by the appetite, the easy and regular digestion, and the absence of the common indications of gastric and intestinal trouble which patients who are not taking alcohol present.

d. By increasing the work thrown upon the lungs and the kidneys, the two great excretory organs of the body, alcohol hinders the proper depuration of the blood, and possibly hastens the occurrence of the hypostatic congestion of the lungs so prone to occur in these cases.

e. By its narcotic influence upon the central nervous system, it interferes with the due discharge of its functions.

4. *In alcoholism, whether acute or chronic, alcohol is contraindicated.*

RATE AND CAUSE OF MATERNAL MORTALITY IN 1,000 CASES IN PRIVATE OBSTETRICAL PRACTICE.

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While the rate of mortality, as given below, may be greater than that found in the experience of others, yet the writer apprehends that the causes as described, will make it appear that it is not excessive. The comparison between the same classes of cases in hospital and private practice, will show much more favorably if, as I think, due credit is given to the manifold obstacles which surround the practitioner in private circles. Called, as he often is, only "in extremis," when labor has progressed so far that a malposition which could have been readily corrected before the labor began, or in its early stages, has become an irremediable condition, is it any wonder that fatal results follow? Is it not the greater wonder that fatal results do not more frequently follow? Compelled to attend puerperal cases in the most unsanitary localities, and under the most unhealthy conditions, with no opportunity to remedy surroundings, or prepare the patients for the ordeal, is not the practitioner in private practice to be commiserated when comparison is made between him and those who serve in the hospitals surrounded with all the appliances of science and art to aid them; all the assistance required, either professional or otherwise, and in large majority of cases with time beforehand to prepare their bad cases for that which is before them, if, indeed, it be true that many of the fatal results follow uncleanness, this being the leading factor as at present taught in causing the septic troubles.

Hoping that others who have like statistics may present them for the purposes of comparison, and trusting that still others may have had yet smaller mortality rates, I offer this:

CASE 1. Woman, aged 23, first pregnancy, aborted

about the end of the fifth, or beginning of the sixth month. Septicæmia resulting from the detachment of a very firmly adherent placenta, leaving a very large portion of the uterine surface in an injured condition, and in whom neither internal medication, nor medicated injections locally produced the slightest relief.

CASE 2. Woman, aged 33, fifth pregnancy, was delivered in the same room in which lay two of the children of the family suffering from scarlatina. As she lived in a town ten miles away, and I was summoned by telegraph, arriving only to find her in the active throes of labor, and with no other place in the house to remove her to, she lay exposed to the scarlatinous poison, which developed in the characteristic pyrexia, eruption, etc., on the third or fourth day, and the end soon came. This case was attended for and in the absence of a practitioner who was already in charge of the scarlatina cases, and attended her after the delivery until her death.

CASE 3. Woman, aged 19, first pregnancy, was delivered in what bid fair to be perfectly normal condition, but who on the second day had a severe rigor, very high temperature, and in short time was covered with the scarlatinous eruption, dying on the fourth day.

CASE 4. Woman, aged 34, eighth pregnancy, who early in this pregnancy showed unmistakable signs of acute renal disorganization, fell into labor six weeks before the end of gestation, was delivered of a very small, feeble child, and in removal of the placenta, which gave no trouble, gasped, exhibited sudden indications of heart clot and expired, as it appeared to the writer, from the sudden absorption of additional urea into the circulation when the pressure exerted by the gravid uterus was removed.

CASE 5. Woman, aged 26, second pregnancy, had been under the care of a midwife, as they were all Germans, for 20 hours; when summoned, found it necessary to perform version, which was done, and delivery effected in a few minutes, patient left perfectly comfortable, although exhausted; as it was at some distance, the patient was not seen again, but was informed that she died in 24 hours afterwards—no history of excessive hæmorrhage, and attributed it to exhaustion or heart clot.

CASE 6. Woman aged 21, first pregnancy, labor only twelve hours in all, everything apparently normal until the end of the second day, when she had a very violent rigor, what was considered to be general peritonitis was developed, and she died at the end of the fourth day. There was a history of great mental depression here for a long time prior to the labor owing to unhappy marital relations.

CASE 7. Woman aged 36, in the 9th delivery, who had been greatly exhausted by frequent pregnancies and very severe labors owing to very marked pendulous uterus, was delivered by version after failure to put on the forceps, owing to the hydrocephalic condition of the head; was very much prostrated and notwithstanding every effort was made use of to aid her, the state of shock persisted for 19 hours, when she expired.

CASE 8. Woman aged 22 in her first labor, only

eight hours, was delivered of a healthy female child, without complication except a very slight laceration of the perinæum which was kept touched with astringents and antiseptics, but who, owing to an injudicious nurse's action in giving her a heavy supper of meats, etc., within twenty-four hours developed septicæmia, ushered in by a rigor and following the usual course for six days, terminated in death.

