portion of the bronchial mucous membrane, and the retention of old secretions in cases of bronchiectasis.

We thus have the history of a patient never very strong, who, after long disease of the gums, under which pus was secreted, fell a victim to pulmonary gangrene. As malignant ulcerations of the mouth are a cause of this disease, so the condition of the alveolar mucous membrane placed her in a favorable state for the onset of the fatal illness. Gangrene of the lower lobe of the right lung set in, and, to the septic condition of the mouth, may be added, as a possible cause, entrance of blood into the bronchi during the operation of extraction, particularly during the collapse. Perhaps the collapse, too, may have been caused by the plugging of a bronchial tube with blood flowing from the gums into the trachea during anæsthesia. The decomposition of such clots, even when caused by hæmoptysis, has been noted above as originating this form of disease. Careful search was made in the autopsy for the signs of any such plugging, but none could be found. I am more inclined to place the cause of death with the long disease of the gums, favoring the fatal illness.

CASE OF ATTEMPTED SUICIDE FROM THE INGESTION OF THIRTY-SIX GRAINS OF MORPHIA, WHICH REMAINED IN THE STOMACH FIVE HOURS. RECOVERY.

IN THE PRACTICE OF DR. L. E. LEMEN, DENVER, COL.

REPORTED BY SAMUEL A. FISK, A.M., M.D., DENVER, COL.

WILLIAM P., aged thirty-eight years, a German, six feet in height, about two hundred pounds in weight and of powerful build, becoming tired of life attempted suicide by taking a large dose of the sulphate of morphia. At ten o'clock on the night of March 6, 1887, in the presence of a woman with whom he had had a disagreement, he opened a one-eighth of an ounce bottle of Powers & Weightman's sulphate of morphia, which he had bought for the purpose of committing suicide, poured out a large quantity on to the palm of his hand, and ate it down. The drug remaining in the bottle proved to weigh twenty-four grains, making the amount that he took in the neighborhood of thirty-six grains. After taking the drug he remained in the woman's room some ten or fifteen minutes, when, under the apprehension that a physician was being called, he ran down stairs, jumped into a hack, and was driven about a mile and a half to his home. On the way he opened a small vial of the spirits of chloroform, that he had with him, and drank a fluid drachm. When he reached his house and got out of the hack, the driver thought he was drunk. P— afterwards stated that the last thing that he remembered was his getting into bed on reaching home. He drank freely of water and, on the arrival of the woman with whom he had quarreled, he was given a couple of glasses of milk, and a physician was summoned.

Half-past twelve, March 7th. Two and one-half hours after the ingestion of the drug, Dr. L. E. Lemen, who was called and who took charge of the case, arrived. Respirations were six per minute; pulse sixty-eight. Pupils pin-hole. Patient cyanotic. Ten grains of tartar emetic were placed upon the tongue and an attempt was made to wash it down, but the reflex effort of swallowing could not be excited. The at-

tempt and the dose were repeated, with a like effect, in about twenty minutes. Twenty minims of the fluid extract of belladonna were given hypodermically at 12.30, A.M., and the dose was repeated at 12.45, and again at 1.15.

Quarter-past one, A.M. Three and one-quarter hours after ingestion of the drug, I arrived with my battery. Found the respirations three per minute; pulse eighty-four. Pupils moderately dilated, due, no doubt, to the belladonna. We immediately applied the galvanic current from eighteen cells of a McIntosh Battery, the negative pole being placed over the right superior, carotid triangle, the positive over the præcordium, and the current interrupted very slowly. Galvanism and the belladonna brought up the respirations, both in depth and number.

Two, A.M. Four hours after ingestion. One-sixth grain of apomorphia was given hypodermically and an attempt to wash out the stomach with a soft-rubber tube was made, which failed, as the tube was not stiff enough. The hypodermic injection of apomorphia, one-sixth grain dose, was repeated in about twenty minutes after the first injection and followed in twenty minutes more by a third injection, making one-half grain in all of the drug that was given hypodermically, but it was of no avail.

Three, A.M. Five hours after ingestion. Galvanism having been kept up pretty constantly, an œsophageal tube was introduced into the stomach and it was thoroughly emptied and washed. The citrate of caffeine, grains fifteen, in solution, was then administered by the tube and the tube withdrawn. At this point the respirations ceased, the heart stopped beating and could not be heard over the præcordial region. The face and surface of the body became pallid, and we were afraid that life had flown.

Galvanism from eighteen cells was applied as before, and after three or four minutes a shallow inspiration occurred, and a second, and a third. Electricity was continued, the expirations were increased by compressing the chest, the heart started beating again, the respirations were restored, and the patient broke out into a profuse cold sweat.

Four, A.M. Six hours after ingestion. The stomach tube was introduced a second time and fifteen grains more of caffeine administered. On withdrawing the tube the pulse and respirations stopped as before, and were reproduced by galvanism as described. The respirations soon became Cheyne-Stokes in character, four or five series to the minute, and from that time for several hours but little was done except to stimulate the inspirations with a weak galvanic current whenever they seemed to flag.

Nine, A.M. Eleven hours after ingestion. Respirations eighteen per minute and fairly regular. Pulse one hundred. Patient unconscious.

Eleven, A.M. Thirteen hours after ingestion. Gave strong coffee, by spoonfuls between the cheek and the teeth, some of which would be drawn into the trachea and produce a violent coughing and the patient would thus become partially aroused, but dropped off instantly into slumber again. Could arouse him and make him cross for an instant or two, by pulling his beard. Slapping the face with a wet towel produced contractions of the orbicularis palpebrarum and corrugator supercillii. The citrate of caffeine in six-grain doses was administered every two hours for four or five doses, and we kept pouring down black coffee by

spoonfuls and by arousing patient enough for him to drink a little.

