two at most after they have been put to bed, but they are willing to remain until they are discharged. The relapse is, we believe, due more to want of care in dieting themselves after they leave hospital than to promature discharge. The author shows from statistics that the results of surgical treatment in ulcer of the stomach are not so uniformly successful as some surgeons would claim, and it must not be forgotten that 8 or 10 per cent. die directly from the operation; in the hands of a few specially skilful surgeons this mortality may be reduced, but of those who recover from the operation the number in whom a permanent cure cannot be claimed varies with the operator, and is from 8 to 25 per cent. In the treatment of gastropnothis Dr. Lockwood advises the application of strapping according to a plan which seems indistinguishable from that originally devised by Glénard; the diagram illustrating it seems to be identical, yet this is called "Rose's belt"; elsewhere he describes the method of putting on a Priessnitz bandage, but not exactly as prescribed by its originator, and the modification is a doubtful improvement.

NOTES ON BOOKS.

VERY greatly increased attention has been given to fleas as well as to other insects since the part such creatures play in the spread of disease has been so clearly demonstrated. It is fitting, therefore, that one of the Cambridge manuals should be devoted to this ubiquitous insect.⁷ Mr. RUSSELL, in the pages of his book on *The Flea*, treats the subject popularly, avoiding whenever possible technical, zoological terms, though if these have had to be used they are clearly explained. A very good account of the life-history of the human and some of the animal fleas is given, and the part these insects play in the dissemination of plague is also suitably discussed. The little manual should be found useful.

"M. OSTON, M.D." has written a bright, readable, if not very exciting, story of student life in Edinburgh in the late eighties or early nineties of the last century. Several of the personalities in university circles at that time are painted so as to be easily recognizable by any one who knew the "auld grey town" in these years; and some characteristic tales, not the most daring ones, are told of their idiosyncrasies, especially when in the examination hall. The Edinburgh landladies, and especially a certain Mrs. Choice-Jones, with an amazing vocabulary of new-created words, are amusingly portrayed. The story, which has the title, *Born in Blinkers*,⁸ concerns three youths studying medicine; two of them propose, each in his own way, to the sister of the third, and she makes her choice in the old-fashioned manner. There is nothing "modern" about the story any more than there is anything "militant" about the maiden, and all ends happily. Elsa, the heroine, is delightful; and Rayner, the hero, goes along all right when he gets his "blinkers" off.

MOTOR CARS FOR MEDICAL MEN.

MOTOR CAR INSURANCE.

IN reference to a case recorded at page 1101 of our issue for October 25th, in which the underwriters of a policy refused payment on the ground that the damage incurred was due not to an accident but to a mechanical breakdown, a member suggests that the plaintiff must have been unaware of the advantages offered by the Medical Insurance Agency, established by a committee of members of the British Medical Association and the owners of the *Lancet* conjointly. Had he been aware of these advantages and availed himself of them, his claims for damages would probably never have been refused on such grounds as those indicated, and he would certainly not have had to run a risk of having to bring separate actions against five different individuals. The Medical Insurance Agency has made arrangements with several insurance companies for the issue of policies covering every form of accident to cars or their owners, or to third parties, incurred by the use of motor vehicles. These policies are specially suited to the needs of medical men, and can be obtained through the committee by members of the Association at a reduced rate. The secretary and agent of the Agency is Mr. Guy Elliston, 429, Strand.

⁷ *The Flea*. By Harold Russell, B.A., F.Z.S., M.B.O.U. Cambridge: The University Press. London: H. K. Lewis. 1913. (Fcap. 8vo, pp. 132. 1s. net.)

⁸ *Born in Blinkers: A Romance of Edinburgh University*. By M. Oston, M.D. London: Murray and Evenden. 1913. (Cr. 8vo, pp. 351. 6s.)

THE CYCLECAR AND LIGHT CAR SHOW.

SITUATION REVIEWED FROM THE MEDICAL MAN'S POINT OF VIEW.

By H. MASSAC BUIST.

