perfect result and £2,500 compensation. Many years ago I copied Mr Gissane's ideas on industrial rehabilitation, and one of our appliances is a small milling machine which is operated by a below-knee stump. For example a patient can operate the machine eleven days after amputation with his stitches still in and his bandage in place. When he tries to operate his machine the stump is straightened and he gets perhaps 2,000 quadriceps contractions a day.

AFTERCARE AND REHABILITATION

R. F. L. Logan, M.D., M.R.C.P., D.I.H., C.P.H.
(*Reader in Social Medicine, Manchester University*)

The title of this paper is " Rehabilitation and Aftercare "; there is not a word about resettlement, not a word about adjustment to chronic handicap, the putting up with the handicap or the adjustment of the person's ego to it and of the family to a diminished wage. Also it is spelt with a capital " R " so let us have a definition. Can I borrow one from Browning? " Rehabilitation is the process of returning a man, woman or child to a normal healthy position in the social structure after they have been dislodged from it for one reason or another ". The other side of the coin is the dehabilitation which is the signing off work, the signing on to the sick fund; this could be defined as the process of dislodgement from a normal healthy position in the social structure. This can be related to divorce, separation, illegitimacy, chronic unemployment, leaving school, National Service, and changing jobs. But for our purpose, it is leaving the job when the person is signed off sick. We are then essentially dealing with a social process of taking the individual out of a setting he has been used to, taking him off his tram lines, when we sign him off sick. We are de-socializing him, because today, in a complex industrial technological society like Birmingham, about the only root the man has is his job, his little group of workmates. This is the place he has most contact with. In the old days

he had village life, he was stable, his roots were there, he knew where he fitted in to the social structure, and on Sunday morning he had the Church. But these days he often only has his work-place. By work-place I do not mean Austin's 10,000 people, I mean the tiny little corner of it where he works with the chaps, and drinks his tea with maybe a dozen people. Once we take him away from that he has become uprooted; that is the process of dehabilitation, and really that is what we are dealing with. In terms of the whole spectrum of medical care, from symptomatic diagnosis right through to internment, rehabilitation is inclined to be looked at as a phase of this, often done in a special place, and it is for that reason we are dealing with it separately today. But when we look at the processes involved in this part of medical care, they show three aspects. There is the man in his plaster, exercising on his job with his 2,000 movements a day. There is the mental side; he is dealing with his handicap, earning the same money on the job. And there is the social side; the patient may be with his father or he may be isolated in some occupational therapy base doing an abnormal and unusual and invaliding kind of a job that is an insult to his masculinity. So we have these three aspects of it, these three kinds of therapy in rehabilitation, and we are also inclined to have it phased at a certain time. As in most of medicine today, which is fragmented and specialized, the crying need is to bring these aspects together. To do that is often impossible for one man; he is not paid for it, or he does not have all of these skills. The only answer can be team work; if you do have a team of skills, dealing with different phases of medical care, the next crying need is a link-up between them. That link-up should be as personal as possible, preferably face to face if not voice to voice, and ideally with the doctors involved in the different phases and the different skills having a case conference. Case conference is a foreign term in Britain. We are a long way off that; we are so far off it that most general practitioners do not know what D.R.O. stands for. A fair number of casualty officers do not know either, and a fair number of consultants, for this was one of the questions we asked in the Nuffield Survey! He was often mistaken for the D.A.O. So indeed in 1960 this is what we are faced with in Britain. We have the blueprints of the service, we have the Pearcy Report five years old, and we have no communication.

The loss of work through injuries among working people, not the self-employed, is thirteen million days per year, and these injuries rank fourth among causes of industrial incapacity for work. So that is the size of it! When we take the figures by individual, the percentage of the working population at risk experiencing an accident in twelve months for all ages for males is over four, that is, more than one in twenty. Let us throw in some other figures. Rheuma-

tism is the second major cause for industrial absenteeism, and the major factor in its mixed aetiology is multiple small traumata, if not large traumata. Look at the work done on coal miners' backs, the size of the x-ray service for coal miners' backs, the x-ray service of a normal population with rheumatism, the incidence of what we call fibrositis. Let us look at some other things to get the size of this picture. The elderly are large consumers of hospital beds, large consumers of all aspects of medical care, but we know that the hope here is rehabilitation. The elderly, so far not mentioned this week-end, may be in fact the segment of the population with the greatest need for rehabilitation.

Follow-up studies are going on of what happens to inpatients, Scotland again taking the lead in this. These show that working men over 40 with fractured tibias and fibulas or fractured pelves are in fact becoming crocks.