Three, P.M. Seventeen hours after ingestion. Vomited a little. Could be aroused sufficiently to be made to walk, supported by a man on either side. Pulse one hundred and twenty and thready. Respirations normal. Very drowsy, but could be kept from going into a deep sleep by talking to him. Skin bathed in perspiration.

Six, P.M. Twenty hours after ingestion. Sufficiently conscious to answer questions intelligently. Voice very husky, and he complained of his throat's hurting him. That night he vomited profusely and repeatedly.

The subsequent history was marked by great physical prostration; by a sore throat, on which some sloughing patches occurred; and by a cough, which with the ulceration in the pharynx lasted about ten days. At the end of that time he was able to get up and be around, and to-day he is a well man.

The interest of this case attaches to the fact that so large a dose of morphine could remain for five hours in the stomach of a perfectly healthy man, subject to the rapid absorption that would come from the stomach being empty, and yet that recovery should take place.

That the amount taken was about thirty-six grains, we feel sure, because he bought a fresh one-eighth ounce bottle, opened it in the presence of the woman, poured out a large quantity of the drug on to the palm of his hand, and ate it down. The remnant left in the bottle weighed just twenty-four grains.

That the drug taken remained in his stomach five hours we are equally positive, because from the time of his taking the drug, until his stomach was washed out, five hours afterwards, he was constantly in the presence of some person, and there is no history of his having vomited or purged in that time.

It is unfortunate that the washings of the stomach were not saved, so as to have determined accurately the amount of the drug that was not absorbed, and so, to have learned the real point of interest, the quantity of the drug that was absorbed. But so desperate did the case look, at the time, that it did not occur to us that there would be any need of reporting it, save to the Health Office, and the washings were thrown away.

We offer no excuse for the extreme measures taken in handling the case, except the urgency of the symptoms and the final recovery of the patient.

We are conscious that the stomach should have been washed out earlier than it was, but the delay was in a large degree unavoidable. The case has taught us, however, the necessity of emptying and washing the stomach even in apparently hopeless cases.

In turning to the books on my shelves, I find a case, cited by Reese in his "Manual on Toxicology," where a druggist swallowed *seventy-five* grains of sulphate of morphia. No marked symptoms appeared for an hour and a half, when he began to feel sleepy and had a staggering gait, soon after this emetics were given; causing free emesis. Despite the fact that the amount of the drug ingested was twice that taken in the case here reported, the absorption was evidently not as great—due to the fact that it was retained only an hour and a half, as against the five hours in this case.

Ziemssen's Cyclopædia (Vol. xvii), states that Bonjean witnessed a recovery after twenty-five grains of the acetate of morphia were taken: and Wood, (Ther-

apeutics, etc., p. 216), says the maximum doses from which recovery has taken place *without* emesis are fifty-five grains of the solid opium, equivalent to nearly seven grains of morphia.

A CASE OF PREGNANCY IN A UTERUS BILOCULARIS.¹

BY G. S. STEBBINS, M.D., SPRINGFIELD, MASS.

MRS. A., thirty-six years of age, had been married ten years, and never been pregnant. She had always been an intense sufferer from dysmenorrhœa, having been obliged at every menstrual period to remain in bed from three to four days, and have hypodermic injections of morphia administered, or resort to frequent use of opium suppositories per rectum. I am confident that her sufferings during her periods, taken altogether, were greater than those attendant upon ordinary cases of labor. Pregnancy had been suggested to the patient as the most hopeful remedy, but however gladly she would have availed herself of the relief that such a condition might have afforded, it was quite evident that there was some physical impossibility that stood in the way. Examination per vaginam revealed a very narrow, contracted os, which well-nigh amounted to stenosis of the cervical canal, and which, I assured the patient, was the cause of her sufferings, and her non-pregnant state. As the patient was desirous of obtaining relief at all hazards, I suggested dilatation of the cervix, which operation she finally assented to. I dilated pretty thoroughly with the steel dilator, and in a few months afterward she became pregnant as was supposed, but the question of pregnancy was rendered a doubtful one, by the subsequent history of the case for four or five months.

About six or eight weeks after her last period, she began to experience intense pain in the right ovarian region, the abdominal walls at the same time becoming so sensitive, that she could not turn in bed, nor hardly tolerate the weight of the bed-clothes. These symptoms continued very severe, and were unendurable unless she was continually under the influence of opiates. Soon there began to be visible enlargement in the right iliac region, the nodulated, uneven outline of what appeared to be a tumor being readily mapped out by gentle pressure, the growth seemingly extended just above Poupart's ligament, the upper border rising up inside the ilium to its anterior superior angle. At the termination of the fifth month, there was no enlargement in the median line perceptible to the eye, nor to be distinguished by pressure on the abdominal walls; neither did examination per vaginam reveal anything except an elongated, œdematous condition of the posterior lip of the os, which felt like a bladder of water. A sympathetic condition, manifested according to some authors, in cases of tubal fetation.

The uterine cavity was still apparently empty, as far as the vaginal examination shed any light upon the case. The following question now arose: was she really pregnant? If so, was it a case of extra- or intra-uterine pregnancy? Had she a tumor? If so, was it ovarian; or was it some growth involving the broad ligament? If either of the latter, was the growth benign or malignant?

At this juncture, at my suggestion, a veteran in

¹ Read before the Springfield Society for Medical Improvement.