THERE opens at Olympia, Kensington, on Monday next the second show promoted by the Cycle and Motor Cycle Manufacturers and Traders' Union at which the form of vehicle currently styled the cyclecar constitutes perhaps the chief novelty among the exhibits. A year ago it was needful to point out that, interesting as was the display as regards the mere matter of design, its value as an appeal to the medical man was concerned, was extremely limited by reason of the fact that comparatively few of the types of machines submitted had gone through adequate testing by use on the road. To give the cyclecar its due one must say, on the one hand, that during the past season various examples have put up such performances as 20,000 miles in twelve months, the accomplishment of the journey from John O'Groats to Land's End in thirty-four hours thirty-nine minutes, a petrol consumption test of eighty-seven miles to the gallon, and a run on the track at Brooklands for an hour, during which period seventy-two and a half miles were traversed. Of course, no one machine has done all these things. These are, instead, examples of what has been done in various directions by vehicles, some of them specially built for the particular performances in question, as distinct from standard machines. On the other hand, no light car reliability trials—and this is the thing that alone matters to the medical man—have been organized on any large scale by any of the big car organizations in which the machines, considered in the bulk, have figured in at all a striking fashion, such, for example, as would have called for wide notice in the general press.

WHAT HAS LED TO DISSATISFACTION.

The cyclecar, or light car movement, as it is now being alternatively styled, has yet to do things in reliability trials worthy of prominence in the world's press as distinct from that small section which is solely interested in making all its geese appear swans. True, there have been reliability trials of sorts in England and Scotland. Quite a lot of ado was made in the cyclecar organs of only a week or two ago, for example, of a one-day reliability trial wherein only 10 per cent. of the starters fell out of the running. We are supposed to consider that a wonderful thing. But, if we look at the matter from the mathematician's point of view, we come quickly to the surprising conclusion that if they had carried the test to ten days—which would be by no means too long for a real trial of reliability—at that rate there would have been exactly no finishers on the tenth day's run out of thirty starters on the first day! It is things like this that require to be brought to the notice of the medical man, who has no use for a machine, no matter how cheap, if it affords only a sporting chance of quite nine and a half days' service before it breaks down. He must have a vehicle that will be available month after month all the year round. This plain speaking is necessary, too, to get this new branch of the industry away from those who would adopt hothouse methods of cultivating it. It is essential that cyclecar producers should come into the open and engage in the severest possible forms of reliability trials, no matter what weaknesses they may reveal, because that is the only means of putting the new industry on a solid basis by making it serviceable to the public. The motor engineering genius of the country, like the manufacturing one, is fully equal to the task of solving the problem once the causes of failure have been exactly, therefore scientifically, determined through process of trial and failure. As it is, it is being said in general terms to-day all over the country that, as the result of a season's service in the hands of the public before the vehicles had been adequately tried by the manufacturers, the cyclecar movement is dead.

HOW THE SATISFYING VEHICLE WILL BE EVOLVED.

That, however, is quite wrong. No movement that has its cause of being in a widespread and permanent demand

on the part of the public can be killed by any one season, or any series of seasons of failure on the part of manufacturers to produce the required article. It will be within the recollection of most that the motor bicycle movement went through precisely the same phase. Early in the century, particularly on the part of foreign manufacturers, it came on for a spell faster than the car movement spread. Then there was a sudden collapse because the goods had proved unsatisfactory so repeatedly that the public had lost its confidence to purchase; and we were told the motor cycle movement was dead. So, indeed, it appeared for a time. But during that spell some wise men in Coventry in charge of the Triumph Cycle Company considered the causes of general failure and arrived at a simple solution. They decided that the thing to do was to experiment quietly in the design and building of a machine which should be good enough for themselves to use daily to take them to and from their business and for week-ends. When they had got the design right, and the right material for each part, they merely standardized the vehicle. The whole of the motor cycle movement as a permanent development dates from that clear-thinking method of attacking the problem. So it must be with what we are styling the cyclecar movement. The manufacturers must not shun ordeals to test reliability, but must go on experimenting and building machines that are good enough for themselves to use at all times the year round in any part of the country. When they have got the design and materials right there will be an even bigger boom in cyclecar production than there has been in the motor cycle industry. Of the future of the four-wheeled light road vehicle with two driven wheels there can be no manner of doubt. In the meantime, the most urgent duty is to insist that the medical man must approach with the utmost caution the proposal to acquire a cyclecar. Happily this year many machines have been very considerably improved as the result of twelve months' more experience by the manufacturers, including many months in the hands of the public.

WHAT THE PURCHASER SHOULD SEEK.

