

Book Reviews

Medicine and Science in the 1860s, ed. by F. N. L. POYNTER, London, Wellcome Institute of the History of Medicine, 1968, pp. xiii, 324, 45s.

The 1860s were an important turning-point in medicine and it was an excellent plan to discuss in detail some of the developments of that decade which made so much impact upon future thought. The very first essay, that of K. D. Keele on *Clinical Medicine in the 1860s*, gives us a first-class statement of the fundamentals then being recognized, upon which so much of present practice is based. As Dr. Keele points out, the medicine practised before the mid-century is almost incomprehensible now: it was only with the development of microscopy, pathology and clinical examination that the principles of present-day medicine were established.

Basic to the theme is Virchow's recognition of the cell as the unit both of the physiological and the pathological process, and in the long run no idea of greater importance appeared in medicine in the whole century. *Cellular Pathology . . .* by Professor McMenemey, is a lively review of this subject. Men like Bowman, Müller, Henle and Schwann had laid a wide histological basis: nevertheless, the idea of cellular pathological change, as distinct from aberrant development *de novo*, caused much discussion. Even Schwann toyed with the theory that the 'elementary cells of tissues originated in an amorphous *blastema*' or nutritive fluid, though he also claimed that all animal and vegetable tissues were composed of cells and that cells could develop out of cells. But Virchow was in no doubt and he wrote 'the question is whether the general types which we have established for the physiological tissues will also be found to hold good in the case of the pathological ones. To this I unreservedly reply, yes.'¹

Such arguments were of immense importance in the germ theory battles which were to follow later in the decade. J. K. Crellin in *The Dawn of the Germ Theory* shows, for instance, that Herbert Spencer's 'physiological units', and Darwin's 'gemmules' (on which he built his *pangenesis* theory), though in advance of their time, prepared the way for Pasteur and Koch, and probably have a modern relevance. Darwin had postulated that his gemmules were formed from protoplasm, and perhaps the interest in protoplasm indicates one profound change between his era and the present. In the thirties your reviewer was taught by those still under the influence of Lionel Beale and Huxley. The latter had called protoplasm 'the physical basis of life' in a paper of that title in 1868, but it has, of course, long been superseded now that we are under the influence of the molecular biochemists. By the 1870s, however, there was a realization that theorizing was insufficient to prove or to disprove either spontaneous generation or the germ theory; only the biological study of organisms would do this.

In an interesting paper entitled *The Impact of Darwin's Origin of Species on Medicine and Biology*, Dr. Bernard Towers shows how we are only just beginning to come to terms with 'Darwinism'. The popular idea of the *Origin of Species* was based upon its title, and upon the inability of many scientists to go further. Of medical men, only a few such as W. B. Carpenter and Henry Holland, fashionable physician though he was, were able to interpret the theory to the profession. Holland told Darwin that he thought it 'very tough', but that sooner or later some view akin to it would be

¹ Virchow, R., *Cellular Pathology . . .* trans. from 2nd ed, by F. Chance, London, 1860, p. 60.

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accepted. This was Darwin's own view, and as Towers remarks, perhaps acceptance is round the corner now, a century later, when 'pangensis' may be vindicated by the molecular biologists.

These more general essays set out with some clarity the overall picture of the philosophical and scientific scene as it applied to medicine. The subsequent papers refer in more detail to individual aspects of medical development of which *Medical Mycology 1841-1870* by F. M. Keddie surveys an unusual field; a series on public and state medicine shows how the national conscience was awakening; a paper on *The Dental Profession* by N. D. Richards explains the complicated story by which the dentists began to achieve recognition and a final essay by E. Gaskell on *Medical Literature* rounds off the volume with a most useful survey.

All the essays are fully documented and the volume should be studied closely by all who wish to discover more about the basis on which modern medicine stands, whether he be clinician or medical historian.

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Traditional Medicine in Modern China, by RALPH C. CROZIER, Cambridge, Mass., Harvard University Press, London, Oxford University Press, 1968, pp. xvi, 326, 57s.

In recent years there has been a growing interest among historians in the history of Chinese medicine. But little attention has been devoted so far to what might be called the *intellectual setting*. A theoretical system preserved for so many centuries in a country as populous as China was naturally accompanied by a mass of folklore and legend (cf. *Chinese Medicine: Catalogue of an exhibition illustrating the traditional medicine of China*, The Wellcome Historical Medical Museum and Library, 1966, 35 pp. with plates).

Since everything is made from the *yin* and the *yang* (acupuncture is a procedure to restore the balance), the order can be seen through the universe. The human body was thus a universe in miniature and we have the stereotype of changeless China. But the traditional medical system of China suggests infinite complexities and striking contrasts. Those who are close to Chinese studies are now fully aware of the Chinese contribution to medicine. If we want to understand the doctors of the Far East it will not be enough simply to speak like them (though that would indeed be something) we must also try to reason like them. Disease could be caused by a disharmony between the world and a patient. Chinese arguers since the earliest times have not managed to create a system, like the system of Western logic. But they proposed a concrete dialectic and a course of action. In a medical team the reasoning will often be very brief. So psychotherapy holds more importance in popular medicine than tranquillizers. The physician is constantly confronted with the problem of prescribing new drugs or therapeutics.

The task of writing a historical survey of this contribution is not an easy one. This consideration will persuade the readers of *Traditional Medicine in Modern China (Science, Nationalism, and the Tensions of Cultural Change)* to excuse the author, Mr. Ralph C. Crozier, from any bold attempts and omissions. Mr. Crozier made research into 'very heterogeneous materials', the best and the worst, which partly explain his motives and plan: