dermically to all children of four years and upwards before every operation, until we found it wiser to administer the atropine by mouth instead of hypodermically. For some two years, since the atropine has been given by mouth, this dosage has been increased. The children take the atropine sulphate in two doses, the first two hours before the operation and the second one hour before the operation, the total amount being 1/80 grain for all children of 6 years of age and upwards. This does not cause convulsions.

As over 7,000 operations are performed at the above hospital every year, the children never exceeding 12 years of age, and every operation being preceded by the dosage of atropine already quoted, it can be assumed that atropine is not the cause of the convulsions in question, because these convulsions have not been observed by either myself or my colleagues on the anaesthetists' staff.—I am, etc.,

HAROLD SINGTON,
Senior Anaesthetist, Hospital for Sick Children, Great Ormond Street.

London, W.2, Sept. 15th.

"A FORGOTTEN BENEFACTOR."

SIR,—Surely Henry Hill Hickman was not, as Mr. Wayland Joyce says (September 10th, p. 471), "the real first discoverer of the anaesthetic relief of pain." General anaesthesia was known centuries before his time, but it was forgotten. Tom Middleton, in his tragedy *Women Beware Women* (Act IV, Scene 1, 1605 or thereabouts), writes:

> "I'll imitate the pities of old surgeons
> To this lost limb, who, ere they shew their art,
> Cast one asleep, then cut the diseased part."

As so often happens, the poet remembered and recorded what was forgotten by everybody else.

Anyone reading the surgical records of the thirteenth century must realize that the operations performed could not have been the successes they were if general anaesthesia was completely unknown. And in fact Guy de Chauliac (fourteenth century) has left this record:

> "Some surgeons prescribe medicaments, such as opium, the juice of the morel, hyoscyamus, mandrake, ivy, hemlock, lettuce, which send the patient to sleep, so that the incision may not be felt. A new sponge is soaked by them in the juice of these and left to dry in the sun; when they have need of it they put this sponge into warm water, and then hold it under the nostrils of the patient until he goes to sleep. Then they perform the operation."

Why the employment of general anaesthesia was given up, and the memory of it quite forgotten by the medical profession, are mysteries not easy to unravel. But probably the Black Death was responsible. So very many of the leading doctors, including de Chauliac himself, perished of the plague, taking with them their newly acquired knowledge; and, almost without doubt, the general public, disappointed and despairing, lost all faith in the medical profession. This much is beyond question—while the thirteenth and early fourteenth centuries were bright with the new-found triumphs in medicine and surgery, the following centuries were almost hopeless. It was not till the nineteenth century that anaesthesia and asepsis came once more into their own. But it should not be lost sight of that the so-called discoveries of the nineteenth century were in actual fact *re*-discoveries. Most of the pioneer work done then had been done already—in the Middle Ages.—I am, etc.,

FRANK G. LAYTON.

Walsall, Sept. 11th.

PAINLESS CHILDBIRTH.

SIR,—On page 35 of the *Epitome* of September 10th are summarized the experiences of two writers with Gwathmey's method of rectal ether anaesthesia. Harran's claim that "the applicability of this method is much greater than that of scopolamine amnesia" is contradicted by the limitations he himself mentions. It appears the method cannot be continued more than ten or twelve hours (what happens then is not stated), and that it should not be begun early. I have continued scopolamine amnesia for fifty-five hours,[1] and it has, I believe, been given for over 120 hours; it should be begun before the pains are severe; to deny the patient relief in the early stages, as in Gwathmey's method, is surely to stultify in part the term "painless childbirth."

Both writers emphasize inertia as contraindicating the ether method; in inertia scopolamine may be employed without hesitation, since by producing sleep it preserves the patient's strength and gives the best chance of a natural birth.

Properly given, scopolamine-morphine narcosis shows better results than "85 per cent. pain greatly relieved" (Harran), and "full analgesia in more than half the cases" (Naiditsch). Harran says "there was no increase of forceps delivery"; this is indeed "faint praise"! Scopolamine gives an increased percentage of physiological deliveries—that is, fewer forceps cases—because it obviates the use of instruments merely to shorten the sufferings or prevent exhaustion of the mother, or to placate the relatives; it is especially useful in labours that are likely to be prolonged—that is, difficult—in contradistinction to Naiditsch's experience with rectal ether. This writer also says that the morphine may be repeated, but this may entail danger to the child; in scopolamine amnesia the morphine should be strictly limited to the first dose.

Contrary to what Harran apparently implies, it is my experience that scopolamine-morphine narcosis is eminently suitable for use in a private house, and though it necessarily takes up much time and requires some experience to get the best results (which will not follow rule-of-thumb or standardized methods), it does not require "the service of a trained anaesthetist."

In these days of a falling birth rate, which is in part due to the dread of the sufferings of childbirth, it cannot be too widely known that scopolamine-morphine narcosis, properly given, affords a method of relief which is safe, harmless, applicable to all cases, and can be used in the patient's own home.—I am, etc.,

E. CURNOW PLUMMER.

London, N.W.8, Sept. 9th.

[1] *Lancet*, February 13th, 1926, p. 338

THE ABUSE OF CAESAREAN SECTION.

SIR,—The publication of Dr. Henry Jellett's paper under the above heading in the JOURNAL of September 10th (p. 451) should be warmly approved by all who have experience of obstetrics and are anxious that a high standard be maintained in this specialty. With the statistics in the paper, and the conclusions come to, I need not deal, as they are recognized as true and sound by all who are in a position and qualified to give an unbiased opinion. What I hope to do is to point out how this abuse often occurs, and suggest something for its control.

Caesarean section is a surgical operation and well within the scope of a properly qualified obstetrician's practice, but general surgeons may also well claim (and do so) that it is within their province; but it is not apparently realized universally that the true obstetric question is the *advisability or not* of the operation in any given case. That question can only be decided after careful consideration and examination by an obstetrician—whether with or without the help of other surgeons is immaterial for the moment to the argument.

Now so long as practitioners (often anxious to get the troublesome case "off their hands") are willing to transfer these cases to institutions, hospitals, or maternity homes, regardless of what expert hands they go into, so general surgeons attached to such institutions will prefer Caesarean section, as the easiest way out of the difficulty to them, according to their view. Consideration of the foregoing must point to the general practitioner as an important link in the chain of events leading to the results we are discussing. It is so easy to transfer cases into other hands, and the responsibility is apparently over. The trained midwife is another link in the chain. She has no option in her legal duties but to call in a "registered medical practitioner" in cases of difficulty; and local health authorities, acting through their maternity committees (not to mention the Ministry of Health itself), see no difference between different practitioners called to these cases, which almost always require specialist attention.

Criticism, so far—now the suggestion. The large share of the remedy is in our own hands; the profession as a whole must cultivate a "conscience" in obstetric