AN ACT FOR THE PREVENTION OF BLINDNESS.

SECTION 1.—Should any midwife or nurse having charge of an infant in this State, *notice* that one or both eyes of such infant are inflamed or reddened at any time within two weeks after its birth, it shall be the duty of such midwife or nurse so having charge of such infant, to report the fact in writing, within six hours, to the Health Officer or some legally qualified practitioner of medicine of the city, town or district, in which the parents of the infant reside.

SEC. 2.—Any failure to comply with the provisions of this Act, shall be punishable by a fine not to exceed one hundred dollars, or imprisonment not to exceed six months, or both.

SEC. 3.—This Act shall take effect on the first of September, Eighteen Hundred and Ninety.

The word *notice*, in the first sentence was omitted in a similar law enacted in Maine in 1891, and known as 97 of the Senate.

This law reads as follows:

SECTION 1.—Should one or both eyes of an infant become reddened or inflamed at any time after birth it shall be the duty of the midwife, nurse or person having charge of said infant, to report the condition of the eyes at once to some legally qualified practitioner of medicine of the city, town or district, in which the parents of the infant reside.

SEC. 2.—Any failure to comply with the provisions of this Act shall be punishable by a fine not to exceed one hundred dollars or imprisonment not to exceed six months, or both.

SEC. 3.—This Act shall take effect on the first day of June, 1891.

Rhode Island only lately, in 1893, followed the good example of her big sisters by an enactment practically similar to theirs. I will again quote Dr. Howe to answer a question which has been repeatedly put to me and to which he so pertinently and concisely replies. He says:

"A question might arise as to what advantage it is to oblige nurses and midwives to report a disease of which a certain class of so-called doctors are almost as ignorant as the nurses themselves. The answer to this is three-fold: 1, the nurse is made to appreciate her responsibility, not only in that case but in others, and to know that the condition indicated by redness and discharge is not anything to be trifled with; 2, the parents also become alarmed when they know the disease is sufficiently serious to be the subject of special legislation, so that in choosing a practitioner they select with rather more than ordinary care. Finally, as for the physician himself. If he accepts the case he feels that he must understand it thoroughly, and he will be apt to look it up with considerable care in text-books and treat it intelligently. Above all, if he fails to do that, the parents have a responsible individual against whom they can, with perfect justice, enter a suit for malpractice, and if he has proved himself incompetent, he not only suffers the penalty which a law has provided for him, but one such case would be an example to him and to other practitioners in the community in which it occurred."

And now we are confronted with the momentous question, Whether the great State of Illinois which has shown itself so willing and prompt to champion the cause of all worthy enterprises will be behindhand in this deserving undertaking. I think not. It remains only for us, the physicians of this commonwealth, to show by united action and unanimous indorsement, that we favor the immediate enforcement of such legislation. The representatives will then be convinced of the need of such a measure, and no doubt will readily make it a law. At the March meeting of the Chicago Society of Ophthalmology and Otology, my paper on "Legislation for

the Prevention of Blindness" called forth an animated discussion, which resulted in the adoption of the following resolutions:

WHEREAS, Statistics compiled in this country and in Europe demonstrate that fully 25 per cent. of our blind owe their affliction to an inflammation of the eyes appearing a few days after birth; and

WHEREAS, Experience has proved that the inflammation can be cured and the eyesight saved in the majority of cases if treatment is instituted at an early stage of the disease; and

WHEREAS, The destruction of the eye and blindness are usually the result of delay in treatment; be it

Resolved, That we heartily recommend that the people of the State of Illinois represented in Senate and Assembly, do enact as follows:

SECTION 1.—Should one or both eyes of an infant become inflamed, swollen, or reddened at any time within two weeks after its birth, it shall be the duty of the midwife or nurse having charge of such infant, to report in writing, within six hours to the Health Officer or some legally qualified practitioner of the city, town or district, in which the parents of the infant reside, the fact that such inflammation or swelling or redness of the eyes exists.

SEC. 2.—Any failure to comply with the provisions of this Act shall be punishable by a fine not to exceed two hundred dollars, or imprisonment not to exceed six months, or both.

Committee: { F. C. HOTZ, M.D.,
LYMAN WARE, M.D.,
BOERNE BETTMAN, M.D.

I think this Society should put itself on record and aid the cause by passing resolutions to the same effect. We thus not only indicate to the world our approbation of preventive medicine, but give a moral support to the instigators of this movement.

RUPTURE OF THE UTERUS DURING LABOR.

Read before the Cambridge Society for Medical Improvement,
April 23, 1894.

BY EDMUND SCOTT DOW, M.D.

ALLSTON, MASS.

I wish to call your attention to this subject tonight, owing to a case which I saw recently in consultation with a physician who gave me the following history:

"Mrs. X., age 33, 4-para, her youngest child being 7 years old. Her previous labors had been normal, never needing even the use of forceps. At different times during the last few years she has been in a hospital for some uterine disease, but has never had an operation, although one was advised for a laceration of the cervix. Her term of pregnancy has been uneventful, except she was said to be subject to faint spells but was able to attend to her family cares and to take out-of-door exercise. The membranes ruptured on a Wednesday night, but labor pains did not start until eight days later at about 7 in the morning. During this past week the waters had continued to drain away. The labor continued uneventful until nearly noon, when the os was fully dilated and, as the labor pains seemed to diminish, I thought best to deliver by forceps and so asked for counsel."

When I saw her about 12:20 P.M. she was in a very critical condition from loss of blood, which bleeding must be internal, as there was very slight hemorrhage externally. She was pulseless, cyanosed, with sighing respiration, limbs cold, and covered with clammy sweat.

On examining per vaginam the head was found low down, the os fully dilated and the cervix wholly taken up. The patient was given hypodermic injections of brandy and ether; a slight amount of ether was given her and a stillborn male child of ten pounds was

easily delivered by forceps. The placenta was not easily expressed and so the doctor tried to take it manually. Meanwhile I was busy with hypodermic stimulations, to which the patient did not respond, and I was asked to try for the placenta. On examination the hand passed readily into the abdominal cavity through a rent in the side of the uterus, and the intestines could be easily felt. Here, then, was the cause of the collapse. The placenta was readily removed from the uterus and the uterus pressed down and contracted, but the patient expired a few minutes later.

The postmortem examination was made twenty hours after death; *rigor mortis* still present. The abdomen only was examined. The abdominal cavity was found to contain a large amount of fluid and the uterus was fairly well contracted. The uterus and its appendages were removed and found to contain a tear on the left side, extending from the mouth to the Fallopian tube, but not involving it; a tear fully five inches in length.

Rupture of the uterus during labor may be one of two kinds; either spontaneous, or that due to manual or instrumental force. As to the cause of rupture, in a general way, it may be said that uterine contraction causes it. Of course the effect of uterine contractions in normal cases is the expulsion of the fetus; but if the child meets an obstacle such as a contracted pelvis in the mother, or from abnormal size of the child itself, then continued hard contractions end in rupture of the uterine walls. Again, the improper use of ergot, as in the first stage, has been known to be followed by rupture.

The frequency with which cases of rupture occur seems to vary much according to different authorities. Ramsbotham puts the proportion as 1-4,887, Bandl 1-1,200, and Dr. Jolly, of Paris, says 1-3,403. In 1880 Dr. Harris, of Philadelphia, made a careful study of the subject, especially as regards the frequency in the United States, and he says that many physicians see several thousand cases of labor without meeting a single case of rupture, and he concludes the proportion is 1-4,000. There is no doubt that many cases occur which are not reported, even if recognized at the time, for the symptoms of rupture are not the same in each case. In the one case the tear may occur in one pain and be so extensive that the fetus would go into the abdominal cavity, when acute pain followed by collapse and recession of the presenting part would occur; while in another case the rupture would take place by degrees, the tear would not be so extensive and the pain of tearing would be so masked by the pain of labor that the condition would not be recognized until too late. Thus it will be seen that the accident, fortunately rare, may be much more frequent than these figures would show.

That the accident happens much more frequently in multiparæ, admitted by all writers, is partly on account of the thinning and weakening of the walls in successive pregnancies and on account of the increase in size of later children. One writer speaks of the greater number of shoulder presentations in multiparæ as a cause of rupture.

The extent of the tear may vary from one or two inches, to such size that the entire fetus escapes into the abdominal cavity. As to degree, the rupture may be complete or incomplete; complete if the tear extends through the walls to the abdominal cavity, and

incomplete if it involves the muscular layer only, the peritoneal coat remaining intact, in which case there is no hemorrhage into the abdominal cavity, but may be very grave hemorrhage into the surrounding tissue.

