health education. It is a great disappointment that it plays so small a part in the training of teachers."

This is, in part, an answer to the question as to how far first aid is being taught in schools. As regards health education in general it is possible to give only a personal impression—it would need a national survey to define a pattern. I have been disappointed to find how few teachers have read the Ministry pamphlet—which incidentally is a substantial volume and suggests a comprehensive programme for all grades of schools. I doubt whether this programme is being followed in many schools, and the main difficulties are lack of specialists and the absence of a generally accepted policy. I find that a minority—and these are usually specialists, consider that health education should appear in the curriculum as such. All student teachers in training colleges receive a formal curriculum in health education and an examination is taken in the subject for the qualifying certificate. However, the London institute has decided not to set a separate paper in the subject but to include questions in a general paper as from 1965.

The diploma course in health education at the London institute provides an academic year's study and teachers enrol for this course alongside medical practitioners, health visitors, nurses, and public health inspectors. In the ten years of its existence, however, this course has produced few specialists to work in the United Kingdom. Where a head teacher approves of the inclusion of health education in the curriculum, and a specialist holding the Diploma of Health Education is employed, the results are excellent. A recent move in Birmingham is encouraging. A course is to be held for one year for established teachers on lines similar to those in London.

There is no doubt, however, that first aid has been neglected in schools in this country in contrast to the situation in the U.S.A. As an external examiner for two major institutes of education I have never known a question on first aid to be set. There is obviously a field for co-operation between the first-aid organizations and the schools until such time as there is a sufficient supply of health-education specialists who are also competent in first aid. Teachers of first aid would undoubtedly benefit from further training in the use of modern health education methods, and I know of one local association which has had help from the public health department in this.

On the question of what the content of health education should be my own opinion is that it should aim at producing enlightenment in all aspects of human biology and ecology, as well as influencing attitudes and behaviour. This requires a different approach from the factual instruction and participation involved in first-aid teaching. Thus while the Atlantic College formula is interesting I would not think that it has arrived at a final solution.—I am, etc.,

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New Type of Accident

SIR,—In the last few months a new type of industrial accident is becoming manifest. This is no less than avulsion of a wide area of hair and sometimes scalp. The phenomenon is exclusive to young men obsessed with the present day "Samson complex" of allowing their hair to grow to extraordinary lengths. The result is that it becomes inextricably entangled in moving machinery with, for them, disastrous consequences.

The patient was a boy of 17 with hair of average length 9 in. (23 cm.). He is employed as a machinist at a cutlery firm and the accident occurred while working at the machine, when his hair became entangled with a rapidly revolving turret lathe. As his head was pulled towards the machine he violently jerked his head away. A substantial wedge of hair (see Figure) was avulsed measuring some 5 in. by 2 in. (13 by 5 cm.), but no scalp was removed with it. There was some serous oozing from the denuded area. The scalp was cleaned well with Cetavlon solution followed by eusol. The damaged area healed uneventfully and fresh hair is slowly growing. He has not as yet, alas, had a haircut.

I feel there is a case to be made for the legislation compelling women to wear hair nets to be extended to men of hair length beyond a reasonable figure.—I am, etc.,

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Pyogenic Infection of Liver

SIR,—I have read with interest Mr. C. G. McKenzie's account of pyogenic infection of the liver (19 December, p. 1558). However, his classification of liver infections secondary to infection in the portal drainage area into two groups—pylephlebitis and solitary liver abscess—while simple, is perhaps too narrow. It takes account neither of pericholangitis, an inflammatory lesion not infrequently complicating ulcerative colitis,¹⁻³ nor of diffuse purulent hepatitis, which has been described in ulcerative colitis⁴ and also after appendicitis.⁵ Pericholangitis may be the result of portal bacteraemia known to occur in ulcerative colitis,⁶ and the association of both pericholangitis and diffuse purulent hepatitis with ulcerative colitis suggests that the more

limited may occasionally progress to the more diffuse lesion.

It is possible that single liver abscesses may result from pylephlebitis, but they may also follow biliary tract infection, an association that almost certainly explains the high incidence of pyogenic liver abscess in Hong Kong.⁷

Although pylephlebitis and liver abscess are rare conditions, liver sepsis in a wider sense which includes pericholangitis, diffuse purulent hepatitis, chronic ascending cholangitis, and acute suppurative cholangitis may possibly be responsible for morbidity in surgical patients more commonly than is realized.

The diagnosis of liver sepsis is difficult to make, but awareness of its possibility in patients with unexplained post-operative morbidity is helpful. Further, elevation of the serum alkaline phosphatase in the presence of otherwise normal liver function suggests liver sepsis or new growth.⁷ Mr. McKenzie's findings give additional support to the association between pyogenic liver infection and raised serum alkaline phosphatase.—I am, etc.,

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Disinfection of Blankets

SIR,—Disinfection of blankets should surely in these days be superseded by the phrase and the method of "sterilization of blankets" and of all bedding. Your leader writer (12 December, p. 1480) seems unaware that excellent materials have been available for some time which can be sterilized in a variety of ways; and in many hospitals to-day blankets as light, as warm, and as cheap as wool are in use which can be autoclaved at the same temperatures and pressures as other hospital materials are sterilized. We refer in particular to polypropylene blankets now being made from I.C.I. fibres by a number of British firms in various colours, textures, and prices.

We have been particularly concerned with the development of a cellular polypropylene blanket. We have subjected these to severe tests in washing and autoclaving and we are experimenting with other materials. Terylene sheeting, pillows, and pillow cases can be autoclaved; and sterilizable polypropylene draw-sheets will soon be available for comparison against the present disposable polythene sheets. It is now possible to autoclave complete sets of bedding; and in the maternity department every baby can be provided with a sterile packet of cot, bath, one-way nappies, etc., of polypropylene.

We prefer polypropylene blankets in "natural" colour, but for those who wish to follow your advice to abolish counterpanes other fast colours are available. These blankets would answer, also, your demand for "blankets [to] be disinfected if they are to