ical," he says; "fifty men are not necessarily a centipede because one man is a biped." This is trite, it is apropos; its brilliancy smacks of good sound literature. But the Cabot grade would have enclosed this centipede biped wit in quotation marks, for the expression is not Dr. Croftan's. It belongs to the English essayist, Gilbert K. Chesterton ("What's Wrong with the World," p. 2).

RAYMOND RUSS, M.D., San Francisco.

Work of the Full-Time Instructor

To the Editor:—When a standard is established in food or drug analysis, a method of approximation to the standard is also established. Thus, if a sanitary authority fixes a limit of 25 parts per million for sulphur dioxide in gelatin, it also sets forth in detail the process by which the ingredient is to be determined.

I make this prologue because I wish to call attention to the fact that while severe standards are now being required for medical colleges, no definite methods of ascertaining compliance therewith are being furnished, nor, as it seems to me, are some of the standards clearly defined.

Take, for example, the "full-time" instructors. What constitutes full time? Surely, it is not meant that the instructor is to spend all his, or her, waking hours in the teaching work. It is thought by many that research work should be performed by such teachers in the hours not actually occupied with students; but research work is not teaching, and students may not get direct benefit from the time that the instructor spends in the research laboratory. It is likely that many instructors will find research more attractive than the lecture-room, as to both immediate and prospective returns in fame and fortune, so that the student will be neglected.

Will full-time registry prevent the teacher from preparing text-books or contributing within or without his specialty to journals and encyclopedias, or serving without compensation on commissions of inquiry under national, state or municipal authority, along lines of his teaching work? Some years ago I was a member of a milk commission. The service was without compensation. The report has been pronounced one of the most important yet rendered in the matter, and the information that I obtained in the course of service on the commission was of much value to my students in the department of hygiene. The service was carried on without loss of an hour from the prescribed schedule of my work at the college. Would such a service interfere with full-time registry? What about vacation work? Medical schools in this country are not usually in session between the middle of June and the middle of September. Suppose a teacher should take up some work for compensation during this period, would the "full-time" condition be broken?

From conversations with teachers in medical schools, I have learned that some consider that the full-time requirement means that no time shall be given to routine medical practice, but that teaching in two institutions or accepting expert duty does not conflict. I have not so understood the condition, but it may be worth while for those who are promoting the system to inquire how far the several institutions are complying with the requirements. The history of reform in American medical education shows too many instances of colleges deliberately keeping the word of promise to the ear and breaking it to the hope to permit us to suppose that in this serious matter they will all be true without supervision.

HENRY LEFFMANN, M.D., Philadelphia.

[COMMENT.—The term "full-time instructors" as applied to medical colleges means exactly the same as if applied to a scientific school or a college of liberal arts. No one thinks of arguing that a teacher in our standard colleges of liberal arts should be permitted to engage in private business in all except the strictly class-room hours. So for medical colleges the object sought by the requirement is to secure teachers who are paid sufficient salaries so that their life-work and their chief interests may be devoted to the training of medical

students. The teaching of modern medicine, particularly in the laboratory branches, can no longer be satisfactorily done by busy practitioners or by others who can devote only fragments of their time to teaching, and who are required to look to other unrelated lines of work for their livelihood. As to research in the medical school, the expert teacher must of necessity be engaged in research if he is to keep up with the rapid developments of his subject and if he is to bring into the medical college the spirit of investigation with which every medical student should become imbued. If the teacher by his own research is fully up to date in his subject and has something worth while to add to the world's knowledge of that subject it would by no means detract from his usefulness as a teacher for him to use his spare moments in reporting such facts, or in writing a book on that subject. Unless he is an authority in his subject he would scarcely be in position to write a text-book. Again, expert duty along the lines of the subject taught might really add to an instructor's teaching ability. Vacation time also is the instructor's, to be used as he may see fit. No outside work, however, should be allowed to interfere with his first work as a medical teacher. The "full-time" teacher is one whose work is in the college; his private library is there; his research work is there; his interests are there; he can be readily found by the students to whom his work is a constant inspiration. Instead of the empty, lifeless laboratory of former times headed by the busy practitioner, the full-time teacher's laboratory is an active, orderly place—a constant and present example to those who are fortunate enough to become his pupils.—EDITOR.]

The Special Package Evil

To the Editor:—There is much food for thought in the editorial from the New York Sun (THE JOURNAL A. M. A., Oct. 5, 1912, p. 1307) warning the public against physicians who prescribe proprietaries, blaming these physicians for the all-too-prevalent tendency of the public toward self-medication, and lauding the old-fashioned prescription because it at least cannot easily be duplicated.

