Operation.

An incision was made vertically over the upper part of the right rectus splitting the muscle. A little clear free fluid escaped from the peritoneal cavity, but no bile. Plastic adhesions between coils of congested and distended intestine, confined to the right hypochondrium. Stomach, duodenum, hepatic flexure of colon adherent to the gall bladder by plastic lymph.

On separating the adhesions, the gall bladder was seen to be twice its usual size, deep maroon in colour, and presented five or six patches of black gangrene over which the peritoneal coat was intact and shiny. The patches of gangrene were each about the area of a sixpence.

The most remarkable appearance was over the region of the common duct, where there was a large swelling the size and shape of a banana looking like a full leech or a coil of gangrenous intestine; behind it the finger could be easily passed into the foramen of Winslow. There was no perforation into the general peritoneal cavity and no free bile.

The gall bladder was quickly and easily removed, and an incision made into the peritoneum over the position of the common duct. Free black bile escaped, probably about an ounce. The common duct lay in its usual position and was pale red in colour. No perforation of it could be found, and it was its usual size and lay free, stripped of its peritoneal coat by the layer of bile. (See diagram.)

The region of the cystic duct was drained, and the right kidney pouch was drained separately by a large tube through the right loin. The wound was closed.

The whole operation occupied thirty-five minutes. He was most gravely ill throughout, and he died some little time after the abdomen was closed.

Post-mortem Examination.

There was very rapid decomposition; the common duct was reduced to a black-green pulpy mass, but there was no break in its continuity and no sign of a perforation. No stones were found.

There was a small recent abscess in the upper pole of the right kidney. The pancreas was soft and almost diffident.

The gall bladder contained twenty-two stones. The wall was thick and intensely red. There were ten definite areas where the mucous membrane was black and thinned away until in some parts the peritoneum only remained.

In all the part covered by peritoneum there was no perforation, and none could be found in the portion devoid of peritoneal covering; curiously enough there was not a single patch of gangrene on this portion of the organ.

From one of the patches of gangrene on the under surface near the fundus, starting from the mucous surface, a probe could be passed under the peritoneal coat towards the cystic duct and along it.

It is a most unfortunate fact that the specimen was misplaced by the Pathological Department and cannot be found.

It is difficult to account for the presence of bile under the peritoneal covering of the common duct except on the grounds of a perforation. Whilst it was unfortunate the common duct underwent such rapid decomposition, it was not so bad but that one could come to a definite decision that no leakage had occurred from it. Gangrene of the duct was not present at the time of operation, because the duct could be seen looking pale red when the black bile had drained away.

Is it possible that bile had passed down from the gall bladder, through the breach in the mucous membrane at the gangrenous spot, along the track where the probe passed, and so to the cystic and common ducts?

It would appear no explanation other than a subperitoneal perforation of the gall bladder can be offered.

My thanks are due to Sir Berkeley Moynihan and to Mr. Collinson for giving me permission to use their cases.

REFERENCES.

¹ *Annals of Surgery*, February, 1912. ² *Clinique Chirurgicale* de Prof. Poncet.

A, Retroperitoneal track of bile. B, Common duct. C, Duodenum.

THE INCIDENCE OF OPHTHALMIA NEONATORUM IN LONDON.

By N. BISHOP HARMAN, M.A., M.B.CANTAB.,
F.R.C.S.ENG.,

LECTURER IN OPHTHALMOLOGY TO THE WEST LONDON POST-GRADUATE COLLEGE; ASSISTANT OPHTHALMIC SURGEON TO THE WEST LONDON HOSPITAL; OPHTHALMIC SURGEON TO THE BELGRAVE HOSPITAL FOR CHILDREN.

THE first official statement on the incidence of purulent conjunctivitis in the newborn in London appears in the recently issued report of the Medical Officer of Health of the London County Council. The report is for the year 1911, and it bears the printed date of February 18th, 1913.

The information published in the report is the outcome of the order which made this disease notifiable within the London County area. This was done in March, 1911, by an order extending the provisions of Section 55 of the Public Health (London) Act, 1891, to ophthalmia neonatorum. Prior to this date there was no authoritative knowledge of the incidence of the disease in the population at large, and it was spoken of as "rare" or "common," just as cases bulked largely or otherwise in the minds of medical men and social workers who came in contact with them in maternity hospitals and in private practice. It was obviously impossible to obtain general information for a whole community without official action. Indeed, no attempt seems to have been made to obtain such information except on one occasion, when by the courtesy of several doctors in private practice in one quarter of London I was able to gather and publish statistics concerning some 12,000 births.¹ It will be of interest to put these private returns made in 1906 alongside the official returns for 1911.

