

sons who can supply further information regarding the applicant; and any other information that the applicant desires to submit.

2. For the institution desiring to fill a vacancy: title of vacant position; date to be filled; requirements as to teaching or other routine work and research; salary to be paid; prospect of tenure of office and advancement; and any other information that the institution desires to submit.

The service does not undertake to recommend or to pass judgment on applicants. It aims merely to serve as a clearing-house for such information as the foregoing and to bring into touch with one another candidates for positions and vacancies to be filled.

E. D. BROWN, Secretary.

University of Minnesota, Minneapolis.

THE PREHISTORY OF THE CADUCEUS

To the Editor:—In the discussion of the caduceus as a medical emblem (THE JOURNAL, April 26, p. 1243), your commentator states that "whoever recommended its use as a medical emblem in this country has either been conducted by Mercury, his titular deity, to join the souls of the dead in the world below, or is keeping unusually quiet." In regard to this pronouncement, I have made inquiry of Col. John Van R. Hoff, M. C., U. S. Army (ret.), until recently editor of the *Military Surgeon*, and largely responsible for the introduction of the caduceus as part of the insignia on the medical officer's uniform, and have learned from him that it was introduced in 1902 as a badge of neutrality, appropriate to the medical officer as a noncombatant. This point, emphasized in Colonel McCulloch's article in the *Military Surgeon*, is one which your correspondent has overlooked, namely, that "merchants on their trading expeditions, the success of which depended on peaceful negotiations, naturally carried their emblem, the wand of Mercury, and hence it became generally established as the badge of the nonfighting man." In itself, this was better symbolism than the Maltese cross with scalloped edges which appeared on the uniforms of our medical officers prior to 1902. The Romans had a special functionary, the *caduceator*, who was a sort of peace commissioner. Long before Churchill, the London medical publisher, had employed it (1844), the caduceus had been used on the title pages of books published by the famous medical printer Frobenius (1460-1527). It was, in fact, his personal device. As the caduceus took its place in medical heraldry about this time (crest of Sir William Butts), there must have been excellent reasons for using it as a medical symbol, known to the authorities of the period even if not yet discovered. But the caduceus as a mythological symbol goes much farther back than the culture of Hellas, as has been shown in Frothingham's important investigations (*Am. J. Archaeol.*, 1916), of which I propose to give an account in the *Military Surgeon* for June, 1919. If any one will examine the Babylonian caduceus (on a vase in the Louvre) in W. H. Ward's "Seal Cylinders of Western Asia" (1910, p. 129), he will see the starting point of Frothingham's investigation, which goes back to 3500-4000 B. C. For a number of reasons, principally as typifying the mysterious and changeable aspects of life itself, the serpent was always the symbol of medicine in antiquity. The Babylonian caduceus, which also occurs in ancient Hittite remains, stands for an actual serpent god, Ningishzida, who as the special messenger of Ishtar was the awakener of life in the springtime and the Mesopotamian prototype of the Greek Hermes. To the *Freudianer*, both snake and caduceus are libido symbols, i. e., in Jung's definition of the term, symbols of potential energy. To primitive man, the snake undoubtedly seemed the outward and visible sign of those potential energies which are summed up in the phrase, "making medicine." In other words, as Rivers has so admirably shown in his Fitzpatrick Lectures (*Lancet*, 1916), medicine, in prehistoric and primitive civilizations, was and is only one phase of a set of magic, mystic and ritualistic processes which express naught else than the savage's groping and grasping for power. Not to apprehend this is to overlook one of the fundamental postulates of medical folklore. In considering Greek mythology and medi-

cine, it is well to remember that each divinity of the Olympian Pantheon had both a celestial and an infernal (chthonian) aspect, and so could promote health or inflict disease at will. Thus, in Arcadia, Lemnos and Samothrace, Hermes, an ithyphallic deity, was worshipped as the god of fertility in crops, men and cattle (the very essence of "making medicine") and so had undoubted medical functions, if we mean by "medicine" here the power of the gods to inflict and abort disease, which summarizes pre-Hippocratic pathology. It is worth while to note that practically all that we know of Greek medicine in the pre-Hippocratic period has been investigated and developed, not by physicians or medical historians, but by experts in archeology and philology. These researches are little known to the medical profession, and are of comparatively recent date.

The following problems seem worthy of investigation by medical historians:

1. How did the caduceus come to be introduced as a medical symbol (Johann Froben, Sir William Butts) in the early sixteenth century?

2. How did the English medical publisher Churchill come to use it about 1844?

3. How did it come to be employed on the chevrons of hospital stewards of the U. S. Army in 1856?

4. How did the well known and current French periodical of military medicine come to be called *Le Caducée* in 1901?

F. H. GARRISON, M.D., Washington, D. C.

Lieutenant-Colonel, U. S. Army.

TREATMENT OF MALARIA

To the Editor:—Kindly allow me to direct your attention to a point in an editorial on malaria containing a statement which might lead to many failures in the treatment. In THE JOURNAL for Feb. 22, 1919, the paragraph beginning on the ninth line, page 572, is as follows:

When quinin is given continuously for three days, as just suggested, it should be stopped for about a week and then repeated.

The foregoing should read:

When quinin is given continuously for three days, as just suggested, it should be stopped for six days and then repeated.

It has been found that after the seventh day of interruption of the use of quinin, spore-bearing plasmodia were sometimes present in cases in which quinin had been given every two hours night and day for two or three full days; this shows that some of the spores which were latent have completed their full cycle, and are again ready to produce spores at the end of this time; consequently, in these cases malaria will not be cured, because some spores of this crop may again become latent and produce further spore-bearing plasmodia later, while if the quinin is given before they have reached the spore-bearing period, namely, before the eighth day, this does not occur. This fact we have demonstrated in many hundreds of cases. For this reason the time of interruption should be definitely stated as six days instead of about one week.

A. J. OCHSNER, M.D., Chicago.

HEALTH INSURANCE

To the Editor:—In THE JOURNAL, May 10, under "Medical News," New York, is an item, "Reconstruction Committee Favors Health Insurance." This committee is a political body appointed by Governor Smith who is the first governor of New York to advocate health insurance from the executive mansion. This reconstruction committee made up its findings after hearing leading "civic workers and insurance authorities." No mention, however, is made in this issue of THE JOURNAL of the fact that the Medical Society of the State of New York, a much more competent body, instructed its delegates to the American Medical Association Meeting in 1919, to oppose in every way the project for compulsory health insurance.

JOHN P. DAVIN, M.D., New York.