CASE 9. Woman, aged 29, in her first pregnancy, having been in perfect health up to January 28, 1883, was seized with a sudden pain immediately under the third dorsal vertebra which became so severe that the writer was summoned within thirty minutes of the inception of the trouble, and administered a hypodermatic of morphia which relieved the intense pain, but before doing so it was noticed that the lower extremities were paralyzed, and that there was retention of urine. The pregnancy had reached the end of the seventh month without further details, except to say that it proved to be spinal apoplexy, and that although the greatest care was exercised, a bed sore as large as the hand formed over the sacrum in twenty-four to forty-eight hours, and abortion was advised on consultation, and brought about, nothing seemed to avail and death closed the scene on the eighth day.

CASE 10. Woman aged 43 in the 11th pregnancy, who had experienced great trouble in all her previous confinements, had a fall one week prior to the date of actual labor, and then lost a large quantity of blood, but as the flow checked up by rest she received no medical attention; again two days before the writer was called, she suffered the loss of what was said to be a great quantity of blood, and again no medical aid was summoned; finally on the evening of Nov. 7, 1883, she had another frightful hæmorrhage, and on reaching the house I found her almost pulseless, and incapable of articulate speech; uterus high up; no dilatation of the os and no hæmorrhage at the time. As I could not reach the bag of waters to puncture, resort was had to the tampon, and large quantities of nutrient and stimulant liquids—the os dilated rapidly, labor progressed speedily and she was soon delivered without the loss of two ounces of blood additional. It appears to me that the whole process of labor was of the character which might best be described as ante-mortem, for the heart's action was very rapid and irregular, and she never gained complete consciousness during the time I saw her.

RECAPITULATION.

Septicæmia was accountable for two deaths.	
Scarlatina puerperalis	two "
Heart clot	one "
Renal disorganization	one "
Shock	one "
Spinal apoplexy	one "
Hæmorrhage, ante-partum	one "
Peritonitis, general	one "
Total,	ten deaths.

It will be apparent in this limited number of deaths that the septic element is still the great factor, and while this is true, may it not also be true that with all our knowledge there may be some cases of true, or

analogous to true, puerperal fever? a something more than mere sepsis introduced through a wound of the genitals. It is noticeable in the discussions of this subject in the New York Academy of Medicine that there were still manifested grave doubts as to total absence of something more than that which comes from without; although the weight of evidence was most in favor of infection through abrasions and wounds, rather than from a true autogenetic origin.

How to lessen the mortality in puerperal cases is a very important and interesting subject of discussion, and aside from the septic cases, the writer feels totally at a loss to know how to proceed or what to suggest in all the other conditions recorded as causing death from the standpoint of his personal experience. True, Dr. Busey in a late (April) number of the *American Journal of Medical Sciences* records a favorable termination in a case of scarlatina puerperalis, but is that not an exception to a very general rule of the fatal issue of that class of cases? and as he shows is largely true only of those cases which are attacked late in the lying-in.

And what shall we do in heart clot and marked renal disorganization, and shock and spinal apoplexy? As for ante-partum hæmorrhage, I doubt whether my patient would have died had she been seen at or after the first loss of blood more than a week before she was first seen by me. I might have used intravenous injections of blood or milk, but the efficacy of such measures is still a moot question, and totally impracticable in this case.

The great duty before the medical profession now is evidently the earnest endeavor to guard against septic infection in puerperal cases. It is the great effort in surgical treatment, and it matters little what measures are adopted so that perfect cleanliness is maintained, and such germicides are made use of as will destroy the noxious germs, not troubling ourselves about the multitudes of germs which are innocuous.

During the terrible epidemic of 1873, the writer was especially fortunate in having no septic cases except one case of scarlet fever, in the parturients coming under his care, while in a population of 10,000 or 12,000 there were a number of deaths, some 30 in all from that cause, rendering it a time of especial dread. These deaths, in very many instances, were among the class of women who were cared for by midwives, and frequently lacked all proper care, and, as I have been told, the disease often progressed so insidiously to the bad that danger was not apprehended until all hope was passed.

The septic deaths occurred in order in the 66th, 524th and 659th cases from septicæmia and general peritonitis, and in the 166th and 229th of scarlatina puerperalis, one of them, viz., the 166th of scarlatina puerperalis, in the year 1873.

As hinted in the discussion at the Academy in New York, long periods may elapse between the deaths from septicæmia, and unless carefully recorded may easily be forgotten, especially as all like to forget failures, unless willing to make them public for the general good, so that all mere assertions from memory

may and likely do prove fallacious, and the fact still remains that septicæmia is the one disease which we should most strenuously combat, and he who guards his parturient clientele most carefully from this insidious foe will be the one most fitted to practice his noble art.