The Council's notification order came into force on March 13th, and from that date until the end of the year 673 cases were notified (p. 82). The births in London for 1911—less stillbirths (corrected)—are given (p. 6) as 100,830. To obtain the percentage incidence of the disease it will be necessary to compute the probable figures of the disease for the whole year, instead of as is given, for nine and a half months. There is no reason to suspect any material variation in the incidence of the disease in different seasons of the year. The corrected figures for the year would be 850 cases. Compared with the number of births given, that means an incidence of 0.843 per cent. This figure is very nearly the same as that obtained in my private census for 1906; in 12,680 live births there were 110 cases of purulent conjunctivitis, or an incidence of 0.867 per cent.

The point of greatest importance is the number of cases in which the disease is productive of injury to or loss of sight. The Council's report states that the condition of 278 cases occurring in the practice of midwives was followed out so that in most the ultimate issue was known. There was a wastage, however; 17 children died whilst suffering from the disease, and in 30 instances the parents removed, and could not be traced. There are left 231 cases; of these, 218 were reported to be completely cured; in 13 cases there was impairment of vision.

The rate of injury is, therefore, 13 in 231, or 5.6 per cent. It is interesting to compare this with the private return. In that I found 6 children with permanently damaged eyes out of 110 affected, or an injury-rate of 5.4 per cent.

Details of the 13 cases in which the sight was affected are given:

Blind in both eyes ...	...	...	3
Blind in one eye, other damaged ...	...	...	1
Blind in one eye, other uninjured ...	...	...	4
Both eyes damaged ...	...	...	2
One eye damaged ...	...	...	3

There was a history of vaginal discharge in the mother in 7 of these cases. In every case except one the eyes were cleansed with some antiseptic immediately or soon after birth; where there was delay it was due to the birth of the child before the arrival of the midwife. In the single case in which cleansing is not noted the disease did not appear until the eleventh day after birth, so that it is almost certainly a secondary infection. Efficient medical help was obtained with promptitude in most cases. There was delay of three, five, and, in one case, ten days, owing

to the opposition of parents or neglect of midwives in giving warning.

Of the 278 cases occurring in the practice of midwives a number of details of interest are given.

Mortality.

Whilst the disease was in progress 17 infants died. It is not possible to tell from the infant mortality statistics given in the earlier pages of the volume whether or no this death-rate is like or in excess of that found in healthy children, for the death-rates or infant mortality given are for infants under 1 year old. The mortality recorded is 12.9 per cent.; the death-rate among these new-born diseased children was 6.9 per cent., but the two figures are not comparable. It would be of interest if the death-rate of infants, say, of less than 1 month of age could be obtained for comparison. Lobenstine and Harrar² showed that infants born of gonorrhoeal mothers were less viable than those born of healthy mothers.

Date of Onset.

The Council's report gives the day of the puerperium on which the signs of inflammation were first noticed:

Day ...	1	2	3	4	5	6	6	7	8	10	Later.	Not Ascertained.
Cases..	18	23	38	33	28	29	18	23	19	11	26	4

Condition of the Mother.

A history of vaginal discharge was obtained in 111 instances—that is, in 40 per cent. of the cases.

Prophylaxis.

The antiseptics used for the child's eyes at birth or as soon afterwards as possible were: Boracic lotion in 125 instances, mercury perchloride (1 in 4,000) in 102, silver nitrate (a 1 or 2 per cent. solution) in 27, protargol in 1, and mercury biniodide in 1 instance; in the remaining 22 cases sterile water was used. An interval between the birth and the use of an antiseptic occurred in 50 cases owing to the fact that the infant was born before the arrival of the midwife.

The report gives details of the methods adopted to warn midwives of their duties in regard to this disease, and the opportunities provided for them in the matter of further education and training.

Nursing and Treatment.

The difficulty of nursing the affected children early became manifest. The midwives could not be in attendance all day, and in any case their attendance ceased before the child was relieved. "The Council felt therefore that risk was being incurred by allowing cases of inflammation of the eyes to receive no more attention than was bestowed on them by the people living in the house." Four nursing societies were approached, and agreed to undertake the duties of attending to the infants under the direction of the medical practitioner called in. During the year their services were made use of in 68 cases.

