

forms of abbreviation, was begun in pencil in the compartment of a railway train.

Mr. Strachey pays tribute in his general preface to his collaborator, Miss Anna Freud, who has read and criticized the whole of the translation, and his assistants, Mrs. Alix Strachey, Dr. Alan Tyson, and Miss Angela Richards. It is remarkable that a work of this magnitude—it runs to rather over two million words—could have been completed with so small a team of helpers, none of whom were able to give their full-time assistance. The lack of an “established academic machine,” modestly deplored by Mr. Strachey, has led to an unusual consistency of style and editorial treatment. Every separate work has been provided with an introduction, varying from a brief note to an essay of several pages, according to its importance. Moreover, cross-references are given to other occasions on which a particular topic was considered by Freud. There are full historical and bibliographical details, and each volume has an index. Previous translations, where they exist, have been extensively “remodelled,” and for many a completely new draft has been prepared. The inclusion of numerous untranslated and hitherto unpublished works makes this edition not only the first complete version in English of Freud’s psychological writings but the most accurate and comprehensive edition in any language. Plans are now in hand for the production of a German edition in which Mr. Strachey’s textual revisions and editorial commentaries will be incorporated, while the English edition is to be concluded by a final volume (Volume XXIV) containing a bibliography and index to the entire series.

Nobel Prize

The 1966 Nobel prize for physiology or medicine is to be divided between Professor F. Peyton Rous, of the Rockefeller Institute in New York, and Professor Charles B. Huggins, of the Ben May Laboratory in Chicago. Though both men have made major discoveries in the field of cancer research they have worked independently. The importance of their findings has become increasingly apparent in recent years.

Rous, who is now 87 years old, made the momentous discovery in 1910 that a malignant tumour of fowl could be transmitted by a cell-free filtrate. For many years the Rous sarcoma remained the only example of a tumour induced by a virus, but in the last 15 years many malignant conditions in animals have been shown to be infective, and the suspicion that Burkitt’s lymphoma in man and some forms of leukaemia may be transmitted by viruses is sufficiently strong to have started thorough research into this question. The citation from Sweden states, “The significance of his initial discovery in 1910 has been enhanced with every passing year since the isolation of leukaemia virus in mice in 1951.”

During the first world war Rous turned his interest to blood transfusion, and perfected a method of storing human blood. He continued to work in the field of haematology after the war. Rous has been honoured by his colleagues in all parts of the world. In Britain he was awarded the Walker prize of the Royal College of Surgeons in 1941; he is a Foreign Member of the Royal Society, an Honorary Fellow of the Royal Society of Medicine, and a Foreign Corresponding Member of the B.M.A.

Huggins, who is 66, was also awarded the Walker prize, which is given for the best work in cancer research in the

preceding five years. In 1941 he reported with his colleagues a series of patients with carcinoma of the prostate who had been treated either by castration or by the administration of oestrogen, or by both methods combined. The results were unexpectedly favourable even when extensive bony metastases were present. The success of this treatment was so striking that very soon it was adopted by surgeons in all parts of the world. Incidentally, it is worth noting that it was the discovery of stilboestrol by E. C. (now Sir Charles) Dodds and colleagues in 1938 that initially made an oestrogenic substance available in sufficient quantity for widespread therapeutic use. Huggins’s work not only paved the way for the treatment of prostatic cancer but also stimulated research into hormone dependence in many other types of tumour, and particularly carcinoma of the breast. His bold research techniques have lately led to a method of rapidly producing leukaemia in rats, which may prove helpful in the study of this baffling disease in man.

Asthma in Childhood and Later

Asthma in childhood varies greatly in severity. While some affected children may have attacks of wheezing only occasionally, with apparently normal health between times, others have persistent dyspnoea, cough, and repeated crises of ventilatory insufficiency. Another variant is the asthmatic child who presents to the physician with effort dyspnoea and little or no history of recurrent wheezing.

