

I had failed to make a complete delivery. Later on some loose lens matter was found forcing apart the lips of the wound and was easily removed, but it had already set up a cyclitis which was followed by sympathetic inflammation of the other eye, necessitating enucleation of the exciting eye. The result was particularly deplorable, as the sight in the remaining eye, upon which I had done a successful extraction the previous year, was considerably impaired. There was additional disappointment, perhaps due to the fact that I had done double cataract extractions on two of his friends with a resulting vision of nearly 20/20 in each eye. Earlier removal of loose lens matter might have prevented the cyclitis, and earlier enucleation would certainly have been better for the sight of the other eye, but this case was at a distance from me and could not be seen as often as I wished.

In case third the nucleus of the lens with the thickened capsule dropped down into the vitreous, the capsule remaining attached above so that it swung as if upon a hinge. Efforts to get hold of it and extract failed, although a properly made wire loop might possibly have been used successfully. The eye was closed and a cool compress of cotton applied for a half hour, in the hope that the anterior chamber would refill and the lens float back into position, as it were. At the end of that time, the aqueous showing no tendency to reform and the cornea remaining depressed or collapsed, the usual dressings were applied. A little vitreous had been lost and its appearance indicated the occurrence of liquefaction. At the end of twenty-four hours the anterior chamber was re-established and the lens had come up into place. It was then a question whether to attempt its immediate removal or leave it to nature (supplementing what nature failed to do in the way of absorption by a secondary operation later on). The success of this course with case first, and the fact that the patient was a nervous invalid, led to the adoption of the latter plan. The corneal wound healed kindly and there was but little iritis, slight adhesions below serving to fix the lens and capsule more firmly in place. The iritis having subsided, we began to consider the question of a secondary operation, when the patient, who had long been an invalid, commenced to decline and soon died from causes having no connection with the eye or operation. It is, therefore, a matter of speculation whether it would have been wiser in this case to have gone down into the vitreous with a wire loop immediately, or attempted the extraction of the lens remnant the day following, in lieu of the conservative course adopted. I hope this phase of the subject will be thoroughly discussed.

The text-books at my command say comparatively little about accidents in operations. deSchweinitz gives the most, but even he does not cover all the points connected with such cases as I have here reported. Of such accidents as the iris falling in front of the knife I have had no experience, nor have I ever lost much vitreous. In one case only have I been compelled to enlarge my corneal incision. The accidents mentioned in this paper have been the worst in my experience, but they have taught me such valuable lessons that I thought it might be more profitable to report them than my successes, hoping that the discussion thus introduced might bring out many points of value to those who feel there is yet something to be learned in this branch of our art.

17 West Ohio Street.

AN INEXPENSIVE 60-LENS OPHTHALMOSCOPE WITHOUT REKOSS-DISC.

Presented to the Section on Ophthalmology at the Forty-ninth Annual Meeting of the American Medical Association, held at Denver, Colo., June 7-10, 1898.

BY GEORGE M. GOULD, M.D.

PHILADELPHIA.

It is said that if within five years after graduation an oculist does not devise "A New Ophthalmoscope" his wife and intimate friends begin to make mysterious visits to the best alienists concerning the man's mental condition. I have concluded that it will not do for me to hold out any longer. The little device I show you today is designed to give the working oculist an instrument with double or treble the number of useful lenses in the ordinary ophthalmoscope, without the complicated and bothersome Rekoss-disc, without a handle, that does not need a case, and that is comparatively inexpensive. The lenses are arranged in two sets independent of each other, each set in parallel continuous grooves or channels similar to the Morton instrument in this one respect. Each set of lenses is propelled by a drive-wheel operating a toothed wheel for each of the two sets of lenses, this having a disc on which is the designation of the particular lens at any time before the sight hole. The set of lenses in one end of the ophthalmoscope contains the lenses most used by an emmetropic oculist, and all the rarely-used lenses are in the set at the reverse end. A highly ametropic oculist could have a different set of lenses placed in the most-used end according to his personal needs. The mirror, instead of tilting to either side, is reversible on its axis and thus can be placed at any angle desired for use when patients are in bed or with the light in any direction. The mirror is readily taken out and inserted in either end of the instrument. Side-illumination is excluded by a tube containing the mirror and the body of the instrument. The instrument itself is used as a handle. The arrangement of the lenses is as follows:

At one Extremity (that most used.)		At the other Extremity (that less used.)	
Concave.	Convex.	Concave.	Convex.
...	...	8.00	8.00
...	...	8.50	8.50
...	...	9.00	9.00
0.50	0.50	9.50	9.50
1.00	1.00	10.00	10.00
1.50	1.50	10.50	11.00
2.00	2.00	11.00	12.00
2.50	2.50	12.00	14.00
3.00	3.00	13.00	16.00
3.50	3.50	14.00	18.00
4.00	4.00	15.00	20.00
4.50	4.50	16.00	25.00
5.00	5.00	18.00	30.00
5.50	5.50	20.00	...
6.00	6.00	25.00	...
6.50	6.50	30.00	...
7.00	7.00	40.00	...
7.50

The present crude instrument, the first one made, is designed to show its essential principles and methods; the finished instrument will be made of aluminum, and therefore much lighter in weight.

DEMONSTRATION OF AN "AUTO-FUNDOSCOPE."

Presented to the Section on Ophthalmology, at the Forty-ninth Annual Meeting of the American Medical Association, held at Denver, Colo., June 7-10, 1898.

BY GEORGE M. GOULD, M.D.

PHILADELPHIA, PA.

