it is not intended to enforce strictly, and observe in conclusion that it is possible that the strict conditions suggested may have the effect of slightly increasing the price at which contractors will tender, but in view of the serious interests involved, it is considered that this risk may justifiably be incurred.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

MR. MCKENNA, M.P., in reply to a deputation from the County Councils Association to urge that a grant from the Exchequer should be made to relieve the rates of the cost of medical inspection of school children, which it was alleged would press hardly upon rural districts, said he considered the claim justifiable, and would recommend it to the Chancellor of the Exchequer. He hoped, moreover, that in the Education Bill, which he would introduce in the course of a few weeks, to be able to put the grant system, at present in a state of confusion, on a different footing. The financial arrangement proposed under the new Bill would far more than meet any additional burden imposed by it.

BIRKENHEAD.

The Birkenhead Town Council has appointed Dr. R. Sydney Marsden, M.O.H., to be supervising school medical officer, at a salary of £75 per year, and Dr. R. Owen Morris school medical officer, to devote the whole

of his time to the duties of the office, at a salary of £400 a year. Dr. Morris will retain the lectureship on hygiene at the Corporation Technical School. The Town Council also intend to appoint a school nurse to assist in the work at a salary of 31s. per week and uniform.

CHESHIRE.

The Cheshire Education Committee has appointed Dr. Vacher, county medical officer, to be the chief medical inspector under the education authority for the county, and has resolved to appoint also two medical inspectors at a salary of £350 each a year, to give their whole time to the work of inspection under Dr. Vacher's general supervision.

LEICESTER.

At a meeting of the Midland Branch Council which was held in the Royal Infirmary, Derby, on Thursday, January 23rd, the President of the Branch, Dr. Lorimer of Buxton, in the chair, a letter was read from Miss H. M. Greene of Derby, asking "Would it be feasible for the Branch to pass some kind of resolution strengthening the hands of medical women on the subject of the salaries to be paid by certain county councils for the inspectorship of schools?" The following resolution was passed unanimously:

That this meeting of the Council of the Midland Branch considers that in filling public appointments the same remuneration should be offered to female as to male medical practitioners.

MEDICAL NEWS.

PROFESSOR VON ESMARCH, of Kiel, celebrated his 85th birthday on January 24th. His native town, Tönning, in Schleswig-Holstein, has erected a statue to him.

At the meeting of the Royal Microscopical Society at 20, Hanover Square, W., on Wednesday next, at 8 p.m., there will be an exhibition by Mr. C. L. Curties of slides illustrating the life-history of some diptera, and Mr. E. M. Nelson will read a paper on eyepieces for the microscope.

On January 30th Professor Koch delivered a lecture, illustrated with lantern slides on sleeping sickness and the means of combating the disease, in the presence of the German Emperor and Empress. It is announced that at the end of March he intends to start on a voyage round the world which will extend over a year.

It is proposed to erect a hospital in St. Petersburg, to be called after Peter the Great. It was originally intended that it should contain 1,000 beds, but it has now been decided to increase the number to 2,000. A sum of 4,500,000 roubles has already been allocated for the purpose, but it is estimated that a million more will be required. The money will be raised by a municipal loan.

The next quarterly meeting of the Medico-Psychological Association of Great Britain and Ireland will be held at the Warwick County Asylum, Hatton, on Thursday next, at 3 p.m., when Dr. George Turner will give a lantern demonstration on some further observations on the supposed thrombotic origin of epileptic fits, and Dr. Cunyngham Brown will read a paper, illustrated by lantern views, on boarding out of the insane in private dwellings.

DR. J. A. W. PEREIRA has been presented with his portrait, bearing the following inscription: "Presented by the Chief Constable and members of the Exeter City Police Force to Dr. J. A. W. Pereira, M.D., M.R.C.S., L.R.C.P., Police Surgeon, as a mark of their appreciation of his kindness and attention to the Police Force. Feb. 6th, 1908." The presentation was made last week by the Chief Constable, and was suitably acknowledged by the recipient.

The tour of medical study (Excursions Médicales Internationales) will take place this year in Italy from April 12th to 28th. The medical and sanitary institutions of Turin, Milan, Padua, Venice, Bologna, Florence, Rome, Naples, Pisa, Genoa, and San Remo will be visited. The organization of the tour is in the hands of Professor Pini, who has secured the co-operation of Professors Baccelli, Bossi, Mangiagalli, Mya, and other leading members of the medical profession in Italy. A complete programme of the tour is published in the January number of *L'E.M.I.*, which may be got on application to the Administration de l'Oeuvre d'Enseignement Médical Complémentaire, 8, rue François Millet, Paris (16e), from which all other information required on the subject can be obtained.