rigid apparatus. There are, of course, occasions when it is unsafe, or impossible, to intubate and bronchoscopy can then be performed only with the fibrescope, but these are very rare. To use it alone is to deny oneself the full potential of bronchoscopy.

Furthermore, the definite limitations and disadvantages should particularly be stressed because they are often glossed over. (1) The view is inferior (but adequate in most cases). It is very easily obscured. (2) There is no "feel," which may be very important in assessing rigidity of the bronchial tree. (3) Foreign body removal is very limited. (4) Without a rigid tube in place facilities for resuscitation, if necessary, are dangerously inadequate. (5) Most important, the control of the rare profuse haemorrhage will prove impossible: vision is rapidly obscured, packing cannot be carried out, and finally the re-discovery of the bleeding point through a rigid tube will either not be possible or not achieved in time.

For those using the nasal route under topical analgesia there are the additional occasional problems of sensitivity to the anaesthetic agent, epistaxis, or great difficulty in removing the instrument if it gets caught in the nasal passages. This route seems to us fundamentally unsound when the oral route, via a tube and under general anaesthesia with oxygen ventilation, is not only much pleasanter but safer for the patient. This particularly applies to the severe bronchitic, whose blood gases can be so easily and dangerously deranged.

The flexible bronchofibrescope should be accepted for what it is: an invaluable additional telescope allowing more distal visualization of the bronchial tree. Ideally it should be used as such only through a rigid tube under general anaesthesia, but many physicians and internists can perform bronchoscopy only with the fibrescope alone —in many hospitals access to operating theatres is allowed only to surgeons and the expense of a general anaesthetic may not be acceptable to private patients. There is thus a real temptation to treat bronchofibreoscopy as an "office" procedure, away from adequate resuscitation facilities, so creating a potentially hazardous situation.

Let us then, rather sadly, face the fact that the army of lone bronchofibreoscopists will continue to grow; the procedure is often convenient administratively and, in private practice, it is lucrative. The operators should realize, however, the limitations, disadvantages, and potential dangers that exist and practise this technique only if nothing better can be offered.—We are, etc.,

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SIR,—Dr. I. W. B. Grant makes some sound points in his assault on amateur fibreoptic bronchoscopists (23 November, p. 464). We imagine that few bronchoscopists fully trained in the use of both conventional and fibreoptic instruments would disagree with him that the conventional instrument provides better views, better biopsies, and better suction, and that the only real advantage of the fibreoptic instrument in the anaesthetized patient is the facility to detect a few more distally sited tumours. Furthermore, as Dr. Grant observes, the rigid instrument alone permits assisted ventilation and the removal of foreign bodies.

His case for confining the use of the fibreoptic instrument to fully trained conventional bronchoscopists using general anaesthesia is less easy to follow. While fibreoptic bronchoscopy may be unsuitable or unsafe in some patients, this is not so in many; and, while it may be less satisfactory in some ways, it may still be adequate, irrespective of the operator's experience with a conventional bronchoscope. We concede that fibreoptic examination under a local anaesthetic is not always "undisturbing" to the patient, but we could hardly describe it as "barbarous." It saves the patient a general anaesthetic and in some cases the need for formal admission to hospital, and it frees the anaesthetist and theatre (and in many cases the thoracic surgical team as well) for other activities. Thus from the economic point of view the £3,500 fibreoptic instrument could prove a good investment.

We are enthusiastic amateur fibreoptic bronchoscopists. With the assistance of one nurse and the use of local anaesthesia we have, over the past six months, made approximately 100 examinations using, generally, a transnasal approach in the sitting patient. Relatively fit patients are examined in a clinical room adjoining the chest ward, with standard resuscitation facilities kept immediately available. Whenever we consider there is a risk of respiratory embarrassment the examination is performed in the intensive therapy unit, where conventional bronchoscopy may be carried out if necessary. We have found this arrangement both safe and convenient and our patients have not been unduly distressed. We do not pretend we can achieve as much as a conventional bronchoscopist and an anaesthetist in an operating theatre, and some 10-20% of our patients are left requiring further examination by the rigid bronchoscopy team. We do, however, feel that we provide a useful service for the remaining 80-90%.

We believe the potential demand for diagnostic bronchoscopy is much greater than can be met at present by conventional bronchoscopy under general anaesthesia and we hope that other amateur fibreoptic bronchoscopists will not be discouraged from taking up this "screening" role simply because it is impracticable for them to be trained with a conventional bronchoscope as well. The future might then allow enthusiastic professional fibreoptic bronchoscopists to answer Dr. Grant's criticisms more ably. —We are, etc.,

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Full View of the Road

SIR,—Mr. M. Ruben (23 November, p. 467) has raised one or two interesting points in connexion with my article (19 October, p. 149). The last thing one wants to do is to panic anybody, but his own comment emphasizes how easy it is to misunderstand the situation. All the experts who have worked on the transmission factors of contact lenses stress that if they are tinted such tints ought to be minimal if they are worn for night driving. A simple calculation shows that Mr. Ruben's defence of light tints could lead to complacency—for example, if a windscreen or motor cyclist's visor transmits only 85% of the incident light and the same is true of contact lenses, then the amount of light entering the driver's eye is reduced to 72%, which could be hazardous.

In my article I stressed the importance of windscreens offering mechanical protection, a point Mr. Ruben appears to have overlooked. I also said that "all transparent screens—windscreens, visors, spectacle glasses, and contact lenses—used at night should be clear, and that any light filtering required during daylight should be provided by accessory but removable means." If the intelligent reader fails to include sunglasses and Polaroid in this all-embracing list then I fail to see what more forceful expression can bring it home to him.

The monochromatic light mentioned by Mr. Ruben is just as unobtainable on the road as are optically perfect windscreens. Like Mr. Ruben, I used to think that blue-free light entering the eye would be an advantage in mist or fog at night. However, all the existing evidence shows that our views are mistaken, probably because, as in the case of fogless darkness, any reduction of light reduces visual capacity and this outweighs the benefits one might expect if light scatter were reduced.—I am, etc.,

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Uticillin

SIR,—While I concur with some of your correspondents' arguments (9 November, p. 344), and particularly those pertaining to inadequate information in advertisements and the use of carfecillin (Uticillin) discs, it is important not to let emotion override reason.

In the general practice situation where pseudomonas infections are rare it is not likely that the widespread use of carfecillin will increase their frequency. This assertion is made on the basis that such organisms are already inherently resistant to ampicillin, an antibiotic very widely used for a number of years. It must also be remembered that resistance to carbenicillin and to ampicillin is frequently mediated by the same R-factor, both drugs being susceptible to destruction by β-lactamase coded by the commonly occurring ampicillin-resistance R-factor found in many enterobacteria. Thus if control of the carbenicillin-resistant R-factor is desired it would seem logical to limit the use of ampicillin as well.

The position is obviously different in hospitals, where pseudomonas infections are more common, often being confined largely to specific units. Here the excessive use of carfecillin could well increase the frequency of carbenicillin-resistant pseudomonas strains, just as carbenicillin itself has done, and as ampicillin usage has tended to select carbenicillin-sensitive or carbenicillin-resistant strains.

An important point not mentioned so far is that of cost, a course of carfecillin being about three times more expensive than one of ampicillin. This alone might limit the use of carfecillin for infections sensitive to cheaper drugs. However, amid this flutter of