In conclusion, as stated in a paper by W. W. Jagard, M.D., as to the Vienna mortality in Carl Braun's clinic being only one-half of one per cent. from septic diseases, it is with a feeling of something akin to self-gratulation that the writer notices that the mortality in his list is not much greater, and that his entire mortality, omitting the two cases clearly not properly included in his death-rate, is only three-quarters of one per cent.

MEDICAL PROGRESS.

ANATOMY AND PHYSIOLOGY.

OBSERVATIONS ON A DECAPITATED HEAD.—The observations related by Dr. Petitgrand, in a paper published in the *Revue Scientifique*, extracts from which are given in the *Medical News*, are highly important as furnishing the most precise evidence of the presence of consciousness after decapitation that exists. The man executed was a pirate, of robust frame and brave demeanor. He was an Annamite, and executed at Saigon. M. Petitgrand concentrated his whole attention upon him. He was placed in a kneeling posture, strongly attached to a solid post in front of him, with the head and neck voluntarily and strongly flexed.

The place for the blow having been marked with betel juice, the head was struck off at one blow by means of a long sword having a broad blade; the procedure, to be properly carried out, requiring great address on the part of the executioner, and much *sang froid* on that of the culprit. When this is the case there is, of course, far less contusion and concussion of the spinal cord than with the guillotine, and therefore so far a greater possibility of an ulterior manifestation of the functions of the encephalon. During the preparations Dr. Petitgrand never withdrew his eyes from the culprit, placed at two metres distance only, and with whom he more than once exchanged looks. The head fell within a metre and a half from him, without, as ordinarily, rolling away; and the divided part of the neck resting on the sand, the hæmorrhage which ensued was very slight. At this instant he was startled at finding the eyes of the head steadily fixed on his own, and not believing that this could be an act of consciousness, he rapidly described a quarter of a circle around the head, which lay at his feet, and saw plainly the eyes following this movement. He now returned to his former position, but more slowly, and the eyes followed him for "a very short instant," and then suddenly ceased to do so. At this moment the face expressed manifest anguish, the poignant anguish of a person in a state of acute asphyxia. The mouth opened violently, as if to take a last gasp of respirable air, and the head,

thus displaced in its equilibrium, rolled on its side. This contraction of the maxillary muscles was the last manifestation of life, a period of from fifteen to twenty seconds having elapsed since decapitation.

From these facts Dr. Petitgrand draws these conclusions: (1) That the head separated from the body is in possession of all its faculties as long as the hæmorrhage is restrained within certain limits, and that the proportion of oxygen dissolved in the blood is sufficient for the maintenance of the nervous function—that is, for a short period, which in any case would not exceed half a minute. (2) That the repeated convulsive movements of the lower jaw, after the head has become detached—movements which, without doubt, have given rise to the expression, "biting the dust"—are nothing else than the habitual reflex movements of the face in acute asphyxia. These cannot be absent when the little blood contained in the decapitated head flows away or becomes disoxygenated, and are caused by the sensation (probably conscious) of the want of necessary oxygen in the blood remaining in the encephalon. On the present occasion Dr. Petitgrand had no opportunity of observing the trunk of this beheaded man, but he has had opportunities of observing it on other occasions, and has always noted the following circumstances: The head once detached, the trunk (the body being attached by cords to the post, is unable to fall) suddenly assumes the vertical position, columns of arterial blood springing up a metre or more in height. This straightening of the trunk, and the jets of blood being simultaneous, are in fact related to each other as cause and effect; for at each new systole, manifested by the projection of a column of blood, the trunk is raised, to bend again immediately. The jets soon do not ascend to more than a few centimetres, and the movements of the trunk are reduced to mere oscillations. After from twelve to fifteen systoles all the blood is evacuated and the trunk remains motionless, and as it were suspended to the post, which prevents it falling on the ground. Dr. Petitgrand has never noticed any elevation of the ribs or sinking of the epigastrium, or any other sign of an attempt at respiration. The heart seems to continue to live awhile its own proper life, as is shown by its violent systoles, which are capable of affecting the stretching of the trunk.

SURGERY.

TREATMENT OF NASAL POLYPUS BY SODIUM ETHYLATE.—Dr. B. W. Richardson, in the *Asclepiad*, gives the following treatment for cases of polypus of the nose. He uses a long and slightly curved pair of steel forceps, the ends of which come to a fine point. He takes a piece of soft cotton wool, places it between the points of the forceps, and, twisting it firmly round the points, makes it into a good-sized, soft, flexible probe, like the end of a bougie. He saturates the cotton probe with the sodium ethylate, and then, having caused the patient to bring the polypus into view by sharp blowing of the nostril, he plunges the cotton, charged with the ethylate, into