While the diagnosis of asthma usually presents little difficulty, except in the rare cases when the attacks of wheezing are not very evident, the assessment of severity is a real problem. Indications such as the amount of schooling lost and the child’s failure to gain weight are not specific and are difficult to evaluate. Radiology of the lungs is helpful chiefly in excluding other diseases. But simple measurements of lung function do help in assessing severity if they are performed serially. The test of Forced Expiratory Volume in one second (F.E.V.₁) measures the maximum rate at which air can be shifted out of the lungs—namely, it is a measure of the maximal capacity of the lungs considered as an air pump. It gives essentially the same information as the Maximum Breathing Capacity (M.B.C.) test, which is the maximum volume of air expelled from the lungs in one minute of hyperventilation. In any disease, such as asthma or emphysema, in which the bellows function of the lungs is impaired, the F.E.V.₁ and M.B.C. are abnormally reduced.¹ In children with asthma a single measurement of F.E.V.₁ will give an indication only of the ventilatory state at that time, but repeated measurements over a prolonged period will provide a good indication of severity.² In normal children the F.E.V.₁ increases with the cube of the child’s height, and normal standards should be referred to height rather than age or weight.³

In the *B.M.J.* this week Dr. R. S. Jones describes (p. 972) a useful extension of the F.E.V.₁ test. This author has previously shown that exercise causes a decrease in F.E.V.₁ in asthmatics,⁴ and it is well known that inhalation of isoprenaline causes the F.E.V.₁ to rise in these patients. By

¹ Thompson, W. B., and Jones, P. H., *Brit. med. J.*, 1958, 1, 1093.

² Strang, L. B., *Arch. Dis. Childh.*, 1960, 35, 22.

³ ———, *Thorax*, 1959, 14, 305.

⁴ Jones, R. S., Buston, M. H., and Wharton, M. J., *Brit. J. Dis. Chest*,

1962, 56, 78.

⁵ Ryssing, E., *Acta paediat. (Uppsala)*, 1959, 48, 255.

combining the effects of exercise and isoprenaline he has derived an index of lability which gives an indication of how much the airways resistance, and probably the calibre of the bronchi, are likely to vary from time to time in an individual patient. On the basis of lability index he divides his patients into three groups: those with slightly reduced resting F.E.V.₁ and a slightly increased lability; those with a slightly reduced resting F.E.V.₁ but a greatly raised lability; and those with a much reduced resting F.E.V.₁ and very variable amount of lability. The full clinical significance of this grouping has yet to be worked out in practice, but it certainly serves a useful purpose in drawing attention to the great differences between different asthmatic children. Perhaps the greatest usefulness of the lability index will come in assessing the likely response to treatment and in detecting the chronic asthmatic.

An ever-present problem in the management of asthma in childhood lies in prognosis. Most patients experience a great improvement at puberty, perhaps related to their pubertal growth spurt. But in some children the asthma persists, and in others it recurs after a variable latent period which may last for many years.⁵ How can the physician predict which patients are likely to recover completely at puberty and which are liable to relapse? How many adult patients with bronchitis and chronic respiratory insufficiency are former childhood asthmatics who have experienced a latent phase?

The answer to these questions must come from the study of the latent phase in asthma. Drs. R. H. Trefor Jones and R. S. Jones describe (at p. 976 this week) a finding which may be very useful in detecting which asthmatics remain susceptible to further trouble, although symptom-free at the time. Apparently a fall in F.E.V.₁, sometimes rather large, takes place on exercise in adults with a history of childhood asthma. It remains to be seen how much prognostic significance should be attached to this finding. At the very least a means has been found of detecting an abnormality during this latent phase of asthma. Perhaps factors other than exercise will now be found which affect ventilatory function in a similar way during this phase. Study of these factors may begin to tell us why the remission does not always last, and how to prevent relapse.

The discovery that the bronchi remain abnormally susceptible, like the persistence of eosinophilia during remissions, reinforces the impression derived from the strong family pattern of the disease that asthma is primarily an inborn defect, the expression of which at any one time depends on environmental and psychological circumstances.

