ciated by the patient, owing to the production of pain. Thyroid extract will, however, speed up the circulation very effectively, and forms a ready means of attaining the desired end. As I pointed out in the *Journal* of April 23rd, large doses of thyroid extract are often required, and my technique has been to push the dosage of extract until the pulse rate rises to some 120 beats per minute, at which point sweating and tremor are usually well-marked phenomena.

The figures of American workers in this field are very impressive, but they have erred in not laying sufficient stress upon the theoretical grounds on which the use of thyroid extract is based, with the result that the stigma associated with yet another claim of endocrinology is attached to a therapeutic effect which can be attained, if necessary, with any form of thyroxine suitable for oral administration.—I am, etc.,

London, W., May 7th.

JOHN H. HANNAN, M.D.

LOCAL ANAESTHESIA FOR TONSILLECTOMY

SIR,—I was interested very much by Mr. Costello's article on the use of local anaesthesia in the removal of tonsils (May 7th, p. 839). Some of the advantages are that there is no vomiting, no risk of suffocation, no hidden bleeding, no anaesthetic nausea, and no necessity for a nurse to be in close attendance during a recovery period, as in general anaesthesia. The bleeding is less at the time of the operation, and is less likely to occur later. A matter of importance to the patient in these times of financial stress is that he does not have the expense of an anaesthetic fee. Pantocain I have found a more satisfactory drug than cocaine for surface anaesthesia, as it is less toxic, and can be used freely.

The removal of tonsils under a local anaesthetic is the usual procedure on the Continent, possibly because general anaesthesia has not reached such a high art as in Great Britain. But the English are unaccustomed to the thought of an operation with a local anaesthetic, and many are psychically unsuitable. Women are better than men.— I am, etc.,

London, W., May 11th. C. HAMBLEN THOMAS, F.R.C.S.

DIET AND DENTAL CARIES

SIR,—With reference to the subject of "Raw milk and dental caries," discussed in the Journal in February, Dr. Harry Campbell has rendered a service in stressing what is perhaps the most important means of preventing caries among civilized children. Does not Mr. Sprawson's statement that "raw milk should be part of the daily food until 14 years " need modifying; would not up to 5 years be all-sufficient? Calcification commences in the unerupted teeth germs at the seventeenth week of intrauterine life, and goes on in the permanent teeth during the first few years of life. Cannot the ideal dental development in man be better learnt from noting the custom of primitive races, who have no source of milk other than human, rather than in institutions for children in England? The children of the uncontaminated aborigines of the interior of Australia are, I am informed. suckled till 3, and sometimes even 5 years old. I understand that till 3 years is quite common with primitive peoples. The Australians of the interior have particularly well-developed arches and teeth, and decay is almost unknown. Presumably after three years the necessary vitamins and salts can be obtained in the ordinary diet. Sucking at a breast develops jaws, whereas drinking milk out of a cup certainly does not. The paediatricians and bacteriologists will surely have something to say against unboiled milk for children in connexion with tuberculous infections. Is it worth the risk?—I am, etc.,

E. COUPER BLACK, M.B., B.S.

SIR,-Being so far away I was not able to join sooner in the controversy concerning raw milk and dental caries. I not only agree with Mr. Sprawson, but go further. 1 have shown conclusively in my book on pulmonary tuberculosis that weak or tuberculous children do better on raw milk than when it is boiled or pasteurized; that cow's milk does not necessarily cause tuberculosis in man (a conclusion which Koch arrived at after careful investigation); and that it is not raw fresh milk, but want of it, or improper feeding with cooked milk, that encourages the development of tuberculosis in children. I have seen these conclusions confirmed over and over again, not only in England, but in this far-off India. The nutritive value of breast milk or cow's milk depends upon the nutrition of the mother or the cow. If they are not properly fed with a well-balanced food containing protein, vitamins, and various salts, such diseases as caries, rickets, and tuberculosis are likely to supervene.—I am, etc.,

Thambaram Sanatorium, Chrompet, near Madras, April 20th.

C. Muthu.

ETHER CONVULSIONS

SIR,—So far, apparently, no satisfactory explanation has been found for the convulsions which occur in some cases during ether anaesthesia. It is now, I think, well known that occasionally in certain individuals tetanic spasms may be produced by over-breathing, with its consequent hyperventilation of the lungs, which are thus washed free of CO₂, causing a change in the reaction of the body towards the alkaline side. Might not a somewhat similar mechanism be the cause of the "convulsions "occurring under ether? If so, then we have an easy and rapid remedy for abolishing them in the immediate administration of carbon dioxide. This procedure has actually been carried out experimentally in a case of "spontaneous over-breathing tetany" (vide an article on this subject by R. A. McCance, Quart. Journ. Med., April, 1932, 247). The same writer also points out how little over-breathing may be necessary to produce tetany. -I am, etc.,

A. C. S. COURTS, M.D., B.S., Honorary Physician, Chesterfield Royal Hospital.

May 6th.

PREPARATION FOR MARRIAGE

SIR,—I have found the correspondence on preparation for marriage as interesting as it is amusing, and I would heartily endorse the letter of Dr. J. W. Astley Cooper, with its warning about the limitations of specialists. The matter is obviously one where the general practitioner, with his more intimate knowledge of the people concerned and the environmental and other influences to which they have been and will be exposed, is best suited to advise—provided he has taken the trouble to equip himself for the task. A little help given to him in acquiring necessary information might be well expended.

There is, however, another aspect of the case. Our ancestors, and, generally speaking, all plants and animals, have conducted their mating without specialist advice for so long a period that the question arises whether people who require this ought to marry at all. The thought of a race that cannot manage its own love affairs is too terrible to contemplate.—I am, etc.,

Falkirk, May 7th.

W. J. Logie.

FOULING OF FOOTWAYS BY DOGS

SIR,—The letter signed "Agag," in your issue of May 7th, on this subject, has an interest for me for particular reasons. It is my privilege to act as medical officer of health for the district that includes the dread thoroughfare to which your correspondent makes thinly veiled reference. To the embarrassment of my children,