What do we know of general practice? Well, quoting our own bad figures in Darbishire House, when we did examine a cross-section of our middle-aged, unskilled working men in Manchester, we found crocks, unemployed, unemployables, because they had been desocialized for five or ten years or more, and often we had desocialized them. A third of them were impossible to rehabilitate. We were at least ten years too late. These men had gone through the machinery of signing off sick, their sickness diagnosis coming up and the code number from the Ministry of Health, the Regional Medical Officer sending out his green slip, the man being brought up for that being sent back again, going through that process innumerable times, sometimes going off and seeing the D.R.O. if he was lucky, or being sent to a resettlement clinic which we do not have in Manchester. It is because of this, because we saw what the D.R.O. could do, because we saw that he had been wrongly focused within the Health Service structure, that we brought him right into our general practitioners' surgeries. And so out of these dismal figures of our own we were forced to find and to use probably what is our best social caseworker, a part-time, interim, adopted clerk from the Ministry of Labour.

Why should we be so far behind in this in medical schools? Why should we have to have a subject like this discussed this morning, particularly when medical and surgical sciences have advanced faster in the last two decades than in the whole of the previous century? It is probably for these very reasons that the psychological and social aspects of patient management have missed out or lagged behind. After all, is it not hard enough for most of us in our middle age keeping up with or even glancing at the journals and trying to think

about new techniques, trying to learn a little of biochemistry or electrolytes? We have enough intellectual problems of our own here. Anyway, the patient passes on to a different phase, we have got enough to cope with our own phase; if we do not follow up it is the other chap's business, so the patient disappears out of sight, out of mind, into limbo. There are very good reasons or very good excuses that we can make. And in addition we have the hangover of the days of unemployment, and workman's compensation. We play safe, signing men off sick and so creating iatrogenic disease. We play safe for the major accidents happening today, as we play safe for the major killer of middle-aged men, accidents to the heart, in which we are learning the risk of having cardiac cripples from neurosis rather than from lack of heart output. This may be a bit academic, I suppose, but I think we have got to ask ourselves " Why should we be sitting here trying to talk about it? " I suggest that it is because we can do things now to patients, at least to prolong life, whereas in the old days, as Pickering says " The only difference between a good doctor and a bad doctor was his placebo effect ". Nowadays we can do more than that, but it is because of these advances in clinical science in keeping people alive. There are not as many people dying today on the roads as there were in the early thirties. There are not as many dying on the roads—because we did not have blood transfusion and modern surgery and anaesthetics in those days. Nowadays we keep them alive with their handicaps. Having achieved that success we have not yet had time to look at the follow-up to see how many of these people are back at work or dealing with their handicap, coping in the family, rather than being crocks sitting by the fireside in days of full employment, so called " unemployables ". With a National Health Service such as we have with rigid divisions in it, in contrast to some other countries, the general practitioner is the one man who can pull these things together. The patient is registered with him; he is paid his capitation fee, this is his responsibility. That is from the aspect of providing medical care to a community through a Health Service such as we have. As the patient passes from one phase of care to the next, the general practitioner is the one thread running through this.

What can the general practitioner do? I would suggest very mundane, very simple things. This is what we are trying to teach our medical students in Manchester. Before he signs the sickness note, he pauses with his pen, realizing that the significance of this is the same as pausing with the scalpel. He realizes too, like the geriatrician, that a patient in a geriatric ward must have a written direction from the nurse to lie in bed, otherwise he must be up and about. So he can prescribe social therapy. The D.R.O. is probably his best social caseworker. He is on the telephone in every village. In days of full

employment the man who turns up at the factory gate warm and breathing can be employed, provided that his care has been not only physical, but also social and psychological.

DISCUSSION

F. V. A. Bosc, M.B., CH.B. (*Birmingham*): I have had some experience of the casualty problem from both angles. Before entering general practice I had purely surgical appointments at fifteen hospitals, mostly in Lancashire, in nine of which I did or shared casualty work. I have now been in general practice nine years, and have 3,000 patients. When I compare my accident statistics with those of the recent *National Morbidity Survey*, I find that my figures per thousand patients are quite representative of the national average. For every 1,000 patients at risk I see in a year 100 accidents, of which six come into the general category of major accidents, namely dislocations, fractures of long bones, head injuries, and burns. Thus I have 18 of these cases a year. About eight of these are head injuries, mostly mild concussions, discharged from hospital within 48 hours; only one or two are major fractures or dislocations and some six or seven are burns, mostly minor. The point I am getting at is that of these 18 practically all are back at work in a short time without residual disability, and that only one or two require rehabilitation services. This is the average situation in general practice but it must vary considerably, and we wish to hear those of you in general practice who deal with more than this average and have special problems, those who work in dock or mining areas, and those confronted with the road accident problem literally on their own front doorstep.

In general, the industrially injured are adequately catered for. Those whose rehabilitation is neglected are those outside industry, those self-employed or working for small firms, housewives, and the