Unemployment and Suicide

To lose his job is one of the greatest blows that can befall a man. Many are likely to have this experience as a result of the measures which the Government considers necessary for the country's economic salvation. Is our country adequately prepared to minimize the harm that these actions taken for its collective well-being may do to the individual?

Though obvious difficulties surround any attempt to measure the effect on a person's health of prospective or actual

unemployment, a long-term study of this kind has been started in the U.S.A. and is the subject of a recent report¹ that goes no further so far than describing the methodology. The persons being studied are male factory workers in Michigan who are married and have at least three years' seniority. The main cause of their unemployment appears to be the introduction of automation into the factories. Clearly this must have a bearing on the British scene, for automation is coming here just as it already has, to a more advanced degree, in the U.S.A. Consequently the results of this study will be awaited with great interest.

That unemployment may be an important cause of suicide was a conclusion W. Norwood East² reached after studying some statistics for the years 1903–12 in England and Wales. The statistics for unemployment were at that time very incomplete. Better figures became available later, and D. Swinscow³ used these to show a remarkably close relationship from 1923 to 1947 between numbers of suicides and numbers of unemployed among the male population of Great Britain. The correlation ratio in fact was +0.93. He concluded that "unemployment among men, or the society of which it is a feature, probably influences the suicide rate among men considerably." The corresponding statistical relationship was much less close for females. A study of suicide in London by P. Sainsbury⁴ showed a higher rate among unemployed than employed people, and the case reports suggested that loss or lack of employment predisposed to suicide. The author also considered that "both suicide and unemployment are separate consequences of a common cause—a general social disturbance."

The causes of suicide in a multifarious society like ours are certainly highly diverse, and in a single individual may be complex,⁵ so that unemployment in itself when present as part of the cause may be acting very indirectly. It is also possible that mentally infirm people are more apt to lose their jobs in times of social upheaval than their more stable brethren. In any case the coming months will impose strains on individual patients that medical men may be able to detect and mitigate.

Chicken-pox Pneumonia

Though chicken-pox is usually a benign disease, its lesions in some viscera can occasionally cause serious trouble.¹ A. F. Knyvett² has recently given a report on pulmonary lesions. The liver, adrenal glands, and spleen may all be attacked, and in 1940 H. N. Johnson³ gave a detailed necropsy report of disseminated chicken-pox. In 1942 J. J. Waring and his colleagues⁴ gave the first report of lesions in the lung, and by 1963 upwards of 120 cases of chicken-pox pneumonia had been reported. J. B. Mackay and P. Cairney⁵ have reported nodular pulmonary calcifications thought to be due to chicken-pox suffered in earlier adult life, and E. W. Abrahams and his colleagues⁶ have described calcification developing seven years after primary chicken-pox pneumonia.

In primary chicken-pox pneumonia the condition of the patient (who is more often adult than child) may after several uneventful days deteriorate. Pleuritic pain, cough, and

¹ Cobb, S., Brooks, G. W., Kasl, S. V., and Connelly, W. E., *Amer. J. publ. Hlth.*, 1966, **56**, 1476.

² East, W. N., *J. ment. Sci.*, 1913, **59**, 528.

³ Swinscow, D., *Brit. med. J.*, 1951, **1**, 1417.

⁴ Sainsbury, P., *Suicide in London*, 1955, Maudsley Monograph No. 1. London.

⁵ Stengel, E., and Cook, N. G., *Attempted Suicide*, 1958, Maudsley Monograph No. 4. London.

¹ *Brit. med. J.*, 1965, **2**, 954.

² Knyvett, A. F., *Quart. J. Med.*, 1966, **35**, 313.

³ Johnson, H. N., *Arch. Path.*, 1940, **30**, 292.

⁴ Waring, J. J., Neuburger, K., and Geever, E. F., *Arch. intern. Med.*, 1942, **69**, 384.

⁵ Mackay, J. B., and Cairney, P., *N.Z. med. J.*, 1960, **59**, 453.

⁶ Abrahams, E. W., Evans, C., Knyvett, A. F., and Stringer, R. E., *Med. J. Aust.*, 1964, **2**, 781.