The cyclecar starts with many advantages from the manufacturing point of view. In the first place, it must be standardized to the last detail; therefore, if the design and materials are right, the producer has every opportunity of giving the best value for money, because the public demanding this particular type of vehicle will accept standardization down to the colour schemes, just as it will when buying a bicycle. Cyclecars are practically all marketed with lamps and every form of equipment that is an essential before the machine can be taken on the road. While very appreciable improvement is observable in many directions in the matter of detail—improvement as the result of a year's development—the reason that greater progress has not been made is that manufacturers have gone in quest of the wrong form of competition, aiming at shining at hill-climbing for a given engine size, doing extraordinarily economical fuel consumptions, very fast speeds along the flat and so forth. Now the cyclecar starts as so light a machine that it really matters practically nothing at the moment if it is comparatively extravagant of fuel. It is so light, too, that at present it does not matter particularly whether it is exceptionally or only ordinarily efficient as a hill-climber as judged by the time factor. But it is essential to the medical man to know that, whether he wants to go uphill or downhill, or along the level, and though other folk on other machines may pass him on any of those occasions, that his vehicle will get him there every time without mechanical failure *en route*.

HOW CYCLECARS HAVE BEEN IMPROVED.

Perhaps the first improvement one notices as a general rule in cyclecar development this year is that water cooling of engines is on the increase; this should considerably enhance performances under the heading of reliability by preventing overheating troubles, which have been of comparatively frequent occurrence during the past season. There has likewise been a great increase in the exploitation of four-cylinder engines, which means that the power is furnished with a very much more even turning movement than with a two-cylinder

type, ensuring a saving of mechanical wear and tear, including tyre bills, as well as a gain in luxury of performance. The vertical engine is, of course, practically universal in the case of four-cylinder machines. It is almost extraordinary to observe the extent to which motor car development is being reproduced in cyclecar design, as, for example, in the furnishing of particularly flexible joints between clutch and gearbox to isolate those details of the mechanism from the effects of frame flexion. Reliability, too, is being ensured by furnishing wider teeth and more ample bearing surfaces in the gearboxes, so that in the main there is some tendency for the weight of the cyclecar to be increased. But when it has its cause in such developments as these, it is to be praised. When a four-cylinder engine is employed, there has occasionally been some increase in power, while many of the two-cylinder machines have been made more powerful, for hitherto they have not been quite up to their work. In such cases as the Humber, in which the water-cooled two-cylinder model is now available by reason of such cooling, it is possible to increase the compression employed, and therefore to get more power out of the machine.

GEAR VERSUS FRICTION POWER TRANSMISSION.

This question of not overtaxing the motors is further studied by furnishing gears that are lower than those formerly employed. It is a particularly praiseworthy development in face of the fact that, while theoretically the four-speed gearbox is desirable, the dictates of the price factor determine that it cannot be employed, therefore machines must be produced which will work with three-speed gearboxes without overstraining. It will be found in general that the cyclecars of 1914 will climb hills in an easier fashion than those of last season. The friction type of drive is not employed in many machines. The cone method is not employed as much as the principle wherein discs are set at right angles to one another. The Continental makers are rather more keen on the friction drive than are the British manufacturers. There is a more pronounced tendency to fit detachable wheels as standard, chiefly of the pressed steel type. Tapered bonnets are on the increase, and bodywork has been improved in two directions—by allowing more width and leg room, and by employing more solid structures to obviate the development of rattling.

FORMATION OF A CENTRAL ASSOCIATION FOR THE CARE OF THE MENTALLY DEFECTIVE.

It was inevitable that in the controversies raised by the Mental Deficiency Act when it was still before Parliament attention should be mainly focussed on the constitution and duties of the new authorities it was proposed to set up, and on the new powers over certain individuals that it was proposed to confer on them.

Now that those controversies have been settled by the passage of the bill into law and there has been leisure to survey the whole field of work in regard to the defective, in order to see how best to carry into practical effect the benefits sought to be conferred by the Act on this unfortunate class of individuals, the matter comes to be seen from a fresh standpoint and in a different perspective.

First, it has to be admitted that the provision of institution accommodation must necessarily be gradual, and that unless the problem be approached cautiously at first there is danger of waste and extravagance. In the next place, it is apparent that the Government grant of £150,000, together with a like sum from local sources, will not go very far in providing institutional care.

Moreover it is realized more clearly now that the compulsory modes of dealing with defectives apply to only a limited proportion of the total number, and that the duties imposed upon the local authorities do not by any means extend to the whole class of defectives. There will remain a large number of such persons who are neither in homes or institutions nor placed under guardianship for whom there will be no provision except through the continuance and multiplication of such voluntary agencies as have in the past befriended the children who have passed through the