Diseases of the Stomach, their Special Pathology, Diagnosis and Treatment, with Sections on Anatomy, Physiology, Analysis of Stomach Contents, Dietetics, Surgery of the Stomach, Etc.; in three parts. By JOHN C. HEMMETER, M.D., PH.D., with many original illustrations, a number of which are in color, and a lithograph frontispiece. Pp. 788. Philadelphia: P. Blakiston, Son & Company. 1897. Price 86.

The work is divided into three parts, of which part first is devoted to the anatomy and physiology of the digestive organs, methods and technics of diagnosis; Part 2, to the therapy and materia medica of stomach diseases; Part 3, to the gastric clinic.

The work is completely scientific, modern, accurate and creditable. There is one defect in it, however, which must strike the average reader with regret, and that is that the references are, with exceptions, foreign; work done in our own country escapes with scant mention. For example, under the head of foreign bodies in the stomach, a number of cases of hair ball are recorded all from foreign journals, while the one published in this journal (Vol. xxvi, page 199) by Allen, is unnoticed. Notwithstanding this defect, the book is an excellent one and stands fully abreast with the German works on this subject. We commend it. The illustrations are excellent, the paper is good and the publishers have given the work a handsome setting.

NECROLOGY.

JOSEPH O'DWYER, M.D., College of Physicians and Surgeons, N. Y., 1866, one of the visiting physicians of the New York Foundling Hospital, died of tubercular meningitis at his home in New York city, January 7, aged 55 years. Twelve years ago he achieved even international fame by his intubation method of treating laryngeal diphtheria. He was a progressive, enthusiastic physician, in much favor with the profession for his candid and kindly manner.

EDWARD L. DODGE, M.D., N. Y. University Medical College, 1888, died suddenly from blood poisoning following an operation, January 3, aged 39 years. He was born in Springfield, Mass., and practiced in Brooklyn, N. Y. for 12 years. Just before his death he had secured a position on the eligible list of Police Surgeons.

FRANZ HEUEL, M.D., N. Y. Medical College (now extinct), 1857, who belonged to the German revolutionary army of 1848, and emigrated to this country after its defeat, died in New York city, January 4. He was once attached to the Health Department, and also served as a Dispensary physician. He leaves two sons who are also members of the profession.

SAMUEL HENDERSON MCILROY, M.D., Long Island College Hospital, 1864, was a war veteran, member of the Grand Army of the Republic, a Fellow of the N. Y. State Medical and AMERICAN MEDICAL ASSOCIATION, and belonged to many fraternal bodies. He was born, June 21, 1839, in Scotland, Pennsylvania, not far from the Gettysburg battle field. He was a popular, well-read physician, and up to within a year of his death, when his health failed, he enjoyed a lucrative practice. He died January 5 and left a widow with three children.

ERNEST HART, Editor of the *British Medical Journal*. Mr. Hart was the author of a number of works on sanitation, etc., and had been conspicuous for his devotion to social and sanitary progress in London. He established a society for the abatement of smoke, and instituted cheap concerts for the poor. As chairman of the Parliamentary Bills Committee of the British Medical Association he took an active part in promoting a better organization of the medical departments of the British army and navy. Among sanitary investigations he especially inquired into the various epidemics due to the pollution of milk and devised a series of regulations for safeguarding the milk supply of towns. After investigating the conditions of the Irish peasantry in Galway, Donegal, and Mayo he

published in the *Fortnightly Review* proposals for favoring the creation of a peasant proprietary and for reclaiming waste lands. These were adopted by the government.

