

### Book Reviews

Bartholin and Rudbeck. During the eighteenth century the humours and qualities of Galenic theory were gradually replaced by physico-chemical conceptions. In the nineteenth century the rise of the cell theory was reflected in hepatology by Purkinje and Henle's description of liver cell structure and crowned by Claude Bernard's characterization of the liver cell as a chemical laboratory and centre of metabolism. After a brief eclipse of the importance of the liver—when it seemed no more than an excretory organ—it regained a position in the new physiology as important and central as that which it had once held in the old. In a curious way it even regained something of its old status as a centre of blood formation when Reichert and Koelliker described the formation of blood cells in the foetal liver.

Dr. Mani has enriched medical history with a fine and scholarly work. One hopes that his book will prove to be the first of a genre to include eventually (with the co-operation of other medical historians) all of the organs and tissues of the body. I have only some minor complaints to make. In view of the importance rightly accorded to Galen it seems a pity that he is dismissed in somewhat less than two thousand words. While it is true that some aspects of Galen's hepatology were touched on in Dr. Mani's earlier monograph, cited above, in neither work are the foundations of Galen's physiology adequately presented. Secondly, the text has been overly subdivided into a plethora of numbered and lettered sections and subsections. Many paragraphs consist of only one or two sentences and sometimes resemble notebook entries rather than a fully worked up text. This gives rise to an excess of white paper on the printed page. Together with the jerkiness of style the effect, unfortunately, is to interfere somewhat with the reader's pleasure.

L. J. RATHER

*The University of Wisconsin Medical School: A Chronicle, 1848–1948*, by PAUL F. CLARK, Madison, University of Wisconsin Press, 1967, pp. xvi, 269, illus., \$10.00.

In 1848 Wisconsin was admitted as the thirtieth State of the Union, only ten years after its first beginnings, and the University of Wisconsin was constituted (on paper) on the same day. It was to have four departments, the third that of Medicine. Not until 1887 was a start made, with a special science course, antecedent to the study of medicine. It was not until 1904 that Charles R. Van Hise, who had just been made President of the University, appointed Charles R. Bardeen as Professor of Anatomy. The two between them became the determined founders of the Medical School. They started with a two-year preparatory science course, against the opposition of the College of Physicians and Surgeons in Milwaukee (who thought, correctly, that there were too many medical schools in the States, and that many of them were very bad). Such was the drive of the two men, and their skill in selecting staff, that the preliminary school was a great success. Then outbreaks of typhoid and diphtheria among the students led to the appointment of an outstanding physician, Dr. Joseph S. Evans, to run a Student Health Service (1910), which developed, through the Student Clinic, into a Department of Medicine with an enlarged staff, including that great man, Dr. William S. Middleton (1912).

The Medical School took the opportunity of the first world war to do important research work on war-gases, and although President Van Hise died soon after the

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Armistice, he had been advocating 'nothing less than the world's greatest university' to the end, and Professor Birge, who succeeded him, set his sights equally high. Dr. Evans managed to persuade the Governors to induce the State Legislature to devote a million dollars of the Soldiers' Bonus (the provision for the demobilised) to rebuild the Wisconsin General Hospital as a War Memorial. This skilfully made a complete medical course possible, and the opportunity was used by Bardeen and Evans, in spite of incredible opposition, to start proper medical education. Its success is largely to be attributed to Bardeen's vision of the value of direct clinical teaching in doctors' practices, and close contact between first-class physicians and pupils which had been the best feature of the old apprenticeship system. This was developed, as the Wisconsin Preceptorial Plan, into a system which has underlain thirty-seven years of outstanding success.

The story of the astonishingly rapid rise of the School is well told. It seems extraordinary, but there are well-known instances of other schools rising to surprising heights in a very short time. Bardeen's principle 'Don't buy big names, but choose young men of promise' is usually the reason. Dr. Clark's descriptions of the widely differing personalities of Bardeen, Evans and Middleton, the three men who made the School, are most interesting. The School achieved its greatest stroke of fortune in having Dr. Middleton as Professor of Medicine and Dean in the 1930s, just at the time when the pace of change started to increase rapidly; he was just the man to seize the opportunity of a radical revolution in medical practice and to carry the School on to, and with, the crest of the wave. It was also from that moment that the Wisconsin General Hospital changed from a steady state of, to a logarithmic increase in, activity.

It is always an interesting, indeed an exciting and significant experience, to read the complete story of a phenomenal rise to the highest rank, and of how such an achievement was brought about.

CHARLES NEWMAN

*Drugs and Pharmacy in Prints*, by WILLIAM H. HELFAND (Catalogue of an Exhibition of Prints and Drawings from the Collection of William H. Helfand on the occasion of Canada's Centennial, Toronto, 1967), West Point, Penna., Merck Sharp & Dohme, 1967, pp. 53, illus., no price stated.

The one hundred and twenty prints and drawings listed in this Catalogue range widely from those emphasizing the tremendous public impact of Morison's vegetable pills to trade cards, political satires and a Michael Ciry lithograph from Flaubert's *Madame Bovary*. This pleasantly produced booklet with its many judicious annotations performs a valuable service in underlining the role which illustrations have as a research tool as well as helping to 'bring to life' single events. Helfand's collection of medical/pharmaceutical illustrations is one of the largest in private hands and he has further enhanced its research potential by formulating a punched-card system for listing details of each print (see 'A classification method for illustrative pharmaceutical material', *Pharm. Hist.*, 1968, 10, 3-11).

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