Rupture of the uterus is one of the gravest accidents of labor. Occurring, as it does, at a time when all seems going well, and when the family and friends are expecting a speedy cessation of the labor and the advent of a new life to the home, the blow seems doubly severe. The child is almost invariably still-born, and the mother is put in jeopardy of her life through shock and hemorrhage, and if she survive these she is in great danger of septic infection.

As to treatment two factors are to be considered: 1, how shall we extract the child? 2, how treat the tear?

As to the first question, most authors now agree that if the rupture is complete and the entire child has passed into the abdominal cavity, then do laparotomy; the same treatment is indicated if part of the child has passed through and the rest is so high up that the presenting part can not be readily reached. If the presenting part is low down and easily reached, then deliver through the natural channel. If the head is low down, use forceps; if not successful with forceps, perforate and use cranioclast. If transverse presentation, do embryotomy; if arm is down, do decapitation. Version is not permissible, for the tear, if small, is increased by so doing, and if subperitoneal it is made perforating and hemorrhage is thereby increased. The placenta should be removed manually and not expressed. If the placenta has passed through the tear and is not found, then do laparotomy.

How are we to treat the tear? Different views are held by different observers. If laparotomy has been done and child removed from the abdominal cavity, some prefer to sew up the tear; others to remove the uterus entire and drain through the abdominal wound or through Douglas' pouch. If delivered through the natural channels many authors believe in laparotomy in cases of complete rupture, in order to secure drainage. Others prefer to treat these cases by tampon and drain through vagina. Statistics show better results by the latter than by the former method.

In cases of incomplete rupture almost all authors prefer the tampon, although many prefer laparotomy, as they claim that otherwise you can not control hemorrhage. In case of rupture, should laparotomy be done immediately with danger of adding the shock of an operation to that of the rupture, or is it better to tampon the vagina to control hemorrhage and wait until the patient rallies from the shock? Mortality is much greater by the immediate plan.

I bring that subject to your notice this evening, that there may be free expression of opinion as to the proper course for us to pursue in a case which may occur at any time in a family where we have not all the facilities for doing a grave operation. The saying is that "grave emergencies demand bold measures," and the physician will have to bear some blame in a case of this sort, no matter how careful he may be.

DISCUSSION.

DR. NORRIS had one case of rupture of the uterus in a young woman 25 years of age, in a twin pregnancy, at full term. Labor had been delayed all day and at evening assistance was called and an attempt made to deliver. A child with presenting head was taken with forceps, when the mother apparently became exhausted. The second child was delivered by turning, after which the woman went

rapidly into a state of collapse and died. An examination showed a rupture of the uterus, which the doctor attributes to a long delay in the delivery and the act of turning the child.

DR. TAYLOR asked in what per cent. of cases of ruptured uterus has laparotomy been performed and how many have recovered?

Answer. The per cent. of cases operated upon is unknown; about 50 per cent. of the cases operated upon have recovered. A case in the practice of Dr. Ed. Reynolds recently was treated expectantly and recovered.

DR. HORACE MARION saw a case in consultation some time ago which proved fatal.

DR. M. BROWN, seventeen years ago, had a young Irish patient, primipara, in labor, where there was a great obliquity of the uterus and owing to which he expected trouble. The woman had a severe pain while in a standing position and shortly afterward went into a state of collapse. Examination showed a rent in the uterus and the child in the abdominal cavity. The child was delivered and then the placenta, but the bowels protruded and the woman died the next day. This was a case which might have recovered had an early laparotomy been performed. A very remarkable case of repeated rupture of the uterus has been reported by Dr. Row, of W. Lyndonville, N. Y., where in four consecutive pregnancies the uterus has ruptured during labor, and yet the child has been successfully delivered. The great obliquity of the uterus is emphasized by Dr. Brown as a cause of rupture.

DR. A. P. CLARKE had one case, twenty years ago, in a 4-para. He was called in the afternoon and found the patient in the first stage of labor, with some pain, and the os undilated; in the evening there was some dilatation of the os and the head was found presenting. The patient got out of bed, was seized with a pain which was very hard, and then became collapsed and bloodless. Dr. Wellington was called in, but the patient died before he arrived. The hand passed into the abdominal cavity through the uterus, felt the head of the child. There did not seem to be much hemorrhage present; the woman apparently died from shock. In his case, laparotomy would have been of no avail.