It is but too true that the prescribing of proprietaries fosters self-drugging. When a patient learns that the medicine prescribed is "ready-made" he shrewdly concludes that it was not made for his ailment in particular, but that it must fit a series of similar conditions. Hence, if it is found of value, he will hereafter use it for all symptoms similar to those which caused his physician to prescribe the proprietary. He also will find little difficulty in finding symptoms in the ailments of his friends which will warrant a recommendation to patronize his remedy.

But there is another objection to the prescribing of ready-to-take proprietaries. Even if the preparation is the best possible medicine that could be selected for the particular case, the very fact that it was ready-made is bound to lessen the patient's confidence in his physician—about as much as one would lose faith in a tailor caught in palming off a ready-made suit.

While the patient has a right to know what medicines he is taking, it is desirable for the reasons just given that physicians take pains to give their prescriptions a character of individuality, and to avoid whatever possible giving the appearance of prescribing ready-made medicines.

Physicians who would follow this advice should bear in mind that almost every proprietary article is put up in a distinctive package, and also that the druggist is most likely to dispense it in this package. As a result it is more than likely that the patient will find it out if a proprietary is prescribed, no matter whether it is Fellows' Syrup with the name blown in the glass or the very ethical and probably valuable atôphan with its neat little "star-bespangled" box, even if the physician takes pains to write special directions and the druggist removes the printed label and affixes his own. And it must be understood that the druggist has good reasons for dispensing the proprietary in its original container. In the first place, many physicians have acted on the manufacturer's assertion that druggists are prone to substitute, and therefore tell their patients the kind of con-

tainer in which their medicine should come, thus making it suicidal for the druggist to transfer the proprietary to a regular prescription box or bottle. The second reason is that the druggist must often use the peculiar style of container as a warrant for the high price that he must charge, for almost every proprietary is more expensive than 99 per cent. of the ordinary prescriptions of physicians.

It would be most instructive and also decidedly advantageous if physicians would make it an invariable rule to ascertain the style in which a proprietary remedy whose employment they contemplate is put up. They will then see what steps they must take in order that a prescription for such a proprietary remedy may not be the cause of its indiscriminate use, or subject them to the criticism of prescribing ready-made medicines.

W. C. WESCOTT, PH.G., M.D., Atlantic City, N. J.

Disinfection of Schoolrooms

To the Editor:—In your issue of Dec. 14, 1912, p. 2171, is a miscellaneous item dealing with a paper on the above subject read by me at the Fifteenth International Congress on Hygiene and Demography. The item in question, after outlining the suggestions contained in my paper, concludes: "THE JOURNAL is disposed to wonder as to the reception which would be given to this mode of disinfection. The continuous odor of phenol throughout the school building, which would perhaps be even carried home in the scholars' clothing, might arouse protest which would interfere with the carrying out of the plan."

May I respectfully point out that you have misunderstood my meaning in this connection? The paragraph in my paper to which the above quotation relates reads as follows:

"To avoid the objectionable odor inseparable from the use of certain disinfectants of low efficiency (necessitating proportionately low dilutions), I would advocate the use of one of the modern high-testing disinfectants in a dilution equivalent to 1 part pure carbolic acid [phenol] in 25 parts of water—say one with a Rideal-Walker coefficient of 20, the dilution of which, equivalent to 1:25 carbolic acid would be 1:500. Taking the cost of such a preparation at \$1.50 per gallon, a superficial area of 10,000 square feet could be disinfected daily for a week at a cost of approximately 40 cents."

I do not, as suggested in your note, recommend the spraying of schoolrooms with a 1:25 phenol solution. Such a course would be impracticable not only on the ground mentioned in THE JOURNAL, but also on that of expense. With the use of a preparation such as I have indicated, on the other hand, neither of these disabilities applies, as may be gathered from the fact that practical experiments in schoolroom disinfection with a bactericide of this nature are at present being officially carried out by the education authorities of New York, Boston, Philadelphia, Pittsburgh, Toledo and other cities.

In view of the weight attaching to any pronouncement in THE JOURNAL, I trust that you may be able to find space for the publication of this letter as the most effective means at my disposal of correcting a misconception which must constitute a serious obstacle to a much-needed reform.