WILLIAM SCOTT TREMAINE, M.D., U. S. A., retired, died Sunday Jan. 9. He had been ill for several weeks. He was a native of Charlottetown, Prince Edward Island, where he was born Sept. 13, 1838. He was graduated from the University of Pennsylvania, and entered on the practice of medicine, which he followed until Aug. 7, 1863, when he entered the volunteer service as assistant surgeon of the 24th Massachusetts Infantry, serving until April 12, 1864, when he was honorably mustered out. On May 2 he was commissioned surgeon of the 31st United States Infantry, from which he resigned Sept. 9. He then entered the United States Volunteers as assistant surgeon and on June 4, 1866, was honorably mustered out, having been appointed to a like position in the regular army. This appointment was made Feb. 28, 1866, but he did not accept until June 12, eight days after he was mustered out of the volunteer service. On September 16, he was promoted to the rank of Captain. He served on several stations in the Atlantic division, and then was sent to Ft. Dodge. While there he was taken ill, and for two years was absent on sick-leave. In 1882 he was promoted to surgeon, with the rank of Major, and detailed for active duty at Fort Porter. On Feb. 27, 1891, he was retired owing to disability, after having been on sick-leave for some time. He leaves a widow and six children, Morris Tremaine of New York city, William Tremaine of Chicago, Mrs. H. F. Hall of Jersey City, Mrs. Nairn Walsh and Miss Florence Tremaine of Pittsburg, and Miss Grace Tremaine, who lived with her parents in this city. Dr. Tremaine was one of the founders of the Medical Department of Niagara University, and one of its first professors of surgery. He was a member of the military order of the Loyal Legion, which is composed of commissioned officers of the Civil War, or their eldest sons; of the Masonic Order, of the Buffalo Club and the local medical societies.

Louis Crusius, M.D., Professor of Histology at the Marion-Sims Medical College, January 2, aged 36 years.—L. B. Lindsay, M.D., Cadiz, Kentucky, January 3, aged 71 years.—W. H. Negley, M.D., Dayton, Ohio, January 5.—James Stanton, M.D., San Francisco, Cal., December 28.—Dr. Zaccharin, physician of Czar Alexander III., Moscow, Russia.—John R. Preston, M.D., born February 15, 1809, died in Schuylerville, N. Y., January 2.

NEW INSTRUMENTS.

A NEW PHOROMETER.

BY JOHN O. McREYNOLDS, B.Sc., M.D.
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In the department of ophthalmology no line of research in recent years has attracted so much attention as that pertaining to the extrinsic muscles of the eye. And in view of this rapidly growing importance of an accurate knowledge of the various anomalies of the ocular muscles, it becomes necessary to employ as aids in diagnosis instruments of the greatest precision and convenient of manipulation. This demand has been met in part by several devices invented for this purpose, but some of the best of these in frequent use have covered only a portion of the field of inquiry. Without offering any extended criticism on the very excellent instruments already introduced, I should like to present to the profession a phorometer, which in my judgment will combine every essential feature that could with reason be desired.

This instrument has been made for me by F. A. Hardy & Co. of Chicago, and their kind co-operation I wish sincerely to acknowledge in this connection.

The construction is roughly outlined in the illustration which accompanies the following brief description of the essential

features of the phorometer. The instrument rests upon a loaded metal base which can be placed upon a table as conveniently as if it were an ordinary lamp. It is supported by a vertical metal rod composed of two pieces, one of which slides within the other, and is provided with a fixation thumb screw, by means of which the height of the instrument can be regulated according to the height of the patient to be examined. Attached to the upper extremity of this supporting rod is a horizontal metal bar, which can be maintained in correct position by means of an endless screw bearing upon a cogged wheel, the position of the bar being determined by a spirit level, with which it is provided. The preservation of this horizontal position is important, because any oblique position would modify the axes of the prisms employed. The horizontal bar is grooved, for the reception of two entirely similar slides which are situated beneath the bar, and along which they can be made to move freely, or can be firmly secured at any point by fixation thumb-screws arranged for this purpose. This feature enables us to regulate the phorometer according to the pupillary distance of the patient. Each slide is also provided with a specially constructed spring clip, which will hold in position a Maddox rod double prisms, colored and stenopeic discs, or various refracting lenses.

Now it is evident, that starting at a point at which the two prisms neutralize each other, a revolution through an arc of 90 degrees will cause the bases of the prisms to exactly coincide and their apices to correspond, thus giving a total prismatic effect of 30 degrees, equal to that of the two prisms combined. This point is accordingly marked 30 degrees on the circumference of the cell, and is situated just 90 degrees from the points marked 0 degrees. It is also evident that at 180 degrees from the point just marked 30 degrees there will obtain the identical relations of the prisms to each other, and this point should accordingly be marked 30 degrees. Then the intermediate points in each quadrant between points marked 0 degrees and 30 degrees can be easily determined by calculation or neutralization by prisms of known strength, and thus the graduation of the circumference of the cell is completed. The cell as thus arranged is capable of manifesting in a rectilinear direction a prismatic effect varying by insensible gradations from 0 degrees to 30 degrees. The cell in the other slide is capable of accomplishing the identical result, and hence with the complete phorometer we can secure any amount of prismatic power from 0 degrees to 60 degrees. Not only this, but since each cell is freely movable within the slide which contains it, we can at will determine the direction in which

