through the row of perforations at F, into the next shelf, and so on until it escapes at M. The size of the holes at the alternate ends of the shelves is such, that no three of them will admit sufficient air for a single respiration; therefore the air passes through all and over the whole of the superficies charged with ether.

The following are some notes of cases in which ether was administered.

CASE I.—(In this and the four following cases ether was given on a towel.)—A man with a sinus in the region of the hip was brought under the influence of the ether in eight minutes. There was no struggling nor lividity. He was under its influence altogether a quarter of an hour, during which time he took six ounces. He was very sick directly after the operation, and continued so for a short time, but passed a good night and felt quite himself the following morning.

CASE II.—A little girl aged 11, with a sinus over the lower jaw, was brought under the influence of ether in six minutes. There was no struggling nor sickness. She took about three ounces.

CASE III.—A woman aged 30, with cancer of the breast, was brought under the influence of ether in a little over four minutes. There was no struggling. The operation lasted twenty minutes, during which time she took six ounces. She was not sick till the following morning, then twice.

CASE IV.—A woman aged 19, with sinuses around the ankle-joint, was brought under its influence in three minutes. The operation lasted three minutes more, and she took three ounces. There was no struggling nor sickness.

CASE V.—A man aged 40 was brought into the theatre for extirpation of the eyeball. He struggled a good deal, but was brought under the influence of ether in four minutes. The operation lasted four minutes more, during which time he took five ounces. He was very sick.

CASE VI.—(In this and the following cases the inhaler above described was used.)—A child, with abscess of the thigh and supposed necrosis, required three minutes to be brought under the influence of ether, and was kept under for eight minutes longer. She took three ounces; but the mouth-piece was too large for the face, so that a good deal of ether was wasted. She had no sickness.

CASE VII.—A man was operated on for necrosis of the tibia. He had been a soldier, and drank rather freely. He was brought under the influence of ether in five minutes, after a good deal of struggling. He was kept in a state of anæsthesia for six minutes, and took during that time about three ounces. His pulse, during the administration, went up to 140, and once he became rather livid. He had no sickness.

CASE VIII was one of recurrent cancer in the breast and axilla of a medical man. He had been operated upon twice before, each time having had chloroform, which nearly proved fatal the last time. He went off very quietly, without any struggling, and was under the influence of ether in four minutes. The operation lasted thirty-five minutes, during which time he took three and a half ounces. He was slightly sick on the return of consciousness.

CASE IX.—A man with necrosis of the elbow-joint was brought under the influence of ether in four minutes. The operation lasted twenty minutes, during which time he took about three ounces. The pulse, before inhalation, was 96; during it, 114; after it, 104. There was no lividity nor rigidity; but he was sick before he recovered consciousness.

CASE X.—A man with necrosed bone in the stump of the thigh was brought under the influence of ether in four minutes. Before he was quite unconscious there was great rigidity, and twice he became very livid. The operation lasted eighteen minutes, and he took about three ounces. He was very sick. His pulse before, during, and after the operation was 142. He was a very nervous subject.

CASE XI.—A lady on whom iridectomy was performed for glaucoma was brought under the influence of the ether in three minutes. There was neither rigidity, lividity, nor sickness. She took about an ounce for double iridectomy.

CASE XII was one of a man with a large tumour in the axilla. His pulse before operation was 96. He was brought under the influence of ether in five minutes. The operation lasted thirty minutes, the ether being kept up nearly all the time. Towards the end of the operation his pulse became very weak—almost imperceptible—but he soon rallied after an enema of brandy. He had no sickness.

The sickness after ether occurs just about as often as after chloroform, and it is more violent while it lasts, but it does not continue nearly so long. In some cases with ether there is a marked increase in the flow of saliva, but not in all. Cases IX and X had had chloroform in previous operations, and both preferred it to ether. They said that chloroform was less suffocating, and more pleasant to breathe. The pupil under ether is generally dilated. Having given chloroform

for more than two years without a fatal case, I think it rather too soon to give an opinion of the superiority of ether.

In Case I, ether was administered a second time by means of the inhaler, with greater comfort than by the towel. The patient was sick immediately afterwards, but this did not continue.

DEATH FROM CHLOROFORM.

By CHRISTOPHER S. JEAFFRESON, Esq.,

Surgeon to the Newcastle Eye Infirmary; to the Children's Hospital; and Assistant-Surgeon to the General Infirmary.

I HAVE read with great interest the highly practical and interesting remarks of Dr. Jones upon the administration of chloroform; and although I fully concur with him that the dangerous symptoms produced by anæsthetics, especially chloroform, may come on suddenly or gradually, I cannot admit that therefore the deaths from these agents should be classified as avoidable and unavoidable. I say this, because I firmly believe that, in many of the cases where the most sudden and death-like symptoms are instantaneously developed, actual death is avoidable, and may still be averted, provided no time is lost in (at that time) the useless pantomimics of dashing water upon the face, applying ammonia to the nostrils, and various other efforts which are usually resorted to. In these cases, the tongue having been drawn forward, immediate recourse should be had to artificial respiration, and, in spite of all appearances of death, this should be continued for at least three quarters of an hour.

During a large hospital practice, I have administered and assisted in the administration of chloroform several thousands of times; and happy am I to say that I have never witnessed a death, although on two occasions, if I had listened to the advice of bystanders, I fear I should have done so. In each of these cases, the heart's action failed suddenly, and respiration became imperceptible. The bystanders supposed the patient dead, as did I also myself; nevertheless, in one case, after thirty minutes, in the second case, after twenty minutes, of artificial respiration persistently and energetically carried on, symptoms of animation returned, and the patients perfectly recovered. I think many cases are lost in the two or three minutes' delay which generally elapses between the appearance of the dangerous symptoms and the adoption of artificial respiration, a complete stasis occurring in the pulmonary circulation, which cannot afterwards be overcome; and I would direct the attention of the profession to this point.

ETHER AS AN ANÆSTHETIC.

By HENRY GREENWAY, Esq., Plymouth.

A FEW years since, owing to the numerous accidents in the administration of chloroform, a compound of ether, chloroform, and rectified spirit, was brought before the notice of the profession (by whom I now forget) as a safe and reliable anæsthetic. Although apparently safe, its action, when I employed it, was slow, and at times imperfect. It shortly afterwards occurred to me that the ether would be of greater value if administered separately for producing the first stage of anæsthesia, the anæsthesia being then completed with chloroform. In the few cases where I adopted this plan, and then only because I thought, from the aspect of the patient, the administration of chloroform simply would prove unsafe, the results were satisfactory. By following this precaution in every case requiring an anæsthetic, and by interposing with ether (as practised by Dr. Jones of St. George's Hospital) whenever chloroform is seriously affecting the respiration or pulse, I believe we may still regard the agent, so long relied on by Sir James Simpson, as a "good servant", and one possessing advantages over ether simply. That chloroform, even thus employed, or any other anæsthetic, may never or very seldom prove a "bad master", it must be properly administered, and we must be able to say, with some degree of certainty, what cases are unsuitable for its administration. To this end I think the attention of investigators should be chiefly directed.

ACUTE INVERSION OF THE UTERUS.

By THOMAS JOYCE, M.D., Rolvenden.

M. B., aged 27, a slim, delicate looking woman, was in labour with her third child. In each previous labour flooding to a dangerous extent had occurred. The present labour progressed naturally but slowly, and a dose of ergot was given. After the birth, I requested the nurse in attendance to tie the cord and remove the child whilst I devoted my