J. T. AINSLIE WALKER, New York.

What Vital Statistics Should Be.—Vital statistics are, in short, not vital; they deal with death, not life, with the "finished product" only of our slack, slipshod methods. They ought to deal, not with the dead, but who they were, and why and how they died, and why they were not saved. Suppose the factory manager merely knew at the end of the year his total product! Suppose that even this piece of information related, not to the way business went last year, but to the way it went five years before! The modern scientific manager must know not just the total product, he must know also all about the product, the kind, the quality, the cost, and why it is not better for the price. The modern vital statistician must know not only the deaths, but why the health department is not stopping them; what its funds are; how they are spent or wasted; what work is being done; how much of value each division does; and all to one end of saving life.—Hill in *Journal-Lancet*.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

PROPORTION OF PHYSICIANS TO POPULATION

To the Editor:—Please give the latest figures showing the proportion of physicians to population in the various states.

WILLIAM Z. DAHL, M.D., Eagle, Colo.

ANSWER.—The following table is based on the population figures of the Census of 1910 and the number of physicians shown by the third edition of the American Medical Directory.

State	Population	Physicians	People to Each Physician
Alabama	2,138,093	2,418	884
Arizona	204,354	247	868
Arkansas	1,574,448	2,590	606
California	2,377,549	4,707	499
Colorado	799,024	1,772	451
Connecticut	1,114,756	1,504	713
Delaware	202,322	246	822
District of Columbia	331,069	1,850	245
Florida	752,619	974	773
Georgia	2,009,121	3,022	803
Idaho	325,594	420	775
Illinois	5,638,591	9,988	565
Indiana	2,700,876	4,984	542
Iowa	2,224,771	3,053	609
Kansas	1,690,949	2,688	625
Kentucky	2,289,905	3,601	636
Louisiana	1,656,388	1,930	858
Maine	742,371	1,176	631
Maryland	1,295,346	1,972	657
Massachusetts	3,306,416	5,648	593
Michigan	2,810,173	4,104	685
Minnesota	2,075,708	2,262	918
Mississippi	1,797,114	6,032	298
Missouri	3,293,335	6,037	546
Montana	376,053	512	734
Nebraska	1,192,214	1,796	664
Nevada	81,875	144	569
New Hampshire	430,572	704	612
New Jersey	2,537,167	2,884	880
New Mexico	327,301	430	761
New York	9,113,614	14,815	615
North Carolina	2,206,287	1,849	1,193
North Dakota	577,056	594	973
Ohio	4,767,121	7,513	635
Oklahoma	1,657,155	2,620	633
Oregon	672,765	1,041	646
Pennsylvania	7,665,111	11,345	676
Rhode Island	542,610	751	723
South Carolina	1,515,400	1,275	1,189
South Dakota	583,888	651	897
Tennessee	2,184,789	3,338	655
Texas	3,896,542	5,888	662
Utah	373,351	427	874
Vermont	355,956	679	524
Virginia	2,061,612	2,359	874
Washington	1,141,990	1,630	701
West Virginia	1,221,119	1,639	745
Wisconsin	2,333,800	2,652	880
Wyoming	145,965	235	621
Army, Navy, P. H. S.		908	...
Total	91,972,266	142,190	640

LITERATURE ON THE PREVENTION OF INFANT MORTALITY

To the Editor:—Please refer me to literature on the study of the prevention of infant mortality. We are planning to have a children's welfare conference here, and want to use the literature in regard to the work.

MARY W. MILLER, Harrisburg, Pa.

ANSWER.—The following may be referred to:

Herrman, Charles: Suggestions for Reducing the Infant Mortality from Summer Diarrhea, *Arch. Pediat.*, July, 1907.
The Conservation of Child Life in Pennsylvania, *Bull. Pennsylvania State Board of Health*, August, 1910.
Hoffman, H. H.: Saving the Babies, *Harper's Weekly*, Sept. 30, 1911.
Infant Mortality, *Bull. New York City Board of Health*, April, 1912.
Infant Mortality and Infant Vitality, *Bull. New York State Board of Health*, May, 1912.
Neff, J. S.: Efficiency in Child Saving, *Ann. Am. Acad. of Political and Social Sc.*, 1912, xli, 69.
Infant Mortality and Its Relation to the Employment of Mothers, Volume 13 of the Report of Conditions of Woman and Child Wage-Earners in the United States, Senate, 61st Congress, 2d Session, Document 645, Washington, Government Printing Office, 1912.
American Association for Study and Prevention of Infant Mortality, Transactions, 1910, 1911, 1912; Secretary, Dr. Frank S. Churchill, 1259 North State Street, Chicago.
Newmayer, S. W.: Warfare Against Infant Mortality, *Ann. Am. Acad. Political and Social Sc.*, xxxvii, 288.
Infant Mortality and Milk Stations, Report of the New York Milk Committee, 105 East 22d Street, New York City.
The Department of Child Hygiene of the Russell Sage Foundation, 400 Metropolitan Tower, New York City, has literature on the subject.