may be moved in any direction. During ordinary examinations it may also be used so as to

avoid finger prints on the mirror. This will be appreciated by many patients.

The instrument should be applied opposite the attachment to the headband.

Codman and Shurtleff have made the adjuster for me.

Clinical Department.

THE OCULAR AND GENERAL SYMPTOMS IN NASAL OBSTRUCTION. THE REPORT OF AN UNUSUAL CASE.

BY HARRY C. PARKER, M.D., BOSTON,

Clinical Assistant Massachusetts Charitable Eye and Ear Infirmary; Instructor in Ophthalmology, Tufts College Medical School, etc.

AFTER reading Dr. Posey's exhaustive article presented before the Section on Ophthalmology of the American Medical Association in July, 1905, one feels there is little new to offer, showing the intimacy of the relation between the nose and its accessory sinuses and the eye. Although his article dealt with "The ocular symptoms of affections of the accessory sinuses of the nose," I wish he had given more space to those cases of simple nasal obstruction which give rise to ocular symptoms, as severe, and certainly as hard to combat without operative interference, as those of sinus troubles. I refer to the ocular symptoms caused by enlarged turbinates, spurs, deviations of the septum, etc.

There is rarely a day passes in the refraction room of the Massachusetts Charitable Eye and Ear Infirmary without the appearance of several cases which, from the character of their symptoms and the nature of their refractive errors, suggest the necessity of a nasal examination. In this connection I should like to state my hearty agreement with Dr. Edward Jackson in his dis-

cussion of Dr. Posey's paper as to the difficulty of recognizing sinus disease. I wish to call attention to the equal difficulty in recognizing cases of simple nasal obstruction, for many cases are reported back as negative by the rhinologist where, from the nature of the symptoms, you are sure a pathological condition exists in the nose, and which will usually be revealed at some subsequent examination.

The greater number of nasal cases have, at some time or another, definite eye symptoms, and the time has come when the oculist must insist, in order to get good results, on the intelligent co-operation of the rhinologist, or else he himself forced to treat the nasal conditions which give rise to ocular symptoms of greater or less severity. Few rhinologists recognize the fact that simple soft turbinate contact with the septum will, in many individuals, give rise to symptoms which will not be relieved at all, or only in part, by correcting errors of refraction or defects in the muscle balance.

The case I wish to report is of interest from the severity and the unusual character of the symptoms presented both ocular and general. My notes follow:

February, 1906. Mr. E. R. consulted me in regard to persistent diplopia and vertigo. His age, forty-one years, married, two healthy children. No history of wife having had a miscarriage. Had always been a hard worker. General health always excellent up to 1899. Denies gonorrhea or syphilis. Myopic as long as he could remember, and had worn glasses constantly from his early youth. His eyes had given him no trouble beyond the handicap of his myopia until 1899, when he developed diplopia. I wish to state here parenthetically that Mr. R. is a man of keen intelligence and not of the neurasthenic type. His diplopia at that time varied in amount for 20 to 60 prism degrees according to the notes of the oculist which he had with him. The diplopia was homonymous, *i.e.*, esophoria, which in itself is extremely unusual in as high a degree of myopia, and his binocular vision was always obtained readily with prisms. His myopia was at that time uncorrected. He was wearing O.D. — 13.00 S. — 2.00 cyl. x 180°. O.S. — 12.00 S. — 2.00 cyl. x 180°. — So full correction — 15.00 S. — 2.50 cyl. x 180°. out was given, combined with a 6 Δ° base out in both eyes. This produced a great discomfort increasing, if possible, diplopia and caused general symptoms, or at least general symptoms appeared at this time, such as numbness of the face, abdominal shooting pains, and the loss of muscle reflexes. He was allowed to wear his weaker lenses without prisms. His case progressed with little or no improvement, so he was taken to an alienist, who examined fully into his history as his oculist had done, and a constitutional cause of any sort could not be found. The slightest chance of syphilis denied except from possible innocent cause, about which the patient had no knowledge. He was told he had irregular tabes, advised to give up business and either rough it out West for a year or go abroad. He chose Europe and shortly after his arrival consulted a prominent oculist in Germany, who insisted he had syphilis and proceeded to give him a severe course of mercurial inunctions, potassium iodide, which by the way he had had in teaspoonful doses three times a day before leaving this country, and quantities of Bland's pills. This heroic treatment succeeded simply in the

accentuation of all symptoms together with insomnia, loss of weight and appetite.

After four months Mr. R. decided to give up the treatment and left Germany for Switzerland, where, for a period of six or seven months he had no treatment except baths. His symptoms became very much less marked, his weight returned, he was able to sleep, and the diplopia became only transitory. This relief being due in my opinion to the favorable effect of the clear mountain air on his nasal condition and the relief from a severe constitutional treatment which was unnecessary.

After ten months Mr. R. returned to this country very much improved apparently and resumed his work which was active and necessitated long hours. His condition remained fairly satisfactory until 1902, when the symptoms began to return. Early in 1903, he tells me, he had a slight nasal operation which resulted in some improvement. He was again tried with stronger lenses and prisms which again served but to aggravate his symptoms. These continued with more or less discomfort until about six months before his first visit to me when they became much more marked.