DR. DRIVER was called to see a woman who had been in labor all day. On the right the uterus appeared to be very thin, and on the left there was a hard mass. He passed his hand up the vagina and found the uterus was ruptured and the child lay in the abdominal cavity. The woman did not appear to be suffering much from shock or hemorrhage. The child was delivered through the T-shaped rent in the uterus and the placenta expressed. There seemed to be no tendency for the tear to close by uterine contraction, and the patient died twenty-four hours after the accident. As he looks back on the case, it seems to have been one where the life of the patient might have been saved by opening up the abdomen, cleaning it out and closing the wound in the uterus.

DR. MARCY said the blood supply of the uterus during pregnancy is very great and the hemorrhage must be greatly increased, as well as the size of the rent, by dragging the child through this avenue into the world. A rapid laparotomy should be performed. Dr. Marcy was called to a case of pregnancy where the labor was complicated by a large fibroid, weighing seven pounds; the physician in charge had turned the child and attempted delivery by the feet, and in doing so had torn the head from the body and let it remain at the fundus above the tumor. As it could not be removed by the usual channel there was only one thing to do, a laparotomy. The abdomen was opened and the head delivered by an incision in the uterus, but the patient died.

PROLAPSE OF THE IRIS. (HERNIA IRIDIS).— A CASE OF SUCCESSFUL REDUCTION.

Read before the Tri-State Medical Society of Alabama, Georgia and Tennessee.

BY FRANK TRESTER SMITH, A.M., M.D.
CHATTANOOGA, TENN.

The case before you, David Lucas, of Chattanooga, came to my office September 20 with a history of having been struck in the right eye half an hour previously with a piece of steel. Inspection showed a pear-shaped pupil with the point downward and inward, with the iris prolapsing through a linear wound at the margin of the clear cornea. A solu-

tion of sulphate of eserine was instilled into the eye and the patient sent home. Two hours later the prolapse was pushed inside the eye with blunt point of a small squint hook. The iris was freed from the wound except a small part which was adherent to its inner side and it was thought that further use of eserine would reduce this more safely than further manipulation. The pupil was almost circular but was still drawn to a point. Eserine was used for several days, the eye was kept bandaged and quiet enjoined on the patient. The eserine gradually drew the iris from the cornea but in so doing its anterior layers were torn loose and remain incarcerated in the wound. This can be readily seen by direct inspection. In the dark room a red reflex can be seen through this rent, nearly as bright as through the pupil. This interferes with the function of the eye in no way. The vision is 20-15, the same as the other eye. The pupil is now circular. You will notice that at the periphery of the iris the striations are absent, the black pigment can be seen, and by looking obliquely part of the iris is observed adherent to the cornea.

In the diagnosis of hernia iridis, the distortion and displacement of the pupil are important points. The prolapse can not always be distinguished from a foreign body especially if covered with exudation. Attempts at reduction, as a rule, do not succeed, because the surgeon is not consulted at an early period after the injury. This is the only successful case I have ever seen reported. Within a short time an exudate is poured out which prevents the return of the iris effectually. In such cases practice differs, many oculists advising excision; others advocating that it is better to let it alone. The use of eserine is contraindicated if there is any tendency to iritis.

Prognosis is doubtful, generally, most cases recovering with good or fair vision; others result in an inflammation which destroys the interior structures of the eye. All cases of this kind should have the best expert attention available.

CHROMICIZED CATGUT AS A MEANS OF DIRECT FIXATION IN THE TREATMENT OF FRACTURES AND OSTEOTOMIES, WITH A REPORT OF A CASE.

BY F. W. JAY, M.D.
COLUMBUS MEMORIAL BUILDING, CHICAGO.

Without attempting to depreciate the mechanical value of unabsorbable material as a means of direct fixation of the bone fragments in operations performed for the cure of fracture, the writer believes that bone repair is accomplished more rapidly and satisfactorily in the absence of foreign bodies from the bone. He is further convinced that in many cases in which some form of direct fixation of the fractured ends is required, a comparatively readily absorbable material will suffice. Consequently this case, an ununited fracture of the femur of one year's standing, in which some immediate mechanical support was required to retain the bone ends in apposition, and in which sutures of chromicized catgut met the requirements perfectly, is reported.

From the conditions found at the operation, and the methods adopted to secure fixation and union, some points of practical value may be gathered.

Histological research has demonstrated facts in