The Council had under consideration the question of hospital treatment for severe cases, and an endeavour was made to secure accommodation for mother and child (infant), so that while the child was being treated it would not be deprived of the advantage of being breast-fed. The ophthalmic hospitals and the general hospitals had difficulty in providing such accommodation, but in some instances both mother and child were admitted to the Poor Law infirmaries. Of the cases occurring in the practices of midwives during the year, in 12 instances mother and child were admitted to hospitals or infirmaries, and in 20 the child alone was admitted; 101 other cases were treated by the ophthalmic and general hospitals as out-patients.

This report and the official figures given therein may be taken to settle once and for all the question whether or no it is advisable to promote the compulsory use of prophylactic measures; and by that is meant the use of a silver salt or other efficient preparation immediately after birth. The proposition has been frequently mooted. Strong opposition has been raised against the proposals both in this country and in America. After a discussion on the subject at the Obstetrical Society in London (1903), a strenuous protest appeared in the BRITISH MEDICAL JOURNAL by Sinclair. The objection to the proposal was

based on two grounds—(1) that the risk of the procedure outweighed its prospective advantages, seeing the incidence of such blindness was small; (2) that it was an unwarrantable stigma on the parents and an interference with the liberty of the subject.

In 1892 a special committee of the American Ophthalmological Society presented a report calling for legislation for the compulsory use of prophylaxis in almshouses and State institutions, and recommended the routine use of silver nitrate, in 2 per cent. solution, for all newly-born children. But there was also presented a strong minority report in which disapproval of compulsory legislation was expressed. It asserted that there was not sufficient data of the frequency of such blindness in the United States; that the statistics of other countries, especially Germany, are of doubtful value or positively misleading.

This was the position that I adopted in my little book published in 1907, and therein were given the figures which supported that contention and which are quoted above. The Council's figures are in entire agreement with that position. It is quite certain that no Legislature in the world would entertain for a moment an agitation for the compulsory use of a measure for the prevention of a disease to which no child need be liable, for it is not a disease that every and any one may contract; and which even in a huge conglomeration of human beings like London is found to affect less than 1 per cent. of the newborn. It is quite true that the effect of the disease is lamentable; it does not kill, but it blinds, and that in my experience is the worst of the possibilities. It does this in whole or in part in about 1 child in every 2,000 born. But the knowledge of the condition and the light that is thrown on the work of the obstetrician, by notification and the publication of returns such as these, is as likely, probably more likely, to ensure a minimum incidence of the disease or of damage arising therefrom than is the universal use of potent antiseptics, with the possibility that they may be carelessly used or used to cover dirty practice.

There is one other point in the report deserving of special mention. In 1807, at the time when microbes were unknown, and when the cause of the disease was so obscure that most of our profession thought that all would be well if the baby's eyes were protected from draughts or bright light, Dr. Benjamin Gibson,³ of Manchester, gave the earliest recommendations for the prevention of the disease; they are such that they cannot be bettered now. In fact, this report is a complete vindication of the measures he proposed. His rules were:

1. The leucorrhoea of the mother ought, if possible, to be cured during pregnancy.
2. When this has not been done, the noxious secretion ought to be removed from the vagina during delivery.
3. The infant's eyes ought, immediately after birth, to be cleansed with a fluid which either removes the noxious matter or is able to prevent its injurious effects.

I quote Gibson's recommendation because of the emphasis he lays on the necessity of curing the mother. His implication is that the disease ought, if possible, to be made impossible by proper attention to the maternal passages. The Council's report shows that in 40 per cent. of the mothers whose babies contracted the disease there was a history of vaginal discharge.

REFERENCES.

- ¹ *Preventable Blindness*, London, 1907. ² *Bulletin of the Lying-in Hospital, New York*, December, 1906. ³ *Edin. Med. and Surg. Journ.*, 1807, p. 160.

OFFICIAL statistics show that in 1911 there were in France 20,809 doctors, 2,848 dentists, 11,589 pharmacists, and 13,066 midwives.

A BILL regulating the importation and sale of foreign pharmaceutical products is now before the Cuban Parliament. It provides that foreign specialities are not to be allowed to circulate in Cuba unless the agent entrusted with the sale of them is a Cuban pharmacist. Further, the specialities must conform to the following conditions: (1) The label must indicate the components to which the product owes its therapeutic activity, and the quantity of these components; (2) the Cuban Academy of Science must satisfy itself that the preparation really possesses the properties claimed for it; (3) a certificate will be required showing that the product has been made in laboratories which work according to the law of the country from which it comes.