of progress, was used. The effects of this agent proved that lacerations and fissures of long standing and the most aggravated character, complicated with great degree of inflammation, hypertrophy, subinvolution, and a certain degree of pelvic cellulitis, were curable. An experience in the use of this agent in about twenty cases of lacerations and fissures, from the slightest to the most aggravated form, treated in the past ten years, shows conclusively that the most extensive wounds (many of them bilateral), have been made to heal and close up permanently. The os and cervix have invariably been reduced to their natural appearance and dimensions without contraction.

The treatment requires for completion from six to twelve weeks. It can be resorted to regardless of the presence of hypertrophy, inflammation, cellulitis, or subinvolution. The solutions employed were of three different grades.

SOLUTION NO. 1.

R Argent. Nitrat. (cryst.)..... 3ss
Aq. distil..... 13i M.

This is the form to be applied to the interior of the cervical canal, which is always in a state of catarrhal inflammation arising from the laceration or fissure which penetrates it. The remedy is applied down to the os internum by means of a silver or whalebone probe, wrapped with absorbent cotton.

SOLUTION NO. 2.

R Argent. Nitrat. (cryst.)..... 3iiss
Aq. distil..... 13i M.

This solution is to be applied, or rather freely painted, over the external surface of the os and cervix uteri, by means of a large camel's-hair brush, including the cavity of the laceration and granulating surface, until the whole presents the appearance of a grayish white coating. The application usually gives no pain, but rather acts as a soothing or sedative agent, protecting the exposed sensitive branches of the torn nerves and the tender granulations. The coating will often remain from one to three days. While the remedy acts as a protective, it also acts as a mild but decided stimulant, to develop a new and more vigorous growth and a more healthy action. Thus underneath this coating of silver the processes of healing and filling up the gaping wounds and the formation of a healthy cicatrix are in active operation.

At this stage the remarkable action of the remedy is manifested in the reduction of engorgement, in stimulating the process of absorption, and in removing all hyperplastic deposit and hypertrophy. By changing the morbid action in the wounded part, and affording an impervious coat, it suspends the absorption of septic matter and interrupts the action of the cause of cellulitis, which gradually subsides under its influence. The silver applied in this manner never acts as a caustic or destructive agent, but only as a stimulant to vital action.

SOLUTION NO. 3.

R Argent. Nitrat. (cryst.)..... 3iiss
Aq. distil..... 13i M.

Solution No. 3 is not only designed to be applied

to the external surface of the cervix uteri, after the healing and closure of the laceration have been completed, but also when there remains a degree of hypertrophy or hyperplasia, or ordinary engorgement, accompanied with induration. A solution of this grade will generally reduce these conditions and leave the cervix soft and healthy.

It is unsafe to leave the cervix either in a hypertrophied or engorged state, as that might be the basis of future inflammation and reopening of the wound. A majority of the cases thus treated have since given birth to children. Some have borne three children since treatment without difficulty. All have been entirely relieved of all unpleasant symptoms. Examinations held after the birth of each child showed a perfectly healthy os and cervix.

The application should be made every four days. During the intervals a douche of warm water, for the purpose of removing any accumulation of secretion, should be resorted to every morning.

It is the custom of the writer, in all cases of labor under his charge, to make a digital examination, at the time of the delivery of the secundines, of the os uterus, with the design of ascertaining the presence of laceration. If it exist, warm water douches containing biborate of soda, boracic acid, and carbolic acid in solution, are used after the first day, with the intention of maintaining a perfect state of antiseptis, thus preventing infection, and promoting the healing of the wound by first intention, if possible. If fever and cellulitis should come on notwithstanding this procedure, where no laceration can be detected, it would indicate the existence of a concealed fissure deep down in the cervical canal near the internal os, which has never been reached by the antiseptic douches. In the event that healing by first intention fails to occur, antiseptic treatment and cleanliness of the wound are continued, and after two months the local treatment is commenced with the graduated solutions of nitrate of silver, with the certainty of a speedy restoration.

BROMIDE OF ETHYL IN LABOR, AND CLAIMS CONCERNING PRIORITY OF ITS USE.

BY H. LANDIS GETZ, M.D.,

OF MARSHALLTOWN, IOWA.

I have recently noticed some contributions upon the use of bromide of ethyl in labor,—and while I have not lately used the drug, I have done so in the past, and can give something of an experience relative to its effects upon the patient in confinement.

Some time during the month of January, 1880, I received a pamphlet from Dr. R. J. Lewis, of Philadelphia, who had used the drug in surgical practice, wherein were set forth its uses and advantages as an anæsthetic in surgical operations. Being always a decided advocate of the use of anæsthetics in obstetrical practice, the idea occurred to me that if the new anæsthetic was what was claimed for it, it would certainly also answer a good purpose in obstetrical cases, and might possibly possess advantages over chloroform; and in a paper read before the Iowa State Medical

Society, which convened at Des Moines, January 27, 1880, I suggested the use of the drug in obstetrical cases. Shortly afterwards I procured the new anæsthetic and inhaled some of it, that I might compare in a degree its effects with those of chloroform and ether. I found that it produced in a measure the excitement and disposition to talk, which is peculiar to the primary effects of ether, and while anæsthesia could be as quickly produced with ethyl as with chloroform, it did not last so long. I also observed in my own case, and in others, that there was more nausea and vomiting and headache when the ethyl was used, than with chloroform. I also used mixtures of ethyl and chloroform, but found in them no advantages over chloroform alone. I make the following objections to bromide of ethyl:

- 1st. It is no safer than chloroform.
- 2nd. I can produce anæsthesia as quickly with chloroform.
- 3rd. The same *degree* of anæsthesia does not endure so long as with chloroform.
- 4th. It produces more nausea, vomiting and headache than chloroform.
- 5th. The odor and taste is more unpleasant than that of chloroform.
- 6th. It possesses no advantages over chloroform in obstetrical practice.
- 7th. In prolonged obstetrical operations it is not so good as ether, because the anæsthetic effect is of short duration, and as a consequence requires to be continuously administered.
- 8th. For these reasons, I have abandoned the use of it.

Concerning priority in the use of bromide of ethyl in labor, Dr. E. E. Montgomery, in a supplement to a paper read by him before the Obstetrical Society of Philadelphia, and published in the *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*, of September 26, 1885, writes as follows:

"In following the German literature by which I was led to use this drug in labor, I ascribed its first obstetrical use to Lebert, of Paris. The first case in which he used it was for the application of forceps, and occurred in March, 1881, but a paper published by Dr. Turnbull, (*Med. Bulletin*, June, 1880,) shows that he had then used it in a second case of labor, and spoke in high terms of its peculiar advantages. Dr. H. Augustus Wilson had used it in labor prior to August 7, 1880, when he published an article on this drug. (*Medical and Surgical Reporter*, Aug. 7, 1880.)

"It becomes quite evident that the first obstetrical trial of this agent was made in this city, and the priority lies between the gentlemen named."

Now, accepting Dr. Montgomery's dates as correct, I lay claim to priority of use of the drug in obstetrical practice, by a year over Lebert, of Paris, and by months over Turnbull and Wilson, of Philadelphia. In a paper read by me at the Iowa State Medical Society (as already indicated) which convened at Des Moines on January 27, 1880, on "The Use of Anæsthetics in Labor," I suggested the use of bromide of ethyl for this purpose (see extract of paper published in *New York Med. Record*, February 21, 1880). The first case in which I employed the

drug occurred on March 29, and the second case March 30, 1880, as my obstetrical memoranda, made in my "Visiting-list" for 1880, show. These facts, I believe, *clearly* leave with me and in the West thus far, the credit of priority of the use of bromide of ethyl in obstetrical practice, *instead of* at Paris or Philadelphia, or with the gentleman whom Dr. Montgomery unintentionally placed it.

204 E. Main St., September, 1885.

MEDICAL PROGRESS.

PILOCARPINE IN DATURA-POISONING.—DR. LADISLAS ROTH, of Nagy Bajour, Hungary, was called, at 1 P. M., to a little girl, aged 4, in a druggist's shop. She was quite insensible, with widely dilated and insensitive pupils, the face and body being swollen as if dropsical, and covered with a scarlatiniform rash. She was very restless, throwing herself about in all ways, groaning and gnashing her teeth; the pulse was 146, small and weak; the respirations forty, superficial, the temperature 39.5° Cent. (103.1° Fahr.). No urine or stool had passed since the commencement of the symptoms. The mother said that other children had told her that the child had eaten two handfuls of sweet ripe stramonium-fruit, and, when she saw her at eleven o'clock, she had seemed ill, and unable to stand on her feet. She had called the Government medical officer, who prescribed a mixture containing two grains and a quarter of tartar-emetic. The druggist, however, being of opinion that that would not do any good, took upon himself to give a solution of sulphate of copper instead. In the vomit which the copper had produced a number of berries of datura-stramonium were seen. Dr. Roth, remembering a case of atropine-poisoning he had seen reported by Professor Purjek, which had been cured by pilocarpine given subcutaneously, administered, at twelve o'clock, half a centigramme (one-fourteenth grain) of pilocarpine, in five centigrammes of water, by means of a Pravaz's syringe. No salivation or sweating followed, but no improvement was detected; and, at a quarter to three, a centigramme was given. The red rash and the swelling diminished. At three, another centigramme was given. The child cried, and shortly began to show various signs of improvement, even answering, "Yes," when the mother asked if she were ill. The injections were continued. Up to five o'clock, five and one-half centigrammes had been given. At six, the pupils had become almost normal, and the pulse 120, and temperature 39.8°. She was able to speak quite plainly, and wanted something to eat. All this time, there had been no sweating. At seven o'clock, as her condition appeared somewhat less satisfactory, half a centigramme more was given, and this brought on both salivation and sweating. She made a rapid recovery. Altogether, six centigrammes of hydrochlorate of pilocarpine were administered, five of which, the writer considers, were required to neutralize the datura.—*Brit. Med. Journ.*, Sept. 19, 1885.