But most important of all, each slide carries a cell which can be made to revolve freely within the slide which contains it, or can be fixed in any desired position by a set screw. The advantage of this fact is that the prismatic effect of the cell may be exerted in any direction whatever, and this direction is indicated by the graduated circumference of the slide.

Each cell is composed of two prisms of 15 degrees each, superimposed one upon the other, the two prisms possessing the power of revolving with equal rapidity, but always in exactly opposite directions, the motion being communicated to them by a thumb-screw whose distal end is provided with cogs articulating with the circumferences of the prisms between which it is placed. Since the two prisms always move simultaneously and with equal rapidity and in opposite directions there are two points in each complete revolution of the prisms at which they completely neutralize each other, and these points, which are situated at opposite extremities of a diameter, are marked 0 upon the graduated circumference of the cell.

this prismatic power shall be exerted.

The important feature in the effect of two equal and superimposed prisms revolving in contrary directions within the same cell, is that the image transmitted through them is always deflected in a straight line and not in curves, and that the increments of prismatic power are infinitesimal, so that the maximum impulse to fusion of images is secured.

For the practical application of this instrument to the various forms of heterophoria, the procedure would be briefly as follows:

To test for esophoria and exophoria; so adjust one cell that it will produce a vertical diplopia. Then so adjust the other cell that it shall be neutral, and in such a position that subsequent rotation of its prisms will produce horizontal deflection. Then if the images are in the same vertical line the examination shows orthophoria, and if the images are not in the same vertical line rotate the prisms, producing lateral deviation, until the images pass through the same vertical line and the index

of the instrument will point out the number of degrees of esophoria or exophoria, according to the circumstances of the case.

To test for hyperphoria, right or left, start with the cells in the same positions as above, then rotate the prisms of cell producing lateral deflection until horizontal diplopia is produced, and then rotate prisms of cell producing vertical deviation until the images appear in the same horizontal line, and read off the hyperphoria upon the graduated arc of the cell.

For measuring abduction, start with the same positions as above and rotate prisms of cell causing lateral deflection so that their bases pass inward, and as soon as fusion of images is no longer possible the limit of abduction is reached and can be read from the arc.

For measuring adduction, adjust both cells so that the subsequent rotation of prisms will cause horizontal deflection of images and then rotate the prisms so that their bases turn outward and continue until diplopia develops and then read the degrees from the two cells, and the sum will represent the total power of adduction.

For testing sursum-duction and deorsum-duction, place both cells in neutral position, one of which must have the axes of its prisms horizontal, and then rotate these prisms until the power of fusing the images is lost, and read from the arc the degrees of sursum-duction, or deorsum-duction, as the case may be.

Finally, for any kind of oblique, horizontal or vertical rectilinear deviation leading to diplopia, adjust the neutralized cells so that their prismatic power when exerted shall be in the direction favoring the fusion of images, and when monocular vision follows the phorometer will indicate the strength and position of the prisms which measure the heterotropia. These possibilities are true whether the deviation is due to spasm, or paresis, or paralysis of one or more ocular muscles, provided the extent of the deviation does not exceed 60 degrees, which is the maximum capacity of the instrument described. But if it is desired the strength of the component prisms could be readily increased so as to extend still further the field of investigation.

In conclusion I would say, that with this phorometer we can measure with rapidity and accuracy any form of simple or compound heterophoria and any form of diplopia within the combined power of the prisms employed.

SOCIETY NEWS.

