and sufficient manual dilatation or metreurys's will generally require many hours.

Such long-continued manipulation is dangerous, both on account of the anesthetic and the risks of infection and shock.

If the patient be in a hospital and if the physician possess the necessary skill the vaginal cesarean section will probably procure the best results. It is much safer than an attempt to extract through a partially dilated cervix, the old accouchement forcé. tient properly prepared is placed on the table and the cervix grasped anteriorly by vulsellum forceps, one each side of the middle, which are then substituted by traction sutures. A longitudinal incision is then made from a short distance behind the meatus urinaris to the external os through the vaginal mucous membrane. The bladder is then separated from the cervix by means of gauze sponges, the loose tissues between the bladder and uterus yielding easily. The cervix is then cut through on the medium line with scissors. As the incision extends upward the edges are caught by vulsellum forceps, on which traction is made to bring more and more of the anterior wall of the uterus within reach. This is split through, the vesico-uterine fold of the peritoneum being pushed up. In this way an opening may be made large enough to admit easily the closed fist through which the head may be extracted. If the child be at term it may be well to split the posterior wall of the cervix. An incision is made in the posterior vaginal wall, the rectum separated and the cervix incised in the same way as the operation was done on the anterior wall. Sometimes it may be necessary, in order to get more room for extraction, to make cross incisions in the vaginal wall. Unless the head is in the pelvis delivery is accomplished best by version and extraction. After the birth of the child it is not necessary to deliver the placenta at once. This might lead to considerable and unnecessary hemorrhage and probably require packing of the uterus. If there has been no detachment of the placenta and no hemorrhage from the placental site, the cord should be cut short and pushed back with any protruding membrane by a sponge and the repair of the incisions begun. The edges of the uterine wound are caught with forceps as before and pulled down until the upper angle of the wound is in plain view. Then with a well-curved needle and strong catgut the wound is closed with interrupted sutures knotted on the inside of the uterus. Before the lower part of the cervix is repaired the placenta must be expressed and any hemorrhage checked by hot uterine injections. The vaginal incisions are closed in the usual way.

If the operation just described is impossible we must choose between giving all of our attention to securing elimination and controlling dangerous symptoms or cautiously assisting labor while attending to the general condition. If the patient is not overwhelmed with the eclamptic poison, if the convulsions are few, the coma not profound and the heart in good condition, the first may be the best plan to pursue. Morphin hypodermically in one-sixth to one-fourth grain doses up to three-fourths grain, is the most reliable agent to control convulsions. Profuse sweating by packing or hot air should be secured. Two to four drops of croton oil placed on the tongue will secure free and prompt

Bleeding from the arm will rarely be required, but in desperate cases should be resorted to. The subcutaneous injection of one to two pints of normal salt solution will often have a favorable effect. should always be used to relieve the overburdened heart.

In connection with these measures, when the symptoms are more urgent, we may induce labor or slowly dilate the cervix. As before stated, rapid dilatation and extraction in these cases is impossible, and any attempt in this direction is apt to lead to great disaster. The proper way to proceed is to anesthetize and prepare the patient, dilate the cervix with a branch or solid dilator to admit one finger, rupture the membranes and introduce a small Voorhees bag. Then ether should be withdrawn and the patient put back in bed. careful control of symptoms and care for elimination as outlined above the labor should be allowed to progress until the bag is expelled. Then if necessary the anesthetic should be given again and another bag inserted, and again labor be allowed to proceed as before. Finally, after the cervix is well dilated, or after the effacement is complete and more active dilatation is safe, more active measures may be taken to deliver the child.

## THE USE AND ABUSE OF HYPNOTICS.\* W. BLAIR STEWART, A.M., M.D. ATLANTIC CITY, N. J.

"Take a trional powder when you retire and you will not be troubled with insomnia." This is a too common advice given to the laity and patients when either time or lack of interest prevents a thorough examination for the cause of the insomnia. Before falling into the rut of routine hypnotics, it is well to take more time to study every case of insomnia and ferret out the cause, remove it if possible, and little sleep-giving medicine will be needed. It should be remembered that insomnia is a condition or symptom dependent on some disturbing influence in or out of the body. Why give a hypnotic if acute indigestion is the cause; if high or moderate fever is present; if there is an earache, toothache or severe neuralgia; if a brass band is playing next door; if some unusual noise is disturbing? Do we always stop to consider and inquire into these and many other possibilities before we prescribe?

One gentleman who had undergone treatment at the hands of many admitted that no one had given his case a close study, but all jumped to the same conclusion, and had about exhausted the list of narcotic and hypnotic remedies. He was on the verge of a complete nervous breakdown. His constant symptoms were dizziness and a continued buzzing sound referable to the frontal region. Examination revealed errors in dietetics and an impacted auditory canal—the accumulated and hardened serous and waxy discharge impinged on a perforated and inflamed membrana tympani. Do I need ask why hypnotics failed here? Simple dietetic rules and proper treatment soon brought relief, but not at once, because Nature is a great creature of habit, and insomnia once fixed is sometimes very hard to eradicate. We may remove the cause of insomnia or neurasthenia in cases of long standing, but the effects will linger for days and even months before a return to normal is probable. Better nights will come by degrees until Nature reasserts herself. Unhappy is the man who, burdened with debts, business cares, unpleasant home relations and indigestion, retires to his bed night after night

<sup>\*</sup> Read before the Atlantic County (N. J.) Medical Society, March 18, 1904.

to toss and roll in a broken, dreamy and unsatisfactory few hours' sleep! Will we give him his sleeping potion, gradually increased, until he becomes a complete wreck and finally lands in an asylum or commits suicide?