My examination showed

V.O.D. — 13.00 S. — 2 cyl. 180 = $\frac{20}{100}$ —

V.O.S. — 12.00 S. — 2 cyl. 180 = $\frac{20}{100}$ —

with full correction

V.O.D. — 16.00 S. — 2.00 cyl. 180 = $\frac{20}{200}$ } $\frac{20}{40}$ —

V.O.S. — 15.00 S. — 2.00 cyl. 180 = $\frac{20}{200}$ }

This correction verified by retinoscopy and astigmatic charts. *Muscles* — showed 15 Δ° esophoria. Diplopia homonymous quite easily obtained with a 5 Δ° prism base out. *Ophthalmoscope* showed clear media, retina apparently normal; optic nerve of good color, each showing choroidal crescent. *General conditions.* Health quite good; weight somewhat below normal; always has had "cold." Knee reflex active. No Romberg symptom. No Argyll-Robertson pupil, although pupils were slightly irregular in size the left being slightly the larger. The portion of his face on the cheek bones, forehead and lips was somewhat anesthetic. He also complained of occasional shooting abdominal pains. Always of late years had had difficulty in nasal breathing.

Nasal examination showed marked nasal obstruction on both sides, caused by large polypoid middle turbinates pressing against the septum, limiting naturally the air passages. Slight nasal discharge, mucoid in type. I suggested the possibility of considerable relief from a thorough nasal operation, also that he had better be looked over carefully by his physician.

Second visit, Feb. 24, 1906. His physician reported physical condition excellent, urine and blood negative, no sign of any organic disease. Muscle test 15 Δ° esophoria. Fusion with 6 Δ° base out. Referred to Dr. Goodale for nasal operation. I transmitted at the same time a full report of the case. Dr. Goodale reported back in a few days that he had found it necessary to operate under ether and had removed a portion of each middle turbinate the size of a large lima bean, and had curetted out the anterior ethmoid cells.

Third visit, March 5, 1906. — Esophoria but 6 Δ° easy fusion without prisms. Mr. R. was allowed to wear his old correction and told to report to me in one month. My patient was not seen, however, until Nov. 27, 1906, eight and a half months later as he had been very comfortable, only at extremely rare intervals having slight attacks of diplopia occurring always after a hard day and lasting but a few moments. He breathed easily through his nose, no longer awakened with dry throat, had no vertigo and no shooting pains; and the area of facial anesthesia much diminished.

Refraction showed an increase in myopia but a greater visual acuity.

V.O.D. — 19.00 S. — 2.00 cyl. 180 = $\frac{20}{200}$

V.O.S. — 16.00 S. — 2.00 cyl. 180 = $\frac{20}{200}$

His muscles showed perfect balance, both with the Maddox rod and the cover tests.

To recapitulate, here is the case of a man in the prime of life, engaged in an active business, forced, through what is now evident, a mistake in diagnosis, to give up everything and undergo the loss of time, the expense of a protracted stay abroad and be subjected, without cause, to an heroic antisyphilitic treatment. He had in 1899 been obliged, because of vertigo and diplopia to give up business. He was subjected to use stronger lenses and prisms which served to aggravate his symptoms. He took large doses of potassium iodide which were unnecessary and was finally told he was suffering from an incurable disease, the probable end result of an old syphilis and then advised to give up all and go forth in search of a remedy which if unavailing would mean the awaiting of the inevitable. He went forth and in Germany was put through his worst experience, that of heroic antisyphilitic treatment, all the while becoming weaker and less able to resist the underlying cause of all his symptoms, which became in consequence the more powerful. Finally, abandoning all treatment in despair he went to Switzerland where, much to his surprise, things began to right themselves, due in all probability to the effect of the dry mountain air on his nasal condition. He returned to this country full of hope that all would be well, only to find after a time his old symptoms returned with greater or less severity and in gradually increasing periods.

It was at this time that he came under my observation and I advised a nasal operation which was followed with immediate relief, and a constant improvement, so that at his last visit to me, nearly nine months after his operation, he was practically free from symptoms.

The conclusions to be drawn from this case are that all cases of stubborn muscular trouble should have a nasal examination and that we should hesitate to operate on the muscles themselves or even prescribe prisms before having the nasal condition looked into. From this and other cases which have come under my observation in private practice and in a large clinic I am convinced that aside from the many evident ocular symptoms there are unusual ocular and also general symptoms, the obscure cause of which may often be found in the nose. I am strongly of the opinion that the far-reaching effect of nasal reflexes is at present but little understood, and that along this line there is much to be learned that we may intelligently untangle many of our knotty problems.

THE LATE PROF. HERMAN COHN of Breslau, has bequeathed the sum of 10,000 marks to each of the universities of Heidelberg, Tübingen and Breslau, the income to be used for prizes for research in ophthalmology. — *Medical Record.*