examinations, and in giving them better treatment after entrance than many hospitals do at present.

If hospitals will agree not to accept an intern who has not completed his term of service in any other hospital, much of the abuse to which Dr. Lockwood refers, and dishonorable practices arising therefrom, will be abolished. By this I mean that candidates who have begun an intern service in another hospital cannot be lured to leave that hospital by friends who happen to be on another staff of interns, and not be able to get another position if they have been discharged for misbehavior, etc.

DANIEL N. EISENDRATH, M.D., Chicago.

"EXPERIMENTAL PELLAGRA"

To the Editor:—The attention of this office has been called to a statement in the editorial on experimental pellagra (*THE JOURNAL*, Sept. 29, 1917, p. 1082) which is capable of misinterpretation.

McCollom and Pitz are quoted, correctly, as follows: "There is no reason whatever why we should assume, as Voegtlin, Goldberger, Funk and others have done, that pellagra is due to a lack of a specific unidentified dietary factor, a 'vitamin.'"

Neither Professor Voegtlin nor Dr. Goldberger has ever assumed to the exclusion of other possibilities, nor have they stated in any of their publications, that pellagra is due to a lack of a specific vitamin. This was clearly recognized, as were other possibilities; but a perusal of their published work will show that their views on this point have been interpreted erroneously.

G. W. McCoy, M.D., Washington, D. C.

Director, Hygienic Laboratory, U. S. P. H. S.

"THE FULL SACRIFICE"

To the Editor:—Your editorial in *THE JOURNAL*, October 20, p. 1355, entitled "The Full Sacrifice," strikes home. I am guilty; and yet I cannot bow gracefully to the charge of neglecting my duty. Surely I have done no bargaining. Indeed, on numerous occasions I have expressed my willingness to do anything I am asked to do. It happens though that in years I am past 55; but in health and strength I am often taken for 40. Except for a partial plate of teeth, I am physically and mentally as fit as I ever was. And in patriotism I am not wanting, for I am American through and through. Besides, I am married to an English woman who has lost many relatives and loved ones in the present war. Now what more do I need to fire me with a spirit of service? True, my specialty is that of obstetrics; but I know other things too. I feel that a man of my experience should be given tasks commensurate with his ability to perform them; yet I am willing to let someone else be the judge of my fitness. You say, "Men of mature age have the glory of choice." I fail to see it. They seem to be denied an opportunity to serve because they are of mature age. Will you not point out a little more clearly how one beyond the age limit can make the full sacrifice?

FRED ELMER LEAVITT, M.D., St. Paul.

Casualties on Steam Railways.—For the year ended Dec. 31, 1916, according to Accident Bulletin 62 of the Interstate Commerce Commission, the total number of casualties on the steam railways of the United States was 206,723, of which 10,001 were fatal. The figures show an increase over the previous year of 1,371 in the number of persons killed and 34,835 in the number injured. Not all of these represent accidents on trains, however, as 525 persons were killed and 129,740 were injured in nontrain accidents, which means those occurring in and around shops, on boats and wharves, at stations, freight houses, engine houses, coaling stations, water stations, tracks, etc., but not accidents occurring directly in connection with operation of trains. Of the number killed in 1916 there were 2,941 employees, 291 passengers and persons carried under contract, and 6,769 other persons, including trespassers and nontrespassers. Of the persons injured, 176,923 were employees, 8,008 passengers and persons carried under contract, and 11,791 other persons.

Queries and Minor Notes

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

TRUE ANTIPERISTALSIS IN THE SMALL INTESTINE

To the Editor:—1. What is the consensus of opinion as to the possibility of true antiperistalsis in the small intestine?
2. Kindly cite recent literature on this subject.

CARL A. DRAGSTEDT, M.S., Iowa City, Iowa.

ANSWER.—1. True antiperistalsis of the small intestine has so far never been observed in man or animals under normal conditions. Antiperistalsis may occur when the small intestine is exposed to the air, or when a portion of the intestine is isolated and subjected to various experimental manipulations. It would also appear that, contrary to the original observations of Mall, a portion of the small intestine that has been resected and sutured in the reversed direction may, after a lapse of several months, show normal antiperistalsis. It has also been shown that antiperistalsis, or something closely akin to it, may occur in intestinal obstruction, and possibly in certain types of stasis. Small particles, like lycopodium spores, introduced in large enemas, may reach the stomach. This has by some been interpreted as evidence of normal antiperistalsis. Boldyreff asserted that antiperistalsis of the duodenum occurred as a normal process whenever the gastric acidity exceeded from 0.25 to 0.30 per cent. But Hicks and Visser showed that the regurgitation of duodenal contents into the stomach under those conditions is not due to antiperistalsis of the duodenum. According to Alvarez, any condition that induces a motor automatism of the jejunum of a higher order than that of the duodenum will lead to antiperistalsis.

Alvarez, C. W.: The Motor Functions of the Intestine from a New Point of View, *THE JOURNAL*, July 31, 1915, p. 388.

Beer and Eggers: Are the Intestines Able to Propel Their Contents in an Anti-Peristaltic Direction? *Ann. Surg.*, 1907, **46**, 576.

Boldyreff: The Self-Regulation of the Acidity of the Gastric Contents and the Real Acidity of the Gastric Juice, *Quart. Jour. Exper. Physiol.*, 1914, **8**, 8.

Cannon, W. B.: Movements of the Stomach and Intestines in Some Surgical Conditions, *Ann. Surg.*, 1906, **43**, 524; Peristalsis Segmentation and the Myenteric Reflex, *Am. Jour. Physiol.*, 1912, **30**, 114.

Hicks and Visser: Physiology of Stomach: Mechanism of Regurgitation of Duodenal Contents into Stomach, *Am. Jour. Physiol.*, 1915, **36**, 1.

McClure and Derge: A Story of Reversal of the Intestines, *Bull. Johns Hopkins Hosp.*, 1907, **18**, 4712.

Prutz: Transposition of Intestine, *Arch. f. klin. Chir.*, 1904, **72**.

BRUCK'S SEROCHEMICAL TEST FOR SYPHILIS

To the Editor:—Kindly publish the technic of Bruck's serochemical test for syphilis, or advise me where I can find it.

R. H. L. BIBB, M.D., Saltillo, Mexico.

ANSWER.—Nitric acid when added to syphilitic blood serum causes a precipitate to form. Bruck's technic is based on an acid containing, per hundred gm., 24.77 gm. of nitric acid, or, per hundred c.c., 28.48 c.c. of nitric acid with a specific gravity of 1.149. He uses 0.3 c.c. To 0.5 c.c. of clear serum, 2 c.c. of distilled water are added. This is shaken, and then 0.3 c.c. of nitric acid is added with a standardized pipet. This is shaken and permitted to stand at room temperature for ten minutes. Then 16 c.c. of distilled water at 15 C. are added and shaken slowly three or four times so as not to foam. This shaking is repeated ten minutes later, and then the tube is set aside for one-half hour. If the serum is syphilitic it shows a distinct flocculent turbidity. In twelve hours, a precipitate is piled up on the floor of the test tube. If the serum is nonsyphilitic, there is no precipitate at any time. The test is described in the *Münchener medizinische Wochenschrift*, Jan. 2, 1917, p. 25.

DISPOSAL OF COMMISSION ON RECEIVING A HIGHER ONE

To the Editor:—I received a First Lieutenant's commission in the Medical Reserve Corps, Sept. 10, 1917, which I accepted. Under date of Sept. 26, 1917, I received a Captain's commission in the Medical Reserve Corps, which I also accepted. Shall I return the First Lieutenant's commission?

F. M. V.

ANSWER.—No.