Boston Medical Society.—At a meeting of the Boston Medical Society held on Jan. 1, 1898, the following officers were elected for the ensuing term: Dr. S. Goodman, president; Dr. R. K. Noyes, first vice-president; Dr. F. J. Kelleher, second vice-president; Dr. M. Gerstein, secretary; Dr. V. Bychower, treasurer; Drs. N. M. Goodman, Chas. F. Parker, A. Rovinsky, H. P. Leonard, J. J. Hanley, B. L. Bernard, directors. The subject for discussion was "Medical Abuses in the Hospitals and Dispensaries, Their Causes and Remedies for the Same." The following took part in the discussion: S. Goodman, F. F. Whittier, N. M. Goodman, F. J. Kelleher, Gustavus Liebman, Ph. Losnowsky and A. Rovinsky. Papers on the subject were read by Drs. R. K. Noyes, Chas. F. Parker, M. Gerstein, the latter dwelling on the abuses in the lying-in-hospital out-patient department.

MISCELLANY.

The Russian Kvas as a Substitute for Beer.—Dr. Karl Frankel has suggested the Russian drink kvas as a substitute for beer, which so many of the members of the congress at Moscow, though tasting it for the first time, found so pleasant and

refreshing. During the hot days at Moscow nothing seemed more palatable than this simple fermented liquor, which is not unlike our own popular root beer. Kvas contains scarcely 0.5 per cent. of alcohol, and most Americans who attended the congress would agree with Dr. Frankel that it would form an excellent substitute for beer during the heated term when the desire to consume a good deal of liquid is almost irresistible. —Correspondent of the *Medical News*.

Can Not Testify to Own Insanity.—For the purpose of avoiding the legal consequences which would naturally follow from joining in the erection of a division fence, the plaintiff, in the case of O'Connell against Beecher, was permitted to testify that in 1883 he fell from a building, and was severely injured. This, the fourth appellate division of the supreme court of New York holds, October, 1897, was competent. But he was further permitted to testify that for eight or nine years thereafter his mind was not right. That this latter testimony was not stricken out, on objection, the court pronounces reversible error, on the ground that the witness was not an expert, and was not competent to give an opinion upon this question. It would establish a dangerous rule, the court goes on to say, to hold that a party to a contract or a transaction is competent to testify that he was not of sound mind at the time of the transaction, or at the date of the contract.

Naval Hospital Corps Proposed.—Secretary Long has sent to the House Naval Committee a draft of a bill "to organize a hospital corps of the United States Navy, to define its duties and regulate its pay." The Secretary says it is understood that the operations of the Army Hospital Corps are satisfactory, and that a similar organization in the Navy can be established and maintained with practically no additional expense. The corps, as proposed, is to consist of twenty pharmacists at \$75 per month and five at \$100; sixty-five hospital stewards at \$60; thirty first-class hospital apprentices at \$24; sixty hospital apprentices at \$18. The proposed naval hospitals are to be located at Portsmouth, N. H.; Chelsea, Mass.; Newport, R. I.; New York City, Philadelphia, Washington, Norfolk, Va.; Pensacola, Fla.; Mare Island, Cal., and Yokohama, Japan. The scheme includes navy yards and flagships.

Suggestive Statistics.—New York, or since the opening of the year, more correctly Borough of Manhattan, New York City, has one ward, the tenth, with a population of 413,000 to the square mile and a voting strength of nearly the unit. The population of the Whitechapel district of London is 393,000 to the square mile. New York consumes daily 25,000,000 more gallons of water than does London; the former city has a birth every nine minutes and a death every ten and a half minutes, while the latter city has a birth every three minutes and a death every five minutes. In London one out of every sixteen inhabitants seeks relief through public charity, while similar aid is sought in New York by one out of each two hundred. London has a police force of 16,000 while New York has to depend upon not quite half that number, but in London the population moves more like a procession than in New York and much more alertness is required in the management of its street traffic, with perhaps a greater respect for the rights of the individual. Still, New York arrogates to itself the finest constabulary of the world. Travelers agree that both these great communities display the racial stoicism of the Teuton even in their crimes, without the leaven of gayety in their sports so apparent in Paris. The struggle for existence in all three of these dense communities has nearly obliterated the Spartan simplicity of the home and has focused their wealth in divers enterprises. The whole three at the present time are trying to refract their accumulations over the diminished areas of a more compact aggregation of living masses. In other words, the moneyless are in a state of siege, with the watchword that the world owes them a living. Sanitation may make life more tolerable, but can scarcely be expected to enter too deeply into moving causes.