How about the broker on the exchange? The man who works eighteen and twenty hours out of the twenty-four? The professional gambler? The man who is constantly using liquors to excess but not to intoxication? Shall we give these hypnotics? At an hour when sleep is most needful, should we give a narcotic or hypnotic to a crying child to induce sleep? Is it a case of earache, indigestion, too much or too little cover, fear, fever, night terrors, or some other condition? These are a few of the possible conditions that may be slighted and the hypnotic given as a matter of routine.

We should never overlook the fact that a close, warm and poorly ventilated room is often the cause of insomnia and disturbed sleep. It is a bad policy to sleep in a room with a burning light or gas jet, as a poor hypnotic effect is realized. The practice of inducing sleep by the inhalation of chloroform, ether and benzine can not be too strongly condemned. It is dangerous and injurious, and soon becomes a fixed habit. Hypnotic suggestion is often valuable. Gentle stroking massage of the forehead and neck will often induce sleep. Many persons will lie awake for hours, but if a cup of warm milk or bouillon is taken on retiring, Nature is soothed and sleep comes. Conversation, argument, games of chance, light reading and brain work should be avoided immediately preceding retiring, as these induce wakefulness. Many patients come with the tale of no sleep even for one hour, for one, two and three weeks at a time. While it is unnecessary, inadvisable and useless to question their veracity and to argue with them, we should accept their statement cum grano salis, and be governed accordingly. Such patients find considerable broken rest every twenty-four hours (there may be an occasional exception), and instead of prescribing strong hypnotics, we should seek for the possible causes, treat them and be absolutely positive in assuring results. This class of invalids should never be deceived, for the least-discovered deception will prevent the accomplishment of good. Some will occasionally need hypnotics, while others will benefit from a placebo. Mild massage, warm baths and warm-oil rubs at bedtime are often good sleep producers.

Many neurasthenics and overworked people drink a glass of beer or take a small drink of whiskey at bedtime to induce sleep. It works well in most cases, but as time passes the small drink has grown to be a glassful, and often one-quarter to one-half pint of whiskey. Sleep will not come without it. Such sleep is not restful, and the toxic effects of alcohol are produced next daynervousness, irritability, headache, poor appetite and often delusions. We must be careful how we order alcohol as a hypnotic. It is a fine remedy in some cases, but a two-edged sword in others. It is so convenient as a remedy that some physicians fall into its use and very soon, to their discredit, its abuse. When a physician reaches a constant state of insomnia he is a candidate for a rest cure and change, and not a course of hypnotics—so with all business men. Two of my most prominent patients in Philadelphia, when under extreme stress of business cares, can not sleep at home, but come to Atlantic City in the evening and sleep in the soporific influence of the sea air as calmly as a healthy child, and arise next morning fresh and vigorous-not drug logged. One writer has aptly said: "Insomnia is the rich man's burden—sleep the poor man's blessing." The rich constantly live in the future—the poor for to-day—thus causing most cases of insomnia in the former.

They tell us that trional and sulfonal are harmless hypnotics, and can be given almost with impunity within prescribed dosage. I do not believe any such nonsense. Those of us who have had the opportunity to study cases where either remedy has been constantly used will frequently find an individual who is extremely nervous; whose power of endurance is low; whose heart action is nervous and often weak and irregular. There are headache, backaches, general depression, loss of vitality and often memory, poor appetite, constipation or diarrhea, dizzy spells, or in fact many present a condition the Germans call schwach. Many begin with slight nervous or exhaustive insomnia, and by a constant use of trional or sulfonal substitute a train of real toxic symptoms that are too often incorrectly diagnosed neurasthenia. These two hypnotics are among the most valuable, insofar as small after-effects are concerned. when given occasionally; but in these, as in all others, we should always anticipate secondary toxic effects, and never fall into the rut of prolonged administration—we must look for the cause of insomnia and treat it.

Chloral, bromids, hyoscyamus, opium, paraldehyd, morphin, heroin, donoin and hundreds of others have their special indications in selected cases—never for prolonged use, but often for prolonged abuse. When we prescribe a hypnotic, we must do it intelligently and with due consideration, after we have given sufficient thought to justify its use. Many patients tax our resources and we meet with failures, but there is probably no case that exists without a cause. If that cause can be found by diagnostic or other methods, it is necessary to remove it or have it removed if possible; if such can not be done, we will be burdened by a toxicized hypnotic sufferer until death comes to his rescue. Volumes could be written on this interesting line, but let us listen to the words of Longfellow when he writes:

## SLEEP.

Lull me to sleep, ye winds, whose fitful sound Seems from some faint Æolian harpstring caught; Seal up the hundred wakeful eyes of thought As Hermes with his lyre in sleep profound The hundred wakeful eyes of Argus bound; For I am weary, and am overwrought With too much toil, with too much care distraught, And with the iron crown of anguish crowned. Lay thy soft hand upon my brow and cheek, O peaceful sleep! until from pain released I breathe again uninterrupted breath! Ah, with what subtle meaning did the Greek Call the lesser mystery at the feast Whereof the greater mystery is death.

## OUR SEROTHERAPEUTIC MEASURES. H. T. RICKETTS, M.D.

CHICAGO.

The publication of an article of this general nature<sup>1</sup> seems justifiable. in order to extend familiarity with a phase of medical progress, which is nothing less than epochal in its achievements. It is also desirable that

<sup>1.</sup> It seems unnecessary to give detailed literature here. The fundamental facts may be found in one of the following monographs: Dieudonné: Immunität, Schutzimpfung und Serumtherapie, Leipsic, Joh. Ambrosius Barth, 1903; Marx: Diagnostik, Serumtherapie und Prophylaxe, Berlin, Hirschwald, 1902; Deutsch und Felstmantel: Die Impfstoffe und Sera, Leipsic, Geo. Thleme, 1903.