The little device for which I have dared to coin the

terrible word "Autofundoscope," is a very simple bit of mechanism, designed to slowly and accurately revolve a pin-hole through, and placed about two millimeters from, the center of a black rubber disc. The word should have been *autoretinoscope*, but as *retinoscopy* has been given another signification, *autofundoscope* is the only word left to designate the observation of the vascular system of one's own retina. The method essentially is the very old one described in books on physiologic optics of moving a pin-perforated card, held in the hand, before the eye, and observing an illuminated blank space through the perforation. In this way, however, one secures only faint, movable and indefinite images of the retinal vessels, which disappear and reappear with provoking rapidity. The common newspaper puzzle of revolving concentric alternate circles of black and white rings, when upon stopping the movement, the circles seem still to revolve, suggested to me this improvement and device. Both facts rest upon conditions explained in books on optics, which you well know—the position of the capillaries in front of the retina, the shadows they cast, the physiologic influence of fatigue, and the slight change in the position of the shadows affected by the revolving perforated disc. One may place the instrument, without the tube, five or ten feet from a brilliantly illuminated white card-board, and thus obtain a very fair and steady image of the macular region and the entire perimacular vascular system. A little patience and considerable care is needed to hold the eye very steady, at the right angle, and to rotate the disc at exactly the requisite rapidity and uniformity to bring out the image most perfectly and immovably. Had I thought the experiment worth the expense and trouble, it would have been possible to provide an automatic clock-work mechanism much superior to the present crude device.

Physiologically the method is something more than a curiosity, as showing one the exact shape and relative dimensions of his yellow spot of Sömmering, or macular region; the comparison of the different picture of the two eyes; the perfection of the vascular supply of the retina, etc. I have been astonished to see how clearly the finest capillaries are seen, how much closer they penetrate to the macula than I supposed, etc.

I can imagine that the method may have use in demonstrations of pathologic conditions, but all such must depend upon the fact that it is only one's own retina that one can thus see. I have noticed in my own images certain opalescent spots in the perimacular space, invariable in each eye, though entirely different for each, in size, number and location. I do not know what causes them. They are not *muscæ*.

THERAPEUTIC VALUE OF SOME MEDICINAL AGENTS IN PHYSICAL DISEASES AND SOME PSYCHICAL TROUBLES.

Presented to the Section of Materia Medica, Pharmacy and Therapeutics at the Forty-ninth Annual Meeting of the American Medical Association, held at Denver, Colo., June 7-10, 1898.

BY T. B. GREENLEY, M.D.

MEADOW LAWN, KY.

It has occurred to me that a short sketch of the value of a few remedies I have used with good results in certain cases, might be appropriate.

First, I will speak of spirits of turpentine. I have found it to be one of the best antihemorrhagics I have

used. I regard it almost as a specific in hematuria. Within the last year I have had some ten cases of this trouble. I give small doses frequently repeated, say fifteen drops at intervals of three or four hours. As a matter of convenience I give on sugar in a teaspoon, instead of preparing an emulsion. Of course, in order to aid the action of the remedy I freely employ dry cupping over the kidneys. Usually in twenty-four to thirty-six hours the bleeding is arrested. In hemoptysis, either from the stomach or lungs, it is an admirable remedy, especially so when due to trauma. I also use it in hemorrhage from the bowels and uterus. In the latter case ergot would greatly assist the turpentine. In oozing of blood from the surface of a wound, it is not only antihemorrhagic, but also antiseptic, and at the same time exerts some healing property. In cases of bowel affections, where flatulency is present, turpentine serves an admirable effect in its relief. The most painful and unpleasant symptom in typhoid fever is flatulency of the bowels. Turpentine in such cases is our best remedy. Beside removing the painful distension of the organs, it also serves as an excellent antiseptic. It is also a fairly good vermifuge. In old times when intermittent fevers were so prevalent in the Ohio valley, and quinin so high priced, and when I had so much charity practice to do, I studied up an antichill medicine, of which turpentine was the principal ingredient. It had the desired effect in arresting the disease. As quinin at present is so low in price, it is not worth while to speak of the formula.

In speaking of the virtues of turpentine, I do not wish it understood that I regard it a king cure-all, as some of the patent medicine proprietors assert their preparations to be.

Next I would mention ammonium chlorid as an alterative in certain hypertrophies, etc. I have used it in enlargement of the spleen and liver with very happy effect. A case of the largest spleen I ever saw was that of a lady about forty years old, who lived in a very malarious locality. The organ had extended considerably across the median line, producing quite a prominence of the abdomen. I put her on the chlorid and continued it several months. The spleen gradually became greatly reduced, relieving the patient of much discomfort from weight and distention. While using the chlorid, I had the patient apply irritants, such as tinct. iodine, turpentine, etc., over the abdomen, and two or three times drawing blisters with fly plasters. These agents were aided by adjuvants in the way of tonics and laxatives, as quinin, etc. The patient finally recovered her usual health.

I have also used the chlorid in hypertrophy of the liver with very happy results. In these cases, we have to use, aside from the alterative, such adjuvants as are indicated in each particular case. I was very much gratified by its use in a case of chronic pneumonia in a woman of some thirty years of age. Her acute attack occurred some six or eight months before I saw her. She was up and able to attend to her household matters, but complained of pain in her right side, and had a troublesome cough. On examining her I found consolidation of lower lobe of right lung. I put her on the chlorid of ammonia and blistered the surface over the part of lung involved. The surface was kept partially raw by repeating the plaster when necessary. At the end of four or five weeks